



*The Academy of Management  
and Administration in Opole*

**VECTORS  
OF COMPETITIVE DEVELOPMENT  
OF SOCIO-ECONOMIC SYSTEMS**



**Opole 2020**



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SOCIO-ECONOMIC SYSTEMS**

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Tadeusz Pokusa

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## PREFACE

The monographic study presents the scientific developments of a team of authors who reveal various areas and aspects of modern socio-economic systems, which include the following areas: innovative tools for socio-economic systems, strategic management as a basis for competitive enterprise development, and innovative development trends modern organizations.

The monograph is devoted to the formation of innovative tools for the development of socio-economic systems. The current state, features and trends of development require socio-economic systems to constantly search for the latest forms and methods of management, as well as alternatives through the introduction of changes aimed at economic growth. Moreover, economic growth is the main indicator of development and prosperity of each state and at the same time is the most important characteristic of social production. The parameters of economic growth are widely used in assessing the state and prospects of the national economy, and its potential is the key to forming a mechanism for the effective functioning of various sectors of the economy in the country. The unfilled capacity of the Ukrainian market (goods and services) in the field of agribusiness, virtually unlimited potential for the development of tourism and environmental production in Ukraine create all the necessary conditions to increase the competitiveness of domestic enterprises.

The formation of an appropriate level of competitiveness is the end result of production and commercial activities of enterprises, which requires businesses to implement the latest management mechanisms. To ensure a high level of competitiveness and efficiency, it is necessary to identify areas of organizational, production, technological and commercial changes, the implementation of which is the content of strategies to create and implement competitive advantages. Thus, strategic management includes in its functionality issues related to the introduction of innovative tools based on the involvement of new technologies, technical and technical upgrades, as well as the formation of human capital. However, there are also constraints, which include complexity in technological support, underdeveloped market infrastructure, lack of appropriate competitive strategies, as well as the presence of risks in the formation of a gradual process of adaptation and implementation of appropriate strategic changes and more. All the components of the competitive development of business entities, of course, will be manifested in different ways in certain areas. However, there are a number of common problems for each industry, the solution of which is in the plane of formation of models of innovation and investment development, the implementation of which is possible subject to strategic changes, risk management and strategic management, which necessitates the development of methodological tools, methodological support and practical recommendations. The main efforts of the researches presented in the monograph are devoted to the decision of the specified problems also.

Editors

# ENHANCING COMPETITIVENESS AS A KEY FACTOR IN IMPROVING LIVING STANDARDS

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Since the beginning of recorded history, humans have improved their conditions by – among other factors – modifying their surrounding environment and making the most of scarce resources. Technical progress occurred first with the agricultural revolution and with the industrial revolution later, eased food and energy constraints and allowed humans to prosper. However, continuous industrial expansion and population growth have put tremendous pressure on the environment and an excessive environmental footprint. If not addressed, environmental degradation may hinder further economic progress, compromise the prosperity built over centuries, and threaten life across the planet.

With the Fourth Industrial Revolution (4IR), humanity has entered a new phase. The 4IR has become the lived reality for millions of people around the world, and is creating new opportunities for business, government and individuals. Yet it also threatens a new divergence and polarization within and between economies and societies. This year also marks the tenth anniversary of the beginning of the global financial crisis, which has had social and economic consequences of a magnitude unprecedented in recent generations.

Although the linkages between biological ecosystems and human actions are complex, it is possible to distil the causes of these three environmental emergencies into two predominant human activities: energy use and food production.

The first environmental emergency – climate change – is caused primarily by emissions of greenhouse gases, which are largely attributed to energy use. The United States Environmental Protection Agency estimates that more than three-fifths of both US and global GHG emissions are a by-product of one of the following types of energy use: electricity generation, heating, fuel transformation and transportation. The other two sources of emissions are industrial processes (including chemical, metallurgical, waste management and mineral transformation processes, as well as a small portion of fossil fuels burned for energy), which account for one-fifth of the country's emissions, and agriculture and deforestation, which together account for the remaining one-fifth share of total emissions. The second environmental emergency – the nitrogen cycle – is caused, for the most part, by industrial agriculture, which overloads the soil with nitrogen and phosphorus from animal manure and chemical fertilizers. The causes of the third emergency – biodiversity loss – are more difficult to identify because they intertwine with many of the ecological factors. Among them are practices related to food production (i.e. over-fishing and deforestation for agriculture land use), by-products of energy production (i.e. chemical pollution, indirect effects of climate) [1; 2].

As discussed above, there are constraints to achieving growth through the accumulation of factors of production. In contrast, the environmental impact of total factor productivity growth is significantly less taxing. To some extent, sustainability and total factor productivity growth go hand in hand: there is some evidence that failing to address the environmental tipping points will affect productivity. Environmental-driven total factor productivity losses may even outweigh the costs associated with transitioning to a low-carbon economy through different channels.

It is possible to decompose economic growth into three elements: (1) growth in labour force,

(2) growth in physical and natural capital inputs, and (3) total factor productivity growth (TFP) growth, the «unexplained part» of GDP growth, which encompasses all non-physical inputs, such as technological progress, human capital, and institutional and cultural factors (Table 1).

**Table 1. Total factor productivity growth (TFP) growth**

Total factor	
Climate change	Rising temperatures and modified rain patterns, caused by climate change, will reduce crop yields and intensify crop volatility, resulting in lower agriculture productivity. Other potential channels through which climate change could reduce productivity include capital depreciation due to infrastructure damage from extreme weather events and a fall in both labour supply and workers' output due to higher temperatures. In addition, these effects will likely exacerbate poverty by the fact that the effects of climate change will disproportionately penalize farmers in developing countries that depend on producing staples for their livelihoods.
Pollution	The negative effects of pollution on productivity are mainly manifested through health. A large body of research shows that exposure to chemicals and air pollution increases the incidence of non-communicable diseases and mortality rates.
Water	Episodes of water shortage have proven to have an extremely negative effect on productivity in agriculture, as well as for smelting, chemical and mining activities
Energy	Despite increasingly efficient electric vehicles, growing installed capacity of solar and wind farms and energy-saving appliances, nonrenewable resources still account for over 80% of global energy consumption. In the short run, the lack of alternatives to meet the global demand for energy, a push towards non-fuel energy may lead to an increase in production costs in most sectors and therefore hurt productivity. For example, modern agriculture requires significant fuel consumption for tillage and harvest operations. Similarly, an increase in transport costs due to a surge in fuel costs would make current manufacturing value chains less feasible.

Globalization and the Fourth Industrial Revolution have created new opportunities but also disruption and polarization within and between economies and societies. In this context, the World Economic Forum introduced last year the new Global Competitiveness Index 4.0, a much-needed new economic compass, building on 40 years of experience of benchmarking the drivers of long-term competitiveness.

The Global Competitiveness Report series, first launched in 1979, features the Global Competitiveness Index 4.0 (GCI 4.0). As the decade concludes and we look towards the dawn of the 2020s, the GCI 4.0 offers insights into the economic prospects of 141 economies. Drawing on these results, the report provides leads to unlock economic growth, which remains crucial for improving living standards. In addition, in a special thematic chapter, the report explores the relationship between competitiveness, shared prosperity and environmental sustainability, showing that there is no inherent trade-off between building competitiveness, creating more equitable societies that provide opportunity for all and transitioning to environmentally sustainable systems. However, for a new inclusive and sustainable system, bold leadership and proactive policy-making will be needed, often in areas where economists and public policy professionals cannot provide evidence from the past. The report reviews emerging and promising 'win-win' policy options to achieve the three objectives of growth, inclusion and sustainability [3].

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The computation of the GCI 4.0 is based on successive aggregations of scores, from the indicator level (the most disaggregated level) to the overall GCI 4.0 score (the highest level). At every aggregation level, each aggregated measure is computed by taking the average (i.e. arithmetic mean) of the scores of its components. The overall GCI 4.0 score is the average of the scores of the 12 pillars [3; 4].

For individual indicators, prior to aggregation, raw values are transformed into a progress score ranging from 0 to 100, with 100 being the ideal state.

With a 2019 GCI score of 84.8 out of 100, Singapore is the country closest to the frontier of competitiveness. The country ranks first in terms of infrastructure, health, labour market functioning and financial system development. Going forward, in order to become a global innovation hub, Singapore will need to promote entrepreneurship and further improve its skills base.

Among the G20, the United States (2nd, down 1 place), Japan (6th), Germany (7th, down 4) and the United Kingdom (9th, down 1) feature in the top 10, but they all have experienced erosion in their performance. So has Canada (14th, down 2). Korea (13th, up 2), France (15th, up 2) and Italy (30th, up 1) are the only advanced economies to improve this year. Argentina (83rd, down 2 places) is the lowest ranked. Among the BRICS, China is by far the best performer, ahead of the Russian Federation, 32 places ahead of South Africa (60th) and some 40 places ahead of both India (68th) and Brazil (71st).

Led by Singapore, the East Asia and the Pacific region is the most competitive in the world, followed by Europe and North America. Hong Kong SAR (3rd) and Japan (6th) also feature in the top 10. Viet Nam (67th) is the country whose score improves the most globally. But the region is also home to economies with significant competitiveness deficits, such as Cambodia (106th) and Lao PDR (113th).

The United States (2nd overall) is the leader in Europe and North America. Despite dropping one position it remains an innovation powerhouse, ranking 1st for business dynamism and 2nd for innovation capability. The Netherlands (4th), Switzerland (5th), Germany (7th), Sweden (8th), the United Kingdom (9th) and Denmark (10th) all feature in the top 10. The region’s most improved country is Croatia (63rd).

In Latin America and the Caribbean, Chile (33rd) is the most competitive economy thanks to a stable macroeconomic context (1st, with other 32 economies) and open markets (68.0, 10th). It is followed by Mexico (48th), Uruguay (54th), and Colombia (57th). Brazil, despite being the most improved economy in the region is 71st; while Venezuela (133rd, down 6 places) and Haiti (138th) close out the region.

In Middle East and North Africa, Israel (20th) and the United Arab Emirates (25th) lead, followed by Qatar (29th) and Saudi Arabia (36th); Kuwait is the most improved in the region (46th, up 8 places) while Iran (99th) and Yemen (140th) lose some ground. The region has caught up significantly on ICT adoption and many countries boast well developed infrastructure. Greater investments in human capital, however, are needed to transform the countries in the region into more diversified, innovative and creative economies.

Eurasia’s competitiveness rankings see the Russian Federation (43rd) on top, followed by Kazakhstan (55th) and Azerbaijan (58th), both improving their performance over 2018. Focusing on financial development and innovation capability would help the region to achieve a higher competitiveness performance and advance the process towards structural change.

In South Asia, India, in 68th position, loses ground in the rankings despite a relatively stable score, mostly due to faster improvements of several countries previously ranked lower. It is followed by Sri Lanka (the most improved country in the region at 84th), Bangladesh (105th), Nepal (108th) and Pakistan (110th) [5].

Led by Mauritius (52nd), sub-Saharan Africa is overall the least competitive region, with 25 of the 34 economies assessed this year scoring below 50. South Africa, the second most competitive in the

region, improves to the 60th position, while Namibia (94th), Rwanda (100th), Uganda (115th) and Guinea (122nd) all improve significantly. Among the other large economies in the region, Kenya (95th) and Nigeria (116th) also improve their performances, but lose some positions, overcome by faster climbers. On a positive note, of the 25 countries that have improved their Health pillar score by two points or more, 14 are from sub-Saharan Africa, making strides to close the gaps in healthy life expectancy.

Covering 141 economies, the Global Competitiveness Index 4.0 measures national competitiveness – defined as the set of institutions, policies and factors that determine the level of productivity (Table 2).

**Table 2. The Global Competitiveness Index 4.0 2019 Rankings**

Best Performer-2019					Worst Performer-2019				
Rank	Economy	Score	Diff. from 2018		Rank	Economy	Score	Diff. from 2018	
			Score	Rank				Score	Rank
1	Singapore	84.8	+1	+1.3	131	Lesotho	42.9	-1	+0.6
2	United States	83.7	-1	-2.0	132	Madagascar	42.9	n/a	n/a
3	Hong Kong SAR	83.1	+4	+0.9	133	Venezuela	41.8	-6	-1.3
4	Netherlands	82.4	+2	-	134	Mauritania	40.9	-3	+0.1
5	Switzerland	82.3	-1	-0.3	135	Burundi	40.3	+1	+2.7
6	Japan	82.3	-1	-0.2	136	Angola	38.1	+1	+1.1
7	Germany	81.8	-4	-1.0	137	Mozambique	38.1	-4	-1.7
8	Sweden	81.2	+1	-0.4	138	Haiti	36.3	-	-0.1
9	United Kingdom	81.2	-1	-0.8	139	Congo, Dem. Rep.	36.1	-4	-2.1
10	Denmark	81.2	-	+0.6	140	Yemen	35.5	-1	-0.9
11	Finland	80.2	-	-	141	Chad	35.1	-1	-0.4

Cross-regional disparities are more visible across the 12 pillars (Table 3). Regional gaps in Health, ICT adoption and Infrastructure stand at 38.4, 36.2 and 34.7 points, respectively; these are significantly higher than the overall gap of 28 points between the best-performing and worst-performing countries. To some extent, some of the largest cross-regional differences are concentrated in those pillars where most regions attain median scores relatively close to the ‘frontier’ (the best possible performance). In other dimensions, such as the Innovation capability pillar, cross-regional differences are comparatively smaller since even the most innovative regions are only half-way from the frontier. High regional score variance across pillars captures how difficult it is to build and manage a competitive ecosystem and perform well on all dimensions of competitiveness at the same time [6].

Combining the GCI scores at a regional level reveals significant differences in both median competitiveness levels across regions as well as dispersion of performances within regions. Overall, the results show that East Asia and the Pacific (17 countries) achieves the highest median score (73.9) among all regions, followed closely by Europe and North America (70.9, based on 39 countries). However, within the East Asia and the Pacific region the competitiveness gap between the best and worst performers is significantly larger (34.7) than in Europe and North America (28.9). This shows that, while many countries in East Asia and the Pacific have come a long way to bring their competitiveness up to a high level, there are a few that need to progress faster to bridge their gaps. For instance, comparing the lowest performers in East Asia and the Pacific and Europe and North America, Lao PDR’s score (50.1) remains about 5 points lower than that of Bosnia and Herzegovina (54.7). The Middle East & North Africa, Latin America and the Caribbean, and Sub-Saharan Africa present similar levels of dispersion in competitiveness performance. Contrasts are often stark even within sub-regions – in the EU, Germany’s overall competitiveness score (81.8) is 20 points higher than Greece (62.6) – or between two neighbouring countries. For instance, there are approximately 20 points between the GCI performance of the Dominican Republic (58.3) and Haiti (36.3), between Colombia (62.7) and Venezuela (41.8), and between Thailand (68.1) and Cambodia (52.1).



**Table 3. Regional performance (Competitiveness gap within regions), by pillar**

	East Asia and the Pacific	Eurasia	Europe and North America	Latin America and the Caribbean	Middle East and North Africa	South Asia	Sub-Saharan Africa
<b>Enabling Environment</b>							
Institutions`	61.6	53.8	64.7	47.1	55.5	50.0	46.9
Infrastructure	74.8	67.7	79.7	61.3	70.5	59.2	45.0
ICT adoption	70.3	59.5	70.4	50.9	57.6	35.1	34.3
Macroeconomic stability	89.6	74.9	92.6	73.7	75.3	74.7	69.4
<b>Human Capital</b>							
Health	83.8	71.3	89.1	82.2	80.8	68.4	50.8
Skills	67.3	66.1	74.6	58.7	62.9	50.1	44.3
<b>Markets</b>							
Product market	62.2	56.1	60.0	51.6	56.7	45.8	49.3
Labour market	66.6	63.5	66.4	55.9	54.8	51.5	54.6
Financial system	74.3	52.0	70.9	60.3	63.7	60.0	50.8
Market size	67.9	50.3	60.1	51.2	59.9	67.7	40.4
<b>Innovation Ecosystem</b>							
Business dynamism	66.1	61.9	68.3	53.8	58.2	57.8	51.8
Innovation capability	54.0	35.5	58.1	34.3	41.3	36.3	29.4

The lowest median regional average is Sub-Saharan Africa's (46.3), where 17 of the 34 economies covered by the GCI are among the bottom 20 globally. However, many countries in this region have improved their competitiveness performance this year, helping Sub-Saharan Africa become one of the most improved regions (+2.3%). Only the score of the Middle East and North Africa region has improved faster than that of Sub-Saharan Africa, while East Asia and the Pacific follows closely behind, continuing its upward trend. These movements – combined with the fact that competitiveness gaps across regions remain large – highlight how the convergence of developing and emerging economies is ongoing but slow, and still requires decades before it can be completed. On the other side of the spectrum, Europe and North America is one of the world's slowest-improving areas. Although this region includes several advanced economies that have already achieved a strong competitiveness performance, there should be no complacency and advanced and developing economies alike should constantly improve their productivity with appropriate structural reforms. These developments – the 4IR and the consequences of the Great Recession – are redefining the pathways to prosperity and, indeed, the very notion of prosperity, with profound implications for policy-making. Concerned leaders are grappling for answers and solutions, aiming to go beyond short-term, reactionary measures. Table 4 depicts selected contextual indicators of Ukraine.

**Table 4. Selected contextual indicators of Ukraine**

	2018	2019
<b>Selected contextual indicators</b>		
Population millions	42.3	42.02
GDP per capita US\$	2,582.8	2,963.5
10-year average annual GDP growth%	-2.1	0.1
GDP (PPP)% world GDP	0.29	0.29
5-year average FDI inward flow% GDP	2.7	2.3
<b>Social and environmental performance</b>		
Renewable energy consumption share %	-	4.1
Environmental footprint gha/capita	3.0	-
Unemployment rate %	-	9.3
Inclusive Development Index 1-7 (best)	3.4	-
Global Gender Gap Index 0-1 (gender parity)	0.7	0.7
Income Gini 0 (perfect equality) – 100 (perfect inequality)	25.0	25.0

Ukraine loses two positions this year, falling to the 85rd globally. The economy has been in a recession since 2018 (5-year average FDI inward flow% GDP by 2.7% in 2018 and by 2.3% in 2019 on a yearly basis), leading to an increase in the unemployment rate (9.3%) and Income Gini (25). Despite recent efforts to stabilize the economy, resurging inflation (131th) and increasing deficits have led to a less stable macro-economic context (133th) that has undermined investors' confidence and led to capital flights.

**Table 5. The Global Competitiveness Index 4.0 2018-2019**

Index Component	Ukraine-2018 (83)		Ukraine-2019 (85)		Best Performer-2019	Worst Performer-2019
	Score*	Rank/140	Score*	Rank/141		
1. Institutions	46,3	110	47,9	104	Finland	Venezuela
2. Infrastructure	70,1	57	70,3	57	Singapore	Haiti
3. ICT (information and communication technologies) adoption	51,0	77	51,9	78	Korea, Rep.	Chad
4. Macroeconomic stability	55,9	131	57,9	133	Multiple (33 countries) (Australia, Botswana, Chile and etc.)	Venezuela
5. Health	72,0	94	65,6	101	Multiple (4 countries) (Japan, Spain, Singapore, Hong Kong SAR)	Lesotho
6. Skills	68,9	46	69,9	44	Switzerland	Chad
7. Product market	55,3	73	56,5	57	Hong Kong SAR	Chad
8. Labour market	59,5	68	61,4	59	Singapore	Yemen
9. Financial system	48,7	117	42,3	136	Hong Kong SAR	Yemen
10. Market size	62,7	47	63	47	China	Gambia, The
11. Business dynamism	55,3	86	57,2	85	United States	Haiti
12. Innovation capability	39,0	58	40,1	60	Germany	Congo

\* Scores are on a 0 to 100 scale, where 100 represents the optimal situation or «frontier». Arrows indicate the direction of the change in score from the previous edition, if available.

Local and foreign investors have moved over \$2.5 billion out of the country since last year, forcing the government to re-introduce capital controls. Business executives have also reduced their perceptions on Ukrainian's legal framework (i.e. the judicial independence score fell by 3.9 points and the country ranks 105h) and government's policy stability (ranking 88th, rose to 15 places), further discouraging private sector's investments [7; 8]. While stabilizing the economy remains the main priority, resolving the duality of labour market (61.4, 59th) and strengthening the financial system (42.3, 136th). Worsening macro-economic conditions and lack of progress on the Labour market and Financial system pillars have reduced the effect of the dimensions on which Ukraine has improved this year, including sounder business dynamism (+1, 85th), thanks to a significant reduction in regulations on starting a business, and Skills (+2, 44st). Education attainment is trending upwards (mean years of schooling increased ranking the country 51th) and recent efforts to upgrade curricula in secondary and tertiary education (+8, 54st) and vocational training (-2, 65th) have been judged positively by business leaders.

In 2019, Ukraine lost two positions in the Global Competitiveness Index (GCI) of the World Economic Forum (WEF) and dropped to 85th place out of 141 countries. According to the WEF annual report, the main regression was recorded in the financial systems sector, in which Ukraine's rating dropped by 19 positions to 136th place and in the healthcare sector by 9 positions to 101st place.

ICT implementation also deteriorated slightly, from 77th to 78th place, macroeconomic stability from 131st to 133rd place, and innovation opportunities from 58th to 60th place. At the same time, in the second year the country's position on the criteria of «product market» – from 73rd to 57th place, «labor market» – from 66th to 69th place and «institutional development» – from 110 to 104th place. In addition, Ukraine has managed to rise slightly in such indicators as education – from 46th to 44th place and the level of business development – from 86th to 85th place.

Ukraine maintained its previous position in terms of the volume of the domestic market – 47th place, and 57th in terms of infrastructure. According to the report, the average annual GDP growth rate over 10 years ceased to be negative and improved from -2.1% to 0.1%, while the growth of foreign direct investment over 5 years decreased from 2.7% of GDP to 2.3% of GDP. As reported, in 2012 Ukraine was 73rd in the GCI out of 144 countries, in 2013 it fell to 84th out of 148 countries, after the Revolution of Dignity it rose immediately to 76th out of 144 countries, but then rolled back to 79 -th position from 140 countries, and in 2016 – to the 85th position from 138. In 2017, the country rose to 81st place in the ranking of 137 countries, and in 2018 rolled back to 83rd position from 140 countries. Of the closest neighbors, Poland and Russian Federation remained in the same positions – 37th and 43rd place, Romania rose to 51st place (+1), Hungary to 47th (+1), Moldova to 86th (+2), Slovakia rolled back to 42nd place (-1). Belarus is not in the ranking [9].

Making technology and innovation part of an economy's DNA is challenging in itself but governments must also account for enabling this change through human capital investments and mitigating the unintended adverse impacts of technological advancements on income distribution and social cohesion through a holistic approach. In the Schumpeterian process of «creative destruction», creativity must be encouraged, and the destruction must be managed. Increased precariousness of workers, the skills gap, excessive market concentration, corrosive effects on the social fabric, regulatory loopholes, data privacy issues and cyberwarfare are all but a few of the potential negative effects that governments must mitigate.

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## **MARKETING OF EDUCATIONAL SERVICES**

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The modern business environment is characterized by dynamic development. In Ukraine, this integral aspect of today has its own specifics, which is associated with the transitional nature of the domestic economy. In such conditions, when making decisions about the strategy and tactics of market behavior, marketing policy in general, the market entity must rely on constantly updated data on the external environment, analyze them, look for new strategies and tactical approaches. This will allow you to make decisions appropriate to changes in the environment. This conclusion applies equally to all market participants in services, including higher education institutions [1]. The essence of the market of educational services as an object of marketing activities is to provide the population with high quality higher education, meeting the needs of consumers for information and knowledge. Marketing is a complex concept. So far, scientists and practitioners have not developed a consensus on the concept of marketing, its place in management, development, production and sale of goods. However, two aspects are indisputable: marketing is, firstly, the concept of focusing any activity on the consumer and, secondly, the first general management function. Marketing of educational services is a fundamentally new field of marketing, which is in our country at the stage of formation. The subject of marketing in education is a set of general principles of market relations, system of views, strategy and tactics of relations and interactions of consumers, intermediaries and producers of educational services and products in market conditions, free choice of priorities and actions on both sides, exchange of values. These interactions form relationships that lead to the most effective satisfaction of needs: personality – in education; educational institution – in the development and well-being of its employees; firms and other customer organizations – in the growth of human resources; society as a whole – in the expanded reproduction of total intellectual capital. Effective satisfaction of these needs is the target of marketing of educational services, the criterion of its effectiveness in this area [2].

One of the tasks of marketing in the field of higher education is to study the potential needs and values of the consumer, the choice of potential goods (services), the development of regulatory requirements and conditions that ensure the competitiveness of the service or product. Aspects such as needs parameters need to be explored in detail; a set of values needed to meet needs; list of specific goods (services) or their functions; indicators of service quality, their resource intensity, structure of life and reproduction cycles; parameters of potential markets; the influence of environmental parameters (manufacturer of goods or service provider) on the functioning of the system [2; 3]. Marketing of educational services is a tool for forecasting future parameters of functioning and development not only of higher education institutions, but also of the entire education system. The result of forecasting should be the standards of competitiveness of educational technologies, methods of organizing the educational process, etc. This process should be carried out using scientific approaches, methods of systems analysis and operations research, strategic market segmentation. In the conditions of fierce local and global competition for the consumer, for a place in the market, including in the market of higher education, the main thing is to improve the quality of marketing and planning based on forecasting the market infrastructure. The main functions of marketing of educational services are market segmentation, service positioning, choice of channels and methods of service provision, organization of advertising, quality promotion and personalization of educational service provision. The functions of marketing also include the motivation to prioritize the interests of the consumer over the interests of the manufacturer or service provider.

The market of educational services, from the point of view of marketing, is a complex multilevel and multifactorial system that provides the population with quality educational services, satisfies people's need for information, general and professional knowledge, skills and abilities. It should be noted that today the competition between state and non-state educational institutions and their branches, as well as between classical and distance learning [3; 5].

Implementation of the marketing strategy of a higher education institution involves the presence of a marketing program of its activities: marketing analysis, synthesis, planning, management, organization, control and regulation of marketing activities. Successful implementation of the marketing program increases the quality of knowledge, skills, and abilities of students, indicators of their personal development, the level of professional competence of teachers and the competitiveness of the educational institution as a whole.

The main stages of development and implementation of marketing policy of higher education are [6]:

- conducting marketing research to determine the level of competitiveness of educational services provided and the development of strategic measures to increase their competitiveness in the future;
- development of a strategy for a higher education institution, which should include the ideology of innovative technical policy;
- conducting research and development work to create competitive educational services;
- organizational and technological preparation for the production of new educational services;
- production and implementation of new educational services by the institution of higher education, etc.

Implementation of marketing strategies in the market of educational services by higher education institutions (use of new educational technologies, implementation of innovative educational programs, multilevel training, training of specialists for employers, improving the quality of educational services, etc.) strengthens their competitiveness, strengthens their leading position in this market, as well as contributes to the development of the market itself through its differentiation and the allocation of new segments.

Stages of implementation of marketing strategy in the market of educational services [5; 6]:

- segmentation of the market of educational services, forecasting the competitiveness of educational services and higher education institutions; formation of its strategy in the regional market;
- conducting research in the field of finding new options for educational services that will increase their competitiveness; development of new technologies in education, development of design and regulatory documentation of a new educational service, as well as educational standards;
- production of services through the development and implementation of organizational programs and projects for the development of new educational technology; examination of standards; calculation of norms and standards; providing the necessary material, technical and information resources;
- creation of educational content; working out and improving channels and technologies of access to educational content and information resources; development of work plans for the implementation of the educational standard; staff formation; installation of training equipment;
- material and technical support of the educational process; conducting educational and upbringing work; organization of control over the learning process and its timely adjustment;
- conducting current and final certification, participation of students in competitions of research works, tracking of their competitiveness in the labor market;
- performance of works on audit and maintenance, repair or modification of the equipment; assessment of information resources and educational content, its improvement, certification of personnel and other organizational measures.

The innovative development of higher education institutions is provided by the following marketing processes [4]:

- activities related to the collection and analysis of information about the needs of consumers (applicants, employers);
- development and updating of the marketing strategy of the higher education institution;

- implementation of internal marketing of personnel (formation of loyalty and staff commitment) as a tool for retaining highly qualified staff and their intellectual capital within the institution of higher education;
- positioning of higher education institution (choice of strategic position in the market);
- creation of goodwill as a monetary definition of the reputation of a higher education institution.

Within the proposed model of marketing activities can be used such strategic elements of marketing as: brand, relationship marketing, internal marketing. Internal marketing of higher education, as one of the strategic areas, involves consideration of the internal market of educational institutions, which includes corporate culture, system, procedures, structures existing within the enterprise, staff whose knowledge and skills, support and loyalty are necessary for marketing strategies. Today, for the successful promotion of a higher education institution, it is necessary to develop a comprehensive system of integrated marketing communications, to combine communication resources of different promotion technologies. From the point of view of higher education promotion, the following elements of marketing communications are the most important: advertising, public relations, special events, direct marketing, exhibition activities, electronic corporate communications, branding, corporate culture and corporate style, informal communications. Advertising is the most traditional and understandable, especially for the administration and the target audience, the promotion channel. It should be noted that today advertising is losing its relevance and effectiveness, giving way to other ways of promotion.

Traditional advertising, which includes printed products, sound and outdoor advertising, is a necessary condition for a higher education institution, but not quite sufficient. Traditional advertising ensures the presence of the object of promotion in the advertising and information field, but it is not a factor that determines the choice of the target audience. This is only the first step in terms of promotion. As for the target audiences, they are looking for information in specialized and general directories in search of a higher education institution, so information about the higher education institution should be present there. Outdoor advertising attracts attention, informs about the presence of a higher education institution, it is mostly impersonal. The most effective today is the personal nature of the appeal, so the action becomes relevant with a clear focus on the target audience. In other words, much more important are not traditional forms of advertising, and the organization of various promotional activities, which are focused on communication with the target audience [3].

Public relations is one of the key areas of activity within the system of integrated marketing communications of higher education, as their task is to build a harmonious bilateral dialogue with society as a whole and directly with the target audiences of higher education. One of the main tasks of public relations is to form a positive public opinion about the institution of higher education; control of the information field around the positioning object. There are several such facilities in higher education institutions: the higher education institution itself, its educational services and key figures. Public relations helps to establish positive relationships with target audiences, which in turn serve as a base and resource for the use of other communication technologies. It is very important to gain the trust of the audience; if it is formed, then a positive information field is formed around the object, in which case the level of trust in other means of promotion increases [5].

Special events are also one of the main elements of marketing communications. The peculiarity of this type of marketing technology is that the promotion is carried out through the organization of a certain event, event. The emphasis is on emotional means, the atmosphere of promotion is very correct, without the use of direct advertising appeals. When target audiences become participants in bright events, the information is remembered at the level of emotions. When organizing such events, it is very important to leave a positive emotional mark in the minds of the target audience. Higher education institutions have a number of traditional events that are embedded in corporate life and are expected by different target groups. These include, for example, Knowledge Day, Student Dedication Day, Student Day, Diploma Award, and more. You can expand the list of such events, using the profile of the institution of higher education, faculty, specialty, as part of this to hold professional competitions, competitions, etc. Special events of higher education institutions are sources of positive

information, but it is necessary to remember about the promotion of the events themselves, purposefully advertise, and generate interest in them.

Direct marketing is also one of the methods of promoting and selling educational services. In this kind of market, interpersonal communication and the degree of trust in the source of information are important. If the representative of the target audience trusts the source of information, the service will be sold, so it is necessary to specially prepare employees of higher education institutions (especially for employees of the admissions committee, marketing department) to address the target audience, it is even possible to create advertising support groups. staff and students. As a result, we get an internal audience that wants to share with loved ones how wonderful in all respects is the institution in which they study, and this increases confidence in the source of information. When using direct marketing in the field of higher education, it is important to place precise emphasis, not forgetting that educational services are also a social sphere. Direct marketing is a targeted communication and should be organized as an interaction between a higher education institution and an individual. To implement such interaction use: personal sales, which give an effective result in the personal interaction of an employee of a higher education institution with representatives of the target audience; direct mail, which uses personal e-mail addresses to send advertising information messages to higher education institutions. It is also possible to organize cross-promotions of educational services in the institution of higher education, for example, to promote additional education services [5].

Exhibition activity has become a common tool today, which promotes the institution of higher education. The advantage of the exhibition is a successful combination of exposure, personal contacts, sales promotion, as well as a wide coverage of target groups. The exhibition allows a higher education institution to maintain its image both for the general public and for the target audience. It has the public at its disposal, thus giving the opportunity to interest new consumers, and also provides a wide corporate message to the masses of people at the same time in combination with the possibilities of personal communication. Specialists of the higher education institution, thanks to the exhibition, have the opportunity to build the entire system of personal sales, starting with the process of identifying promising customers, collecting information about the target audience, competitors, the level of demand for the specialty, etc. It is important to note that it is at the exhibition that the work is done with an interested audience. When organizing the promotion of educational services, it is important to remember that the ideology, morals, worldview of today's youth have undergone significant changes. With the desire to educate generations of talented, creative, educated, active, enterprising, spiritually developed people, we must first realize how ready the educational institution is to provide, taking into account modern requirements, quality educational services that can meet the needs of the target audience.

Thus, it is necessary to form and implement an effective marketing strategy of the higher education institution, within which special attention should be paid to: increasing the visibility of higher education institutions in the domestic and foreign markets; monitoring consumer behavior and understanding of local culture, mentality; strengthening relations with partners and forming strategic alliances with enterprises of the real sector of the economy; development of relations with staff.

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# THE STATE AND PERSPECTIVES OF DEVELOPMENT OF ORGANIC CROP PRODUCTION IN UKRAINE

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The development of organic agricultural production is a topical and at the same time controversial issue of the functioning of agricultural formations in a competitive environment. Organic farming is a holistic system that combines best practices in terms of environmental protection, biodiversity, natural resources, high standards and production methods. Discussions among scientists and practitioners about the economic feasibility and organizational possibilities of introducing organic production in agricultural formations are related to the conditions of imbalance of the external environment, increased competition and intensification of the effects of the global environment. The current level and structure of requirements for the quality of product consumption, the prospects of integration into the European market, requiring increased efforts in the direction of production of environmentally friendly products have a direct impact. At the same time, many years of foreign experience demonstrate the economic, environmental and social benefits of organic production [1].

The difficulty of complying with all technological requirements for organic agriculture, the inability to obtain sufficient raw materials capable of ensuring food security, lack of domestic demand for organic products due to low solvency of consumers, etc. – the main reasons why farmers are forced to use traditional technologies.

Organic products are currently in high demand worldwide, and the number of its producers is growing every year. Organic agriculture is tolerant of the environment and is based on the principles of ecology – the science of the environment, and the deep laws of biology – a set of sciences of wildlife. Therefore, it can be argued that organic agriculture is essentially both ecological and biological. Thus, the use of the terms "ecological" and "biological" does not contradict EU regulatory directives when it comes to organic agriculture [7, p.233].

The growing popularity of organic production in Ukraine is facilitated by the active work of public organizations and associations, such as the International Association of Organic Production "BIOLan Ukraine", the certification body "Organic Standard", the Union of Organic Agriculture "Naturproduct", All-Ukrainian NGO "Organic Agriculture Club", Ukrainian public organization "Living Planet", Trading House "Organic Era", information center "Green Dossier" and others. Many of these organizations are members of the Federation of Organic Movement of Ukraine, whose activities are aimed at uniting the efforts of producers, scientific and educational institutions and other enterprises, as well as individuals and institutions interested in the production and distribution of healthy, safe products [4, p.204].

According to the commercial service of the US Embassy in Ukraine [1], the average return on investment in Ukrainian organic farming is about 300%, which makes it one of the most attractive areas for investment in Ukraine. Organic farms are often participants in projects to implement organic farming in Ukraine and cooperate with foreign companies, primarily from Switzerland, the Netherlands and Germany [3, p.411].

At the same time, in recent years, the macroeconomic environment of business is characterized by trends that hinder the growth of domestic exports of organic crop products. The growth of

international competition, the acceleration of global climate change, the lack of developed logistics infrastructure, the spread of national protectionism are the most significant [5, c.108].

Organic Ukrainian products are grown on the territory of 1% of land intended for agricultural activities. This is a very low figure. But it gives the chance to develop ecological manufactures. The emergence of new producers of organic products is proof of this.

Ukraine specializes in the production of organic crop products. Cereals (wheat, barley, rye, oats), oilseeds (sunflowers) and legumes (peas, soybeans) are grown. Growing vegetables and fruits is at an early stage. In the structure of crops, 17% falls on wheat, 16% – on barley and sunflower, 11% – on corn; 4% is occupied by peas; 1% each – rapeseed and buckwheat. The rest (34% of sown area) is allocated for soybeans, rye, oats, sorghum, millet, mustard, sugar beets, sainfoin, etc. [4, c.204]. In general, 48.1% of land certified as organic is used for grain cultivation, which puts Ukraine in 7th place among countries producing organic grain [1].

For organic production, fertile soils are used, on which stable crop yields can be grown without the use of mineral fertilizers. Farms growing organic products must adhere to crop rotations, include legumes and perennial legumes in the structure of the sown area to provide nutrients and reproduction of humus in the soil.

The total area of agricultural land certified according to the standard amounted to 309,100 hectares, including 233,500 hectares – land with organic status. At the same time, there were 635 operators of the organic market, of which 501 were agricultural producers [10]. The regions with the highest concentration of certified lands and certified operators are Kherson (66479 ha and 52 operators respectively), Odesa (38245 ha and 41 operators respectively) and Zhytomyr (32196 ha and 43 operators).

Some researchers believe that organic production should be developed in large farms, where the value of gross output at comparable prices exceeds UAH 10 million, which will cover the costs of production development and certification [8, p.140.]. Production should be aimed at a competitive market and maintain its capacity primarily at the level of the enterprise and the regional market. In this regard, the main indicator of competitiveness is the difference between production and sales prices. Thus, changes in production should focus on these two indicators. Since the organic market of Ukraine today can be called oligopolistic, which indicates the impossibility of a particular producer to influence it, the strategic goals of the enterprise should focus on reducing the unit cost of production. Moreover, the company must be sure that it uses organic raw materials.

In general, in 2019, Ukraine took 2nd place out of 123 countries in terms of imports of organic products in the EU, rising by two places compared to the previous year [2].

It is noted that in 2019 the EU imported 3.24 million tons of organic agri-food products, more than 10% of which is accounted for by Ukraine [imports of organic]. Thus, Ukrainian imports to the EU increased by 27% – from 265,817 thousand tons in 2018 to 337,856 thousand tons in 2019.

It is interesting to note that the first significant volume of processed value-added products was imported from Ukraine only in recent years. Although volumes are still small, the fact that these products have been imported means that Ukraine is already able to offer such categories of goods internationally, with the right conditions to significantly increase production and trade if buyers are satisfied with the quality.

However, only 13.3% of domestic producers of organic grains export organic products by concluding direct contracts with foreign buyers. These are companies with a powerful land bank, for which organic crop production is one of the areas of agricultural production. Such companies have an impeccable reputation and the financial ability to cover potential losses from organic farming through other activities. At the same time, small farms specializing in fruit, vegetables and berries cannot export due to the following factors:

1. Foreign companies are interested in large batches of products. Small producers who grow different crops cannot meet the stable demand for organic raw materials and processed organic food.

2. Export operations are accompanied by large transport and overhead costs (costs of storage and delivery of products that spoil quickly and can be damaged by pests and diseases, the cost of legal support, laboratory examination, insurance, etc.). Given the full coverage of such costs, the supply of small batches by sole producers is economically impractical.

3. The implementation of foreign economic activity by farms is also complicated by the lack of qualified personnel, access to logistics infrastructure, high currency, logistics risks [5, c.110].

In the EU, Ukraine exports grain (except rice and wheat, 76.9% of grain of Ukrainian origin), wheat (31.8% from Ukraine), oilseeds (except soybeans, 18.2% and second only to Turkey), soybeans (4th place and 13% of soybean imports from Ukraine). Ukraine is also one of the largest exporters of cake.

The Netherlands, Germany, Great Britain, Italy, Austria, Poland, Switzerland, Belgium, the Czech Republic, Bulgaria and Hungary consume the most Ukrainian organic products. Ukrainian producers also export "organic" to the United States, Canada, Australia, and some Asian countries.

It so happened that the export of Ukrainian organic products is three times higher than the volume of the domestic consumer market in Ukraine and currently amounts to 99 million euros.

Ukrainians consume significantly less organic products than EU residents. This figure is € 3 per capita, while in the EU it is € 53.7. In terms of the volume of the domestic market of organic products, Ukraine ranks 25th in Europe: from a hectare of organic land to the domestic market gets products at € 50, while in Europe – at € 2345. Today, the domestic consumer market of organic products in Ukraine continues to expand through major networks supermarkets [10].

Despite generally high prices for organic products in the domestic market, a significant number of "middle-income consumers" are apparently aware of the benefits of organic products and consider the purchase of organic products an important investment. It is likely that most of these consumers also belong to the category of "health-conscious consumers", who, along with high-income buyers and foreigners, are an important element in the growth of demand for organic products.

Analysis of the development of the market of organic products in Ukraine showed that it could develop faster if not for the main deterrent – the high cost of organic products (approximately an order of magnitude, compared with the cost of products grown in a sacramental way). It is established that in European countries the standard markup on organic products is 20-30%, in our country – 50 – 300% and higher than inorganic analogues of food and household goods [9, p. 27] This significant difference can be explained by the following factors of influence: the direct high costs of the production process, especially in animal husbandry; much more expensive is the processing process, as well as storage of organic products; small production volumes and transportation distances with special shelf life of such products; significantly higher labor costs in the production of organic products, as well as taking into account the costs of its certification.

For most arable crops, the use of efficient technologies of organic production is less problematic – with good equipment and knowledge of agricultural technologies [11]. With a well-thought-out crop rotation, preparation of the soil for sowing and proper mechanical control of weeds, you can get a high gross profit by engaging in organic production. Analyzing the parameters used to calculate gross profit, especially for arable crops, it becomes clear that, although the high price compensates for lower yields, gross profit in organic production is generally higher due to lower costs of purchasing ancillary products. In other words, without the use of chemical pesticides and fertilizers, organic farmers have lower total costs, which means higher profitability. However, the calculation of gross profit does not reflect the initial investment in the transition period, when farmers can sell their products at the price of inorganic products, while receiving lower yields than before. In addition, the costs of organic certification are not taken into account, but for Ukrainian farms they are quite low, given their large size, namely: from 1 to 5 euros / ha, depending on the size of the farm and the certification body.

One of the ways to strengthen the competitiveness of large and small producers of organic crop products in Ukraine is the creation and development of clusters as an innovative means of cooperation between companies in order to achieve common economic, market and national interests. The creation of clusters for the production and circulation of organic crop products will facilitate the development and implementation of economic, market and organizational tools to strengthen the competitiveness of national producers in the face of global economic and climatic challenges [5, p. 110].

The cluster form of association of producers of organic crop products will help increase the competitiveness of producers in national and international markets by:

- determination of geographical specialization of producers of organic products and development of tools to improve the quality of finished products, taking into account natural and territorial features, identification of promising niches in international and national markets;
- development and implementation of an organizational mechanism for the formation of financial resources for the implementation of large-scale research, improvement of logistics infrastructure, intensification of marketing support in international markets, conducting capital environmental measures, etc.;
- implementation of comprehensive organizational, economic and financial measures to prevent the effects of natural and climatic changes, eliminate their impact on the organization of agricultural production;
- formation of institutional support to protect the interests of producers and operators of the organic products market in state, regional and local authorities;
- introduction of a system of legal support and market consulting for small agricultural producers;
- development and application of a mechanism to counter unfair competition from producers of traditional agricultural crop products, as well as procurement companies.

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# **PEDAGOGICAL APPROACHES TO THE FORMATION OF COMPETENCIES AND LEARNING OUTCOMES OF STUDENTS STUDYING IN THE EDUCATIONAL-PROFESSIONAL PROGRAM "TOURISM" OF THE FIRST QUALIFICATION LEVEL "BACHELOR"**

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Among the leading trends in the modernization of modern higher education, its activity orientation is important and significant. In particular, I. Bech (2017) emphasizes that for a long time the secondary and vocational school relied on the position of a gnostic, "knowledge" approach, the main task of which was to form strong systematic knowledge in students (skills have always been secondary components). At present, the emphasis is changing – from the Gnostic approach to the competence approach: the main goal of higher education is aimed at developing the ability to active, productive work in all its forms; creative professional activity for the purpose of self-development and self-realization of the person.

The strategic objectives of reforming higher education are the transformation of quantitative indicators of educational services into quality, which necessitates the search for fundamentally new approaches to the training of students, namely the formation of competencies and learning outcomes of students studying under the educational program "Tourism" of the first qualification level "Bachelor".

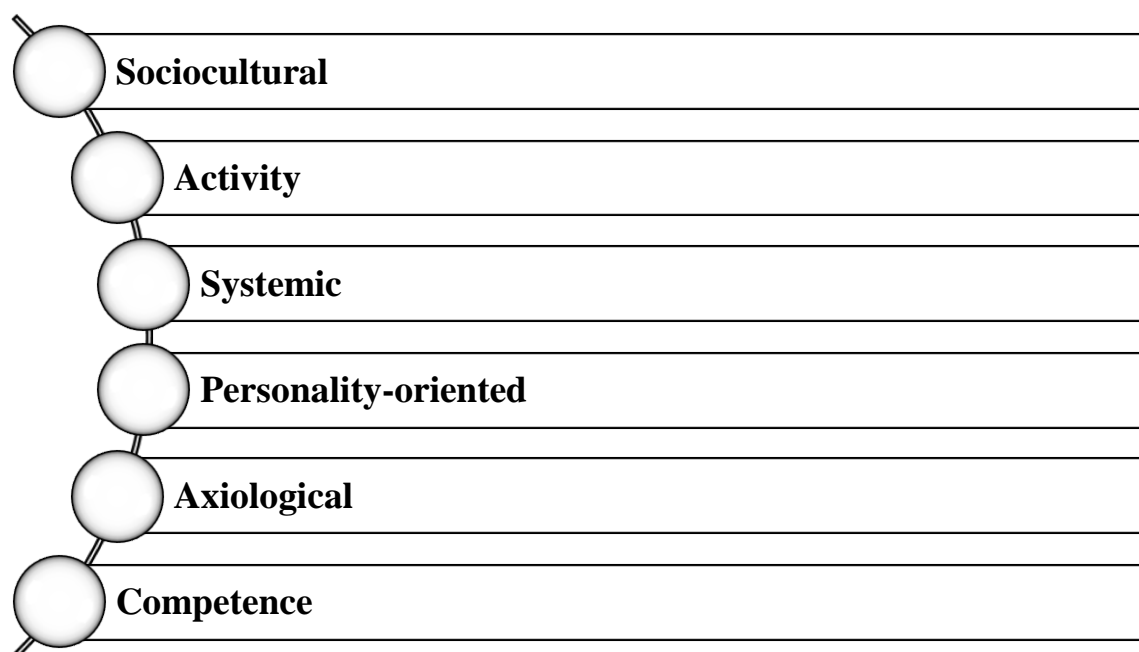
Ways to solve this problem lie in the plane of methodological approaches to professional and personal development of future professionals in the tourism industry, which is the subject of philosophical, political, sociological, cultural, psychological and pedagogical discussions.

Hence, it is important to highlight the system of pedagogical principles, which in the educational process provides effective formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor".

O. Ovcharuk characterizes modern tendencies of estimation of efficiency of quality of education by three indicators: the maintenance, process of training and education, results. A change in the principle leads to a change in approach – a certain position, point of view, which determines the research, design, organization of any phenomenon, process.

Content analysis of research allows us to identify the following main approaches to ensure the effectiveness of the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor", namely: personality-oriented, axiological, competence, system, socio-cultural and activity approaches (*Figure 1.*).

Analysis of methodological approaches to the formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" should begin with a personality-oriented approach, which involves the implementation of appropriate activities through designing the content of this process taking into account the age and individual characteristics of the subjects of the educational process: the specifics of cognitive, emotional, communicative, motivational and other processes and, in particular, abilities, needs, motives, interests, personal qualities of students, etc., which means recognizing the self-worth of their personalities; pre-assigned personal resources: knowledge, skills, methods of activity that accumulate within their individual experience (Mikhalska, 2006).



**Figure 1. Pedagogical approaches to the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor"**

Since the personality-oriented approach is characterized by a focus on the moral and spiritual development of the subject, rather than its adaptation to environmental conditions, then, appearing on the mechanisms of consciousness and self-awareness, promotes the education of higher meanings of human life and practical orientation to them (Bech, 2017).

In this way, G. Soroka argues that in the vital self-determination of the individual a holistic process of development of the motivational sphere, its worldview beliefs, individual abilities is necessary for self-realization and conscious choice of social roles. The latter requires the development of search activity, readiness to make independent decisions and education of responsibility and purposefulness. Providing freedom of choice of independent decisions, different in degree of complexity and character, stimulation of motivation and active activity, and also creation of a situation of success and belief in own forces of the person, enable functioning of pedagogical support.

In fact, pedagogical support is the joint determination of the teacher together with the pupil of his interests, opportunities and ways to solve problems (obstacles) that threaten the preservation of his own dignity, as well as to achieve positive results in his self-affirmation. The purpose of pedagogical support is to teach the pupil to solve their own problems and understand the source of their occurrence, to take a reflective position on the problem and, accordingly, to conduct holistic activities to solve it (Soroka, 2002).

Therefore, a modern teacher must know and operate the means of forming competencies and learning outcomes of students, skillfully manage their own psychological state and focus on professionalism.

Thus, the personality-oriented approach to the formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" provides focus on the student's personality as the goal, result and determining criterion of effectiveness of the process. This approach is related to the need to study and take into account the age characteristics of student youth, including the individual characteristics of each student, their potential, value system, ideals, needs and motives for behavior and activities.

Socio-cultural approach makes it possible to take into account the interaction of socio-cultural environment and professional training of students, during which the formation of professional competencies and learning outcomes.

This approach is based on the concept of "socio-cultural space". Socio-cultural space – provides a reproduction of the community, which is its carrier, as a holistic socio-cultural system. This vocation

is realized through: the accumulation, systematization and transmission of certain experiences of social life; updating and enriching the accumulated experience.

This is supported by the American psychologist Bruner (Bruner, 1996), who argues that man fully reveals his potential only through participation in the creation of culture, which means learning specific to a particular culture of perception, thinking, emotional experience and discourse. The scientist emphasizes the understanding of culture as an educational context for the formation of values and the acquisition of socio-cultural experience (Bruner, 1996, p. 126).

Thus, the socio-cultural approach makes it possible to consider the essence of the process of formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" as a socio-cultural phenomenon and personal characteristics. This is explained by the fact that the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor" covers, on the one hand, mastering the cultural culture of society, and, on the other hand, any socio-cultural phenomenon, provides not only the culture of development, but also the culture of creation as the development of personal meanings and practical value of personal life.

The axiological approach to the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor" is manifested in the fact that the specific value orientations of students are not only studied and taken into account in the educational process. Impact, the result of which is assessed at the beginning, during the relevant work and at the end; ensuring the formation of a system of values and value orientations of students. After all, it is known that values are a kind of vector that directs the interests, needs, thoughts, understandings, emotions, experiences, behaviors and actions of the individual and contribute to decision-making.

The axiological approach not only proclaims man as the highest value of society and the end in itself of social development, but also allows us to study phenomena in terms of their inherent ability to meet human needs.

The implementation of the axiological approach provides the translation, transformation of certain socially significant values to the level of specific value priorities of the individual.

In addition, the activity approach acquires great importance in the implementation of the problem of formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor".

It is well known that a person's innate talents are transformed into his abilities in the process of a certain activity. The preconditions for the emergence of such a position where the scientific developments of V. Ananiev (1980), O. Leontiev (1977), S. Rubinstein (2000), V. Teplov (1947), and others.

We agree with the views of S. Rubinstein, who notes that it is "in activity and through activity, the individual realizes and affirms himself as a subject, as a person: as a subject – in his attitude to the objects generated by him, as a person – in his attitude to other people, whom he influences in his activity and with whom he comes into contact through it. In the activity, carrying out which, a person completes his life path" (Rubinstein, 1989, p. 436).

The scientist notes that "... activity is not an external work, but a position – in relation to people, in relation to society, which a person affirms with all his essence, which is manifested and formed in activity" (Rubinstein, 1989, p. 437).

According to S. Goncharenko, the most important components of the activity are the subject with leading needs; the purpose that stimulates the transformation of the subject into the object to which the activity is directed; means of achieving the goal; result of activity (Goncharenko, 2010, p. 35).

Based on this, the process of formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" should be designed in the activity format, taking into account its main indicators and components (subject, process, subject, methods, result and, in particular, internal and external conditions of its implementation).

It should be emphasized that the use of the activity approach is recommended by some foreign educators in cases where it is necessary to abstract something from the product of the activity in favor

of how it is organized; how, by means of what receptions and strategies problems in its process are solved (Parsons, 1957). In this sense, this approach is a didactic and educational matrix of the process of formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor", which is an additional reason for mastering the approach as one of the main tools. in practice.

Thus, this approach allows highlighting the essence of the process of formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor" through activities, which, therefore, reveals the logic of students' perception.

The following methodological approach defines the competence, which is understood as the focus of the pedagogical process on the formation of key (basic, basic) and subject competencies of the individual, which results in the formation of general human competence (set of key competencies – integrated personality abilities that allow complex multifunctional activities, effectively solve relevant problems that correspond to diverse areas of life and contribute to success) (Ovcharuk, 2003, p. 13). This is due to the fact that, first, both activity and psychological and pedagogical preparation of students for effective social interaction is carried out in a competency format, through comprehensive mastery of students' knowledge, skills, abilities and methods of activity in developing abilities and values of students; secondly, the expediency of introducing a competency approach is also due to the fact that the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" of the first qualification level "Bachelor" affects the development of other components of the competency hierarchy. process of socially significant and professional activity.

In particular, I. Bech emphasizes that the competence approach provides a higher level of competence "... as a unity, where the scientifically oriented basis of action determines the logic of its practical use, which is intellectual and moral self-regulation aimed at overcoming certain life problems. The competence of this level is motivated by the desire for self-affirmation, a sense of dignity, social motivation" (Bech, 2012, p. 30).

Given the above application of the competency approach in the formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" provides: students' awareness of their own motivations, aspirations and values, motives, ideas about their socio-professional roles; analysis and assessment of their personal qualities, knowledge, skills and abilities; regulation on this basis of their self-development and their own activities.

The system approach is a kind of "methodological orientation" in the activity, where the object of knowledge, in our context – the formation of competencies and learning outcomes of students studying in the educational-professional program "Tourism" first qualification level "Bachelor", develops as a system.

The system approach in its characteristic reflection of reality, first of all, follows from the qualitative analysis of integral objects and the disclosure of the mechanisms of their integration. It is these features of the psyche (integrity and integral nature) have been the subject of heated debate throughout the history of psychological and pedagogical science. It seems especially important that the concepts of "system" and "structure" are defined in the scientific literature as "construction". According to K. Platonov (1986), such an interpretation should not only overcome the errors of one-sided interpretation of the structure as a structure of elements (in psychology and pedagogy – functions) or as a relationship between them (in psychology and pedagogy – interfunctional connections), but also as whole, which has an impact on the components of the whole formation. In this case, the relationship between system and structure will be clearer if you use the categories "phenomenon" and "essence". Structure is the essence of a cognitive phenomenon, ie system (Platonov, 1986, p. 92).

In the light of the outlined problem, we consider the view of V. Shadrikov (1996) to be present, which distinguishes the following features that characterize the system: it is integral, different from the environment; integrity has a functional character, functions – the product of a certain result; the result of professional training as a system can be the creation of a new product; aimed at a finite set of elements that have certain qualities; its individual components interact to determine the overall system;



the properties of the system are not reduced to the qualities formed by its components; is in information and energy interaction with the environment; changes the nature of functioning in relation to information about available results.

Thus, the systematic approach provides a holistic view of the problem of formation of competencies and learning outcomes of students enrolled in the educational-professional program "Tourism" of the first qualification level "Bachelor" and allows to consider: first, the unity of all components of the process; secondly, the integrity of this process as a pedagogical system.

It is important to emphasize that one of the specific laws of the pedagogical process in higher education, – emphasizes V. Ortynsky, – the compliance of educational influences of subjects of education to the spiritual needs and cognitive abilities of students (Ortynsky, 2009).

This pattern reveals the direction of action of the subjects of the pedagogical process, the desire to take into account the inner strengths of students in solving problems of their socialization and training. This activity, on the one hand, should best meet the objectives of future professional activity of students, and on the other – individual and group characteristics of people, their individual and group activities, physical and intellectual abilities, level of education and upbringing (Ortynsky, 2009).

Therefore, if the laws of the pedagogical process express a significant, necessary relationship between cause and effect, the principles that come from the laws are the main requirements that determine the general direction of the pedagogical process, its goals, content and methodology.

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# **SOCIAL AUDIT IN THE DEVELOPMENT OF THE CORPORATE SOCIAL RESPONSIBILITY SYSTEM OF AGRICULTURAL ENTERPRISES, AS THE MAIN VECTOR OF THEIR COMPETITIVE DEVELOPMENT**

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The issue of corporate social responsibility has become increasingly relevant in recent years. Economically developed countries are paying more attention when conducting business not only on its profitability, but also on the price and consequences of profit. This leads to the fact that the composition of the mechanism of functioning of economic entities is complemented by a social and environmental element.

Significant economic, social and environmental turmoil in recent decades has led to a rethinking of established business practices and principles of social service organization. That is why the concept of Corporate Social Responsibility (CSR) has emerged in the last century, defining a new approach to corporate governance, attracting an increasing number of companies around the world every day. At the same time, large industrial enterprises have a high level of resource, energy and material resources, they, being the accumulator of significant material, human and other resources, have a high potential for impact on social well-being, socio-economic stability and sustainable development, which necessitates an urgent need not only in social but also ethical and environmental responsibility.

Social responsibility issues have been actively pursued since the beginning of the 19th century: the movement to protect workers' rights and the use of the first social programs by the British industrialist R. Owen; the organization of houses of mercy by the priest John Kronstadt; participation of domestic entrepreneurs in the establishment of social services in the country. Practices of this kind have become a subject of intense research interest since the mid-20th century. The theoretical conceptualization of this issue occurred in 1953 thanks to G. Bowen's article "Businessman's Social Responsibility", in which the author says that corporate social responsibility is the implementation of such a policy, making such decisions that would be desirable to achieve the goals and realization values of society [1, p. 333].

In the 1960s, British economist George Goider insisted that social audit could become "an effective management tool and at the same time allow stakeholders (individuals or groups of people who influence a company's business) to influence company policy." It was during these years that public dissatisfaction with the negative effects of production growth began to grow as a result of increasing economic growth due to environmental pollution, all kinds of discrimination, decreased production safety, and deterioration in the quality of goods.

As a result of these circumstances, the government and public opinion have shifted much of the responsibility for social injustice and economic inequality to business. As social technologies are introduced into corporate governance, new, flexible forms of indirect legislative regulation of these processes emerge, such as social reporting standards.

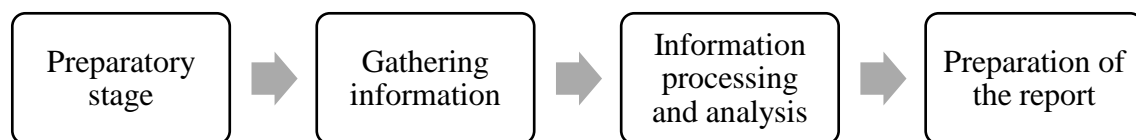
Social audit is a specific form of "analysis, audit of the conditions of the social environment of the organization in order to identify the factors of social risks and make proposals to reduce their impact."

When conducting a social audit should proceed from the fact that ideally the company should provide:

- Consumers – high quality of goods and services, respect for their human dignity;
- employees – decent pay and working conditions, health and efficiency, care for problems and needs, equal rights and opportunities for work regardless of gender, age, race;
- to owners and investors – the attitude of trust, guarantee of optimum return on invested capital, free access to information, limited only by the framework of law and conditions of competition;
- suppliers – fair and honest relationship with them, development of long-term and stable relationships, exchange of information and involvement in the planning process;
- to the local population – observance of universal norms of behavior, maintenance of peace and security, observance of human rights, sponsorship actions, participation in public life;
- competitors – mutual attention, development of open markets for goods and capital, refusal to use dubious means of achieving competitive advantages, respect for property rights, including intellectual property;
- environment – fulfillment of all sanitary norms, carrying out of measures on nature protection.

Given these positions and should evaluate the activities of the organization.

The methodological basis of social audit is the general theory of technologicalisation, as a universal process characteristic of social development. There are temporal bases of division of social process into stages, periods, operations. The process of social audit is divided into stages.



**Figure 1. Stages of social audit**

1. The preparatory stage includes:

- conclusion of the contract between the audit firm and the client;
- recruitment of auditing company staff (creation of audit team);
- determining the level of audit (unit, department, company).

2. Gathering information. There are several methods for assessing the social responsibility of organizations. In the practice of management, the following quantitative indicators of measuring the social effect of corporations, proposed by a number of American scientists in the early 80's of the twentieth century are known:

- use of "social indicators" that determine quality of life indices based on quantitative parameters: living conditions, health care, transportation, etc. and other assessments of the impact on the quality of life of corporations' social activities;

- drawing up a "social report" in the usual balance sheet that takes into account the social benefits and costs of the activities of the companies concerned to employees, customers, suppliers, local authorities as a whole, for example, environmental improvements and local taxes relate to local benefits.

- a method of managing a social program aimed at developing a system, including estimating the costs of social programs, the effectiveness of their implementation, which allow to "reasonably" make a budget and increase "social income" for capital investment.

3. Information processing and analysis. Information processing can be done by the method of calculating the social index. Scores are calculated for each question group. The organization thus determines its rating, as well as the relationship between the goals and efforts of the organization in the social sphere ("what the organization wants" and "what the organization does" on the one hand, and "what the organization receives" on the other).

4. Preparation of the report. The evaluation of the social activity of the enterprise is completed by the preparation of a report, which analyzes the principles of social orientation, determines the responsibility of each of the groups of personnel and proposes incentive measures. The report may look at ways to improve personnel management, including the introduction of new technologies, suggestions for modifying existing procedures, improving documentation, and clarifying.

Domestic experience in social accounting and social reporting is virtually nonexistent. In the practice of Ukrainian enterprises and financial and credit institutions, social reports are still unusual (the first social report was compiled by the Credit Union First Credit Society in 2006), but globalization and integration processes are necessitating increasing implementation. Publication of social reporting stimulates the economy to improve the conduct of its business, increase social indicators in the enterprise.

According to the expert study of the NAS of Ukraine and the Institute of Sociology, 71% of Ukrainian enterprises among the possible positive consequences of social activity of companies report an increase in stability in society, while among the internal effects, the majority noted only moral satisfaction (23%) [2, p. 22]. And since functioning of one's own business from the inside, given the Ukrainian mentality, is a priority task, these statistics confirm the low level of practical implementation of ideas of corporate social responsibility. The practice has led to the need to develop more rigorous standards for the evaluation and comparison of enterprises in terms of social responsibility, which requires the development of an appropriate scientific basis.

The following companies are making public social reports in Ukraine: METINVEST Group of Companies [3], Obolon PJSC [4], Nestle Ukraine LLC [5], Coca-Cola [6], Kyivstar [7], SAN InBev Ukraine [8], Vidi Groups [9], Life [10], etc.

Among the Ukrainian agroholdings that submit social reports are the following:

- Agrofusion is an enterprise located in Mykolaiv and Kherson regions. The main vector of social responsibility is rationalization of energy use, minimization of consumption of water resources, ensuring of high quality of production at the proper level of environmental policy;
- JV Nibulon LLC – has land resources in about 12 regions of Ukraine, the social component of the enterprise provides decent working conditions for staff, a special place belongs to the provision of proper basic education, development of infrastructure of the Ukrainian village;
- PJSC Mironovsky Bakery is located in more than 9 regions of our country. Social activity consists in ensuring safe working conditions in the enterprise, maintaining decent pay, ensuring maximum environmental protection and minimizing anthropogenic impact;
- Kernel Trade LLC (Kernel) – covers over 12 regions of Ukraine. The company pays considerable attention to the professional skills of the staff, the environment and is responsible for product quality.

We investigated the activity of almost 40 agricultural enterprises of the Mykolaiv region, which showed that social activity is conducted at the proper level in the following enterprises: STO "Beam" of the Novoesselsky district, LLC "Novosillya" of the Kazankivsky district, LLC "Golden Colossus" of Vitovsky district, STOV them. T.G. Shevchenko of Bereznegovatsky district, JSC "Vradiyevsky" of Vradiyevsky district, JV "Southern colossus" of Novoadsky district – at these enterprises the social reporting is not formed separately, however there are separate directions of formation of "Labor report", etc.

There is an objective need to develop more rigorous standards for evaluating and comparing businesses in terms of social responsibility

Based on accurate quantitative methods, social audit as a method of controlling the social responsibility of an enterprise, provided it is conducted regularly, gives an opportunity to present the dynamics of socio-economic processes that occur in a particular enterprise, which inevitably leads to a change in the awareness of each participant in this process of their role. as an equal partner. Publication of the results of the social audit of the activity of the enterprise makes its actions more open to the public. Thus, from the control tool, social audit becomes a tool for building new, dialogical relationships in society.

The Global Compact of the United Nations was signed in 1999 to unite the efforts of entrepreneurs with the activities of trade unions, NGOs and government bodies. It is a volunteer initiative and aims to bring together socially responsible companies to share experience in implementing relevant projects and programs.

Today, the agreement brings together several thousand companies from more than 100 countries, creating one of the largest voluntary CSR initiatives in the world. It should be noted that Ukrainian business structures have become quite active in signing this agreement – 93 companies have

joined the initiative. However, only one in three executives in Ukraine is aware of the CSR concept, and no unified standards and rules for Ukrainian business have yet been created.

For many years, well-known companies in the world believe that only those who use ethical approaches to the community as a whole and to their employees in particular can be reliable partners. Therefore, international expert organizations, business associations, and audit firms are currently actively developing standards in compiling and verifying companies' social reporting. These reports should supplement the financial information and provide a clear picture of the sustainability and long-term prospects of business development.

There are four main approaches to the concept of corporate social responsibility in the scientific literature [11]:

1) economic approach, according to which the enterprise is a tool for wealth creation, and all its social activities are aimed at achieving economic results. The most prominent supporter of this approach is the American economist M. Friedman, who believes that "there is one and only one social responsibility of the business world – to use their resources and engage in activities aimed at increasing profits, subject to the rules of the game, ie to engage in open and free competition without fraud and fraud" [12]. That is, in this way, the enterprise performs its economic function, producing goods and services necessary for society, while creating jobs and maximizing profit for shareholders.

2) political approach, based on the fact that businesses are able to influence society in some way, which is why they must use that ability responsibly. At the same time, social power means the ability to influence the results of important social processes in order to solve social problems, regardless of political institutions. The most famous is the concept of "corporate citizenship", which originated in the early 21st century. According to this concept, the role of the enterprise can be considered in a narrow and broad sense. In a narrow sense, the role of the enterprise is reduced to philanthropy, social investment and certain generally recognized responsibilities to the local community. In a broad sense, an enterprise should be responsible for those areas where the state is incapable of protecting its citizens.

3) social approach, according to which the enterprise should focus its activities on defining the social demands of society and responding to them, thereby contributing to the strengthening of their positions. In the 1970s, the concept of corporate social responsibility changed slightly from a "good for society" attitude to a definition of "what society requires from business." In view of this, the activities of any enterprise in the field of CSR should be determined by the expectations that society places on it. However, some authors distinguish between the requirements for reducing the negative impact and the requirement for enhancing the positive impact of the company on society. The emergence of stakeholder theory in the 1980s led to the emergence of a new line of research, according to which the social role of business should be determined by stakeholder requirements, thus replacing the concept of society with the concept of "stakeholders" [13, p. 58].

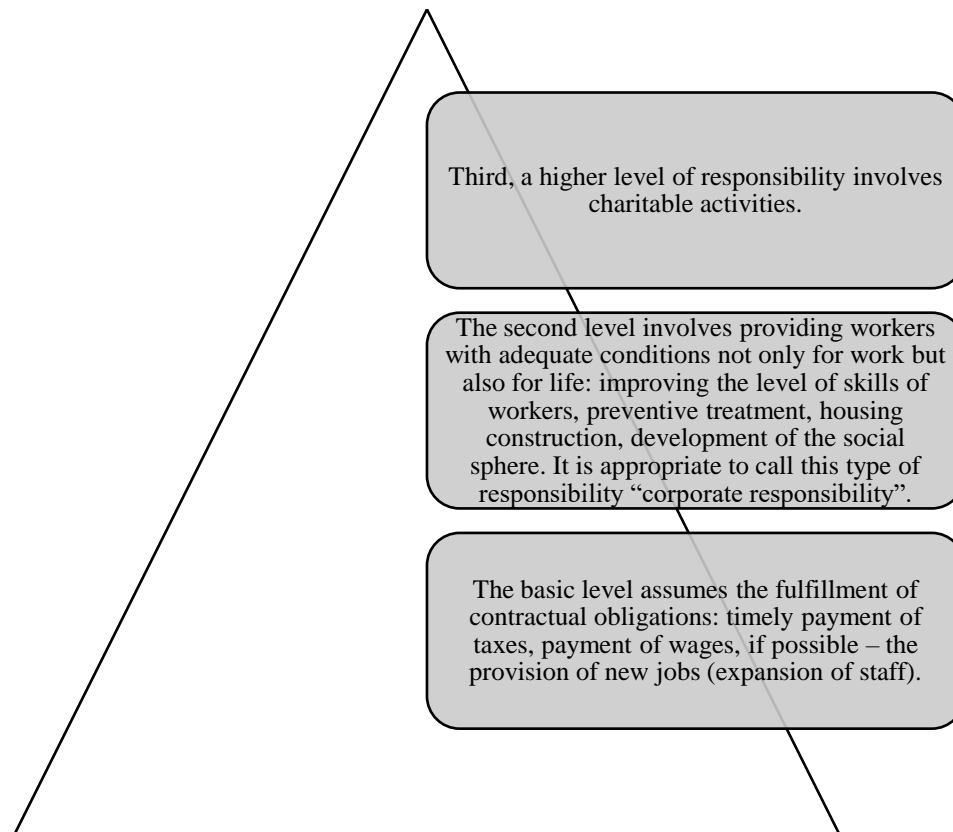
4) ethical approach the main feature of which is that the idea is based on the moral and ethical obligation of business and individual managers to society.

Other approaches include the triple bottom line of the American economist J. Elkington [14, p. 48] and a normative approach from the perspective of the stakeholders of his colleague E. Freeman. According to J. Elkington's approach, each enterprise bears economic, environmental and social responsibility to society, thereby ensuring its viability. J. Elkington's ideas were further developed and reflected in the theories of "universal rights" and "sustainable development". Yes, the theory of "universal rights" is based on the recognition of human rights, labor rights and respect for the environment as necessary conditions for the work of enterprises. At the heart of the theory of "sustainable development" is the idea that the enterprise in its activity is responsible not only to the modern, but also to future generations. That is why it must control both economic, social and environmental performance. Instead, E. Freeman's normative approach made it possible to describe the relationships between enterprises and groups of persons interested in their activities. According to this theory, the enterprise bears moral responsibility not only to the society as a whole, but only to the stakeholders, to whom they include: shareholders, employees of the enterprise, suppliers, consumers and territorial communities in which it operates [13, p. 32]. According to this theory, the enterprise bears moral responsibility not only to the society as a whole, but only to the stakeholders, to whom

they include: shareholders, employees of the enterprise, suppliers, consumers and territorial communities in which it operates [13, p. 32]. According to this theory, the enterprise bears moral responsibility not only to the society as a whole, but only to the stakeholders, to whom they include: shareholders, employees of the enterprise, suppliers, consumers and territorial communities in which it operates [13, p. 32].

Charity companies are more likely to develop a CSR strategy that covers business processes within the company. Over time, charity programs evolve into CSR programs.

Corporate social responsibility is multilevel in nature [15, p. 112]:

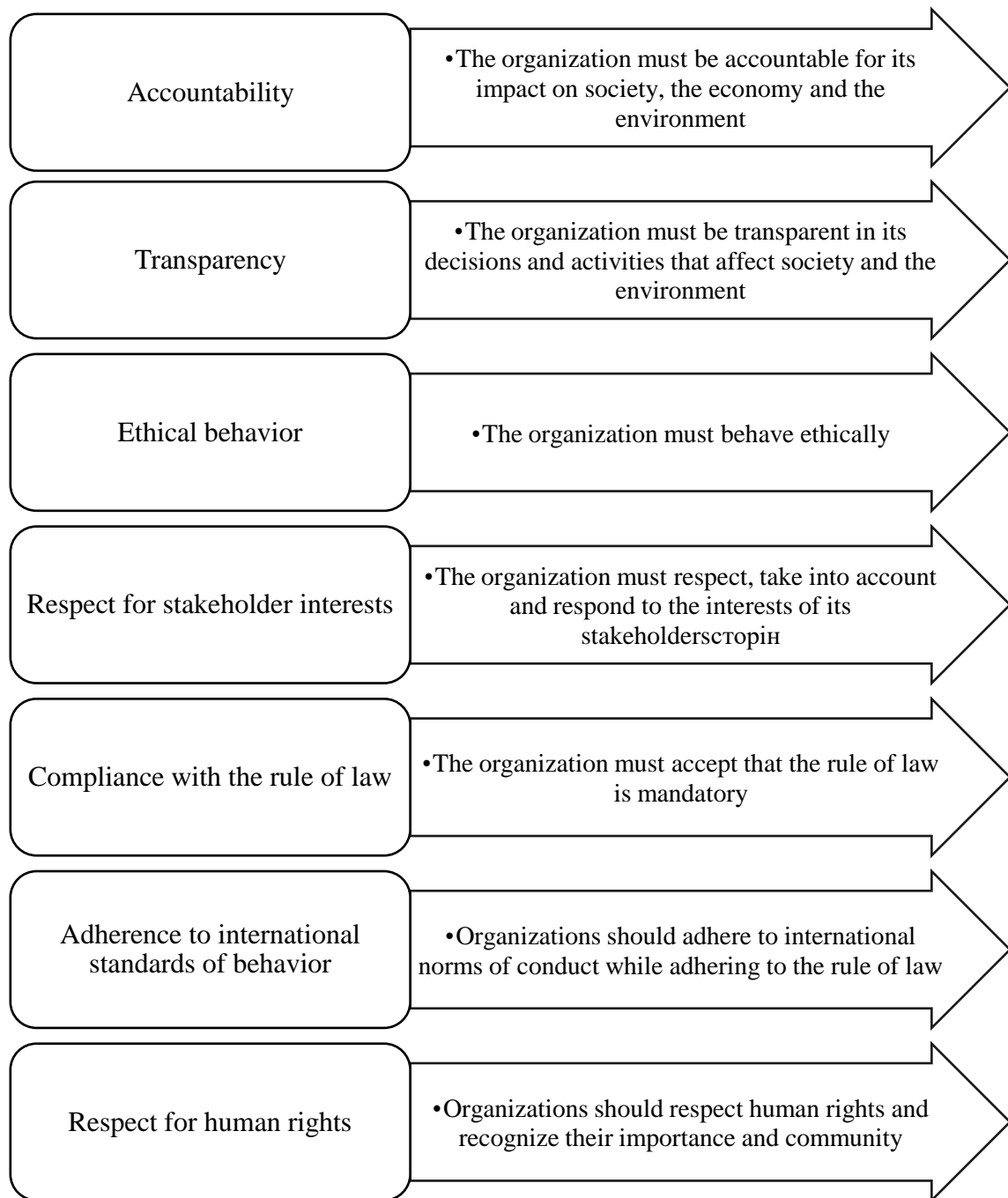


**Figure 2. Levels of corporate social responsibility**  
Source: created by the author [16]

Social capital is a complex category that is often referred to in the context of CSR, and on which the pace of economic growth, industry competitiveness, and the effective functioning of other components of social capital depend. In a narrow sense, social capital is determined by investments in the development of state and public institutions, connections, norms that promote the growth of welfare, stimulate the development of production, reduce poverty, and social injustice. Social capital is characterized by the presence in individuals and legal entities of stable public relations, useful for increasing their income, which creates advantages of their location in the hierarchical structure of society, organizations, in interpersonal relations. Social capital is an indicator of existing potential resources that can

With the spread of corporate social responsibility principles in the world, there is a shift in emphasis on aspects such as employment relations and good business practices. The elements of corporate social responsibility respond to the expectations of society at some point in time and are accordingly subject to change. In addition, corporate social responsibility interpretations have changed over the years, with various researchers and companies offering their own definitions, but after the release of the 2010 ISO 26000: 2010 International Standard on Social Responsibility, a discussion on the core concepts, principles and elements of social responsibility business has lost its relevance. According to this standard, corporate social responsibility is the responsibility of an organization for the impact of its decisions and activities on society and the environment through transparent and

ethical behavior that promotes sustainable development, including the health and well-being of society; takes into account stakeholder expectations; complies with the laws and complies with international standards of behavior; introduced throughout the organization [17, p. 28].



**Figure 3. Principles of Corporate Social Responsibility**

Source: systematized by the author using [17, p. 26]

The application of corporate social responsibility also provides companies with specific benefits, in particular, in improving risk management; improving reputation management; increase in sales and market share; motivation of employees; optimization of operating processes and cost reduction; investor loyalty; improving financial performance; establishing relations with the public sector and society, etc.

The evolution of views on CSR is shaping new approaches to its contemporary concept in the age of globalization.

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# **DIRECTIONS OF IMPLEMENTATION OF INNOVATIONS IN AGRARIAN ENTERPRISES OF UKRAINE**

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In modern economic conditions in Ukraine, the functioning and development of agricultural enterprises are largely determined by the efficiency of using the innovation and investment mechanism, introducing innovations in their activities. The analysis of economic practice shows that the attraction of innovations and implementation of innovative activities for agricultural enterprises in the context of the knowledge and digital technology economy is constantly growing. Meanwhile, statistical data of recent years confirm the fact that agricultural enterprises, especially small and medium-sized ones, are experiencing a certain crisis in the innovation sphere [1, p. 27]. Therefore, if you do not take active measures to overcome it both on the part of the state and on the part of the management of agricultural enterprises, the adverse consequences in the near future may be more significant in terms of labor productivity, resource recovery, processing and logistics, product quality, and environmental reproduction. The introduction of innovations by agricultural enterprises should be carried out on an ongoing basis, regardless of the socio-political and economic situation in the country, the state of the industry, the type of activity of the economic entity or its financial condition. It is the desire of an agricultural enterprise to improve and stay in dynamics that is the primary basis of its innovative development.

It should be noted that the introduction of innovations is not always accompanied by significant capital investments, and the need to remain competitive exists constantly. In addition, the introduction of innovations creates conditions for enterprises to get out of crisis situations and ensures a high level of financial stability [2, p. 25]. Therefore, a necessary prerequisite for activating the introduction of innovations by agricultural enterprises is the determination of reserves for improving the efficiency of their implementation, which are based on the goals and objectives set by economic entities.

Improving the efficiency of innovation implementation by agricultural enterprises is influenced by the formulation of strategic directions of innovation activity. In our opinion, they should include alternative innovative projects, which will allow us to identify the most affordable and effective innovative product for implementation by agricultural enterprises. Now it should be noted that today even agricultural enterprises-leaders of the domestic agricultural market do not form strategic directions for their own innovative development, which is manifested in this:

- enterprises do not determine for themselves the target level of products with signs of innovation and the target level of innovation of the technological processes used, which they must achieve within a certain period of time;
- innovative technologies are considered by Ukrainian agricultural enterprises only as a means of achieving increased productivity, return on resources or maximizing profits, and not as a general philosophy of development, which is more typical for the world's leading producers;
- even leading Ukrainian producers do not have a clear and systematic plan for the transition to innovative technologies of crop and livestock production, the target level of automation of production processes is not clearly defined, and there is no consistency in the introduction of resource-saving technologies.

Innovations implemented in one agricultural enterprise can then be distributed commercially in others. The speed of their distribution (diffusion) depends on the relative need for investment and the effectiveness of each innovation. At the same time, the more enterprises used this innovation, the higher the losses of those entities that did not use it, and the lower the rate of development of industrial agro-industrial production as a whole [3, p. 29]. There are several main functions that innovation

performs in agricultural enterprises: innovations accelerate technological progress; agricultural enterprises operating on the basis of the latest knowledge are able to radically change their socio-economic situation; innovations contribute to the development of vertically oriented chains of value creation; innovations cause the formation of horizontal links between enterprises; the use of innovations contributes to the development of the enterprise by increasing production capacity, increasing profitability and entering new sales markets.

In our opinion, due to the specifics of the industry and the peculiarities of production processes, we can also distinguish the main features of the innovation process in agricultural enterprises: the variety of types of agricultural products and products of its processing; a significant dependence of production technologies in agriculture on weather and climatic conditions; a significant difference in technologies of tillage and cultivation of agricultural crops; seasonality of production and the difference between production periods in the context of individual types of agricultural products; significant territorial dispersion of agricultural enterprises; different social levels of agricultural workers, which requires much more attention to training personnel and improving their skills.

Features of innovative processes in agricultural enterprises are also due to the fact that some types of agricultural products are raw materials for the food industry, the specifics of which are also related to the peculiarity of the food market [4, p. 45]. On the one hand, the demand for products is stable, which makes the agricultural sector attractive for investment. On the other hand, for some types of products (delicacies, environmentally friendly, organic products), the demand is quite closely related to the level of solvency of the population and fluctuates significantly in local agricultural markets. The demand for certain types of agricultural products is directly related to the mentality of the population of different regions (the habit of consuming different types of meat products, milk, bread, etc.). This requires constant work to expand the range of manufactured products, methods of their packaging, storage and delivery to consumers [5, p. 47].

Solving the problems of producing a sufficient amount of agricultural products is possible on the basis of innovative development, primarily with the components of product innovations. They provide for the production of new types of products that are in demand on the market. Technological innovations as part of the innovation process provide deeper and more perfect processing of agricultural raw materials, help reduce their cost and increase competitiveness. However, along with this, the implementation of these measures is impossible without marketing and organizational innovations aimed at creating and developing small and medium-sized businesses in agriculture [6, p. 107]. So, promising directions of innovative development of agricultural enterprises provide for the introduction of the following innovations:

- food products (production of organic products; production of semi-finished products and products that require minimal processing; cultivation of new (improved, modified) plant varieties; breeding of more productive and economically efficient animal breeds);
- technological (introduction of waste-free production; use of energy-saving and resource-saving technologies at all stages of production and storage of agricultural products; use of biotechnologies that allow obtaining new, useful and high-quality products; extending the shelf life of agricultural products by introducing packaging with fungicidal properties);
- marketing (introduction of modern technologies of marketing, advertising and promotion; sales promotion and public relations);
- organizational (application of modern quality control and certification systems; creation of a mechanism for interaction between producers and stakeholders in the production and sale of food products; development of cooperation and formation of integrated or corporate structures in agribusiness; introduction of new forms of maintenance and provision of resources and funds; creation of innovation and advisory systems in the field of innovation; social responsibility for the spread of certain innovations [7, p. 8]).

As for product innovations, the most relevant is the expansion of the range of organic production; technological innovations – activities aimed at saving energy and raw materials, extending the shelf life of products and introducing waste – free production; marketing innovations-the introduction of modern technologies of marketing and logistics, advertising and sales promotion [8, p. 103]. Organizational innovations should be aimed at creating the necessary conditions for ensuring

the realization of the innovative potential of enterprises, improving economic relations, integrating agricultural enterprises with food industry enterprises and creating integrated enterprises based on them.

The need to integrate various types of innovations that provide a synergistic effect is due to the peculiarities of agricultural production. Thus, the specifics of processing (technology) of the same type of agricultural products, which, in turn, are raw materials for the food industry (milk, meat), are associated with the development of fundamentally new products, taking into account the demand of different categories of the population. Marketing innovations contribute to the rapid distribution of the product when it is packaged and, at the same time, provide an increase in the shelf life, can contribute to increasing its mass production.

The development of small-scale production and processing of agricultural raw materials at the site of its production reduce its losses, and in some cases improves the quality of products [9, p. 131]. Reasonable integration of various types of innovations will contribute to the modernization of agricultural enterprises, ensuring import substitution, improving the quality and competitiveness of food products.

The combination of problems and factors hindering the innovative development of agricultural enterprises actualizes the task of forming a multi-level (state, region, industry, enterprise) organizational and economic mechanism for innovation management in the industry, which should stimulate internal and external influences on the subjects of innovation activity [10, p. 49]. At the state level, it is necessary to develop strategies to encourage innovation in agriculture in the long term, taking into account the specifics of each sub-sector.

The document should reflect the forecast of innovation needs of each sub-sector, identify problems and tasks, and identify factors that contribute to and hinder the introduction of innovations, and develop an adequate system for stimulating innovation. The strategy should identify priority areas of innovation activity, identify implemented innovative projects and opportunities for participation in them of scientific and educational institutions, determine the composition of participants involved in them, the relationship of implemented innovations and their impact on the efficiency of the industry, including the creation of new jobs, improving the quality and volume of products, the cost of its production, sales channels, business efficiency in general.

The mechanism of innovation management in agriculture, formed at the regional level, is of particular importance. First, this is due to the fact that most agricultural enterprises operate at the level of regional and local markets. Secondly, the development of medium and small businesses in agriculture strengthens the role of regional government bodies in the development of the industry. During the formation of the innovation management mechanism, administrative, social and economic incentives can be used to ensure the rational use of the productive forces of the region, improve economic relations between enterprises of the region and with business entities of other territories [11, p. 112].

The economic justification of regional innovation programs with a focus on rural areas should be based on a comprehensive assessment of trends in the social development of rural areas, the results of agricultural production activities and the level of agricultural scientific and educational potential. A set of indicators that characterize the potential of innovation entities – applicants for participation in the implementation of programs, as well as an assessment of the projected results of program implementation at the macro-, meso- and micro levels is the basis for justifying decisions to support certain projects in accordance with the goals and objectives of restructuring the regional agro-industrial complex and ensuring sustainable growth of socio-economic and environmental indicators of the agricultural sector of the region.

Given the important social importance of agricultural products, stimulating innovation for their development will help to increase the standard of living and satisfaction of the population. To integrate various types of innovations and accelerate their use in agricultural enterprises in the regions, it is advisable to create centers that would deal with the problems of interaction between scientific, educational and production structures, provide consulting and information support to innovative agribusiness, participate in the development of methods for stimulating innovation, search for sources of financing innovative projects, as well as control the use of funds raised.

The industry level provides for the development of the sequence and interrelation of innovations at different stages of the production cycle in agricultural enterprises, the integration of enterprises to create and implement innovations and their investment support, economic interest in the implementation of innovations of its participants, environmental and social results of innovations. Stimulating innovation at the enterprise level includes creating the necessary conditions for activating the innovation activity of employees. The result of stimulating innovation can be an increase in the profitability of innovative products by improving their consumer properties, reducing the cost of production as a result of technological innovations [12, p. 15].

Large-scale introduction of innovations in agricultural enterprises will meet the needs for high-quality products, Identify the causes of innovation dynamics, create conditions for regular reproduction of production and anticipate strategic changes in the economy, market, products and demand, as well as develop the necessary response measures or organizational, economic, technical support for innovative solutions.

Thus, the innovative development of agricultural enterprises will be facilitated by: state support for the development and implementation of effective innovations by enterprises (creating an institutional and legal environment favorable for innovation; creating a motivational mechanism for innovation; developing institutions for the use and protection of intellectual property rights, a system of state support for the commercialization of intellectual activity results); production of high-tech innovative products to ensure compliance with the needs of agricultural production; development of innovative infrastructure and innovative entrepreneurship in rural areas.

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# **CAPITALISM AND MODERN SOCIETY IN THE HISTORICAL AND PHILOSOPHICAL CONCEPT OF Y.N. HARARI**

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Among the wide variety of works devoted to the problem of the development of human civilization, the main stages of its evolution, the current state and forecasts for the future, the works of the Israeli historian, professor of the Hebrew University of Jerusalem, Yuval Noah Harari, are gaining significant popularity. Partly because his books are written in simple language, and perform the task of acquainting as many people as possible with the author's ideas. The manner of presentation and, in some points, the lack of evidence base, lead to an underestimation by the world scientific community of the main provisions of the Harari concept. However, in our opinion, the interpretation of the historical process of human development, proposed by the author of "Sapiens. A Brief History of Humankind" deserves close attention, since it sheds light on many moments of the modern world, its internal interconnections and relationships, which are fundamental for understanding the modern world and its prospects for the future.

In this article, we would like to consider the concept of Harari, outlined in his book "Sapiens. A Brief History of Humankind" (2011), concerning the formation of modern society in the process of interaction of three fundamental forces: science, economy and capitalism. A modern culture, which can rightfully be considered a global world culture, has been formed due to the interweaving and mutual influence of these forces, according to Harari. Therefore, the analysis of Harari's ideas seems to us very relevant, both in the context of understanding of the world culture and the world community, and in the context of understanding the processes taking place in Ukrainian society.

The purpose of the article is to consider Harari's ideas regarding the interaction of science, economics and ideology, which resulted in modern civilization; philosophical understanding of the views of Harari.

Harari begins his book by highlighting three fundamental moments in the history of humankind, namely, three revolutions that determined the development of our species. "It started with a cognitive revolution, 70 thousand years ago. The agrarian revolution, which took place 12 thousand years ago, significantly accelerated progress. The scientific revolution – it is only 500 years old – is quite capable of putting an end to history and laying the foundation for something different, unprecedented", – Harari writes (Harari, p.9-10).

The cognitive revolution gradually led to the fact that the species "Homo Sapiens" became the only one on the Earth. In fact, due to the cognitive changes during of this historical period, a person became what he/she is today. The basic qualities were formed, without which modern civilization is impossible. People learned to use the language, and, most importantly, to use it not only to convey information about the world around them, but also to discuss the "world of people", the relationship between each other, to make common plans, and, as a result, common myths, that made possible to unite a huge number of people, to build their interaction. This phenomenon, from the point of view of Harari, formed the basis of modern civilization. People are united by intersubjective reality, which, on the one hand, does not exist in the material world, but, on the other hand, differs from subjective attitudes and fictions. Intersubjective reality is real as long as a certain number of people "believe" in it

(Harari, p. 43). Due to this phenomenon such structures as science, ideology, economics, religion, etc. are possible. And due to these structures that European civilization was able to reach an unprecedented level of development and, moreover, spread its influence throughout the world.

These are the effects of the cognitive revolution for humanity. The next revolution, the agrarian one, also radically changed the vector of development of civilization. The agrarian revolution was the first economic victory of humankind, which ultimately significantly influenced the development of culture and society as a whole. However, Harari has a slightly different opinion. Perhaps from the point of view of the human species, the agrarian revolution was a very positive development. “Homo Sapiens” spread throughout the planet, was able to give birth to a culture that has reached a fairly high level, but he had to sacrifice the well-being of an individual. “The Agrarian Revolution is the greatest scam in history,” – writes Harari (Harari, p. 98). He believes that it was not man “tamed” the wheat, but the wheat “tamed” man, made him sacrifice his health and well-being, completely change his lifestyle, adapting to the needs of agricultural crops. As a result, a particular person began to live worse than before: doing work for which his/her body was not adapted, to eat worse, to get sick more. However, since the process of transition to an agrarian society was very long, people did not immediately notice what was happening, and when they noticed, it was already impossible to change anything.

Nevertheless, the agrarian revolution laid in the consciousness of mankind another component, without which modern civilization would be impossible – “gave the future an unprecedented significance. The farmer is forced to constantly think about the future and work for it” (Harari, p. 122). Striving for the future lies at the heart of scientific research and capitalist ideology, shaping the modern world.

Having considered the main events of human civilization, Harari proceeds to reason about what processes, systems and their interactions have created the modern world that has been formed in the last 500 years. “In the first millennium BC,” – writes Harari, – “three potential world orders were formed, allowing for the first time to see the world and the entire human race as something unified, subject to a common set of rules. The first such order was the economic one: everyone was united by money. The second is political: empires were formed. The third is religious: world religions emerged – Buddhism, Christianity, Islam” (Harari, p. 207-208). And since the scientific revolution, a scientific and technological system has been added to these components, which, in an unprecedented interweaving with economics and ideology, has given rise to the modern capitalist world.

Money, from the point of view of Harari, in the context of the development of civilization, can be considered not so much as a material reality, but also as a psychological phenomenon. It was in this manifestation that they played an outstanding role in the construction of modern culture. Money is the highest form of trust and tolerance. Along with collective myths, money has become the factor that has allowed many people to unite, overcoming countless differences in views and traditions. Money formed the basis of the global trust system, but the negative factor, according to Harari, is the fact that trust based on money is trust in money, not in people (Harari, p. 207-208). This feature should be taken into account if we want to comprehend modern capitalist culture.

“And then the scientific revolution broke out, and the idea of progress appeared. The essence of the idea is this: if you admit your ignorance and invest in research, things will go well. The idea quickly acquired economic expression. People who believed in progress also believed that geographical discoveries, technical inventions, and the development of ties would increase the total amount of production, trade and wealth” (Harari, p. 367).

Prior to this, wealth was seen more as a vice. People were confident that the amount of material wealth is constant, or even gradually decreases. Hence the understanding that if someone has more material wealth, then someone is deprived. Naturally, most religions have sought to eliminate this injustice.

In the era of scientific progress, everything has changed. Science has proven its ability to practically endless knowledge, and technology – to practically endless improvement. This gave humanity a basis to believe in progress, to believe that current problems will be solved in the future: new resources, new medicines, new technologies, etc. will be found. This means that material goods are

no longer limited in volume. The worldview of the modern era is already based on this postulate. The economy has been growing continuously over the past 500 years.

Thus, modern capitalism is based on mutual faith and mutual benefit between science and economics. The economy needs more and more resources, and science says that the only problem in obtaining them is our ignorance. As soon as a scientific discovery is made, it entails the emergence of new technologies, which in turn lead to an increase in material wealth. However, this process is not one-sided. As long as science remained the activity of a few individuals who have practically no social and financial support, there have been no significant changes in the development of civilization. But, as soon as humankind realized the practical benefits of scientific discoveries, investments came to science. Moreover, it turned out that science is a very expensive project. The more value we want to get, the more money needs to be invested.

However, the union of science and economics still cannot be considered exhaustive from the point of view of understanding the modern world. If at the dawn of its emergence science acted as a free creative search, and the direction of this search did not depend on anything, then during the period of the scientific revolution everything changed. Science ceased to exist for itself, and began to exist as a tool that humanity uses to achieve any goals. Naturally, some elements of freedom are inherent in science to this day, but someone must set a vector for its development and decide, in the end, what to pay for. “Science cannot set priorities for itself. Nor is it able to decide how to dispose of its findings”, – writes Harari (Harari, p. 324). Such decisions are made from the outside, namely, within the framework of one or another ideological or political system. Naturally, different ideologies will solve the problem of scientific priorities, the problem of financing science in different ways, and as a result, they will come to different results. Therefore, the ideological factor is also one of the elements of the modern world order, along with the economic and scientific.

In addition, both economics and science have learned to look to the future, to believe in progress and to count on the fact that things will be better in the future than they are now. In turn, this phenomenon belongs to the sphere of intersubjective reality, the abilities which appeared in people mind during the cognitive revolution, and with the help of which people are able to unite, create global structures and simulate the further development of events.

Belief in the future has allowed the economy to make full use of such a mechanism as credit. The credit was used before; however, if we assume that the future is likely to be poorer than the present, then the credit seems to be practically meaningless. Therefore, the belief in progress has had a significant impact on the economy. “People agreed to express imaginary objects, which at the moment do not yet exist, with a special type of money – “credit”. Credit gives us the opportunity to build the present at the expense of the future, based on the assumption that in the future we will certainly have much more resources than in the present. When they began to do something in the present, attracting the income of the future, many new, unprecedented opportunities opened up” (Harari, p. 365).

Thus, “capitalism and science are closely intertwined”, – says Harari. – The European “conquest of the world” was financed by credit, not taxes, and the process was controlled by capitalists, whose main task was to get the maximum return on their investments” (Harari, p. 373-374).

The market and the state come to the fore in the modern world. They acquire unprecedented opportunities and powers. However, in the process of realizing their mechanisms, they are faced with an unexpected obstacle – family and community. For thousands of years, human life has flowed mainly within these structures. Family and community had a huge impact on a person, played a decisive role in his/her life. All economic, educational, medical and spiritual needs were met within the family and community. For a long time, the state was content with secondary roles, since, in fact, it could not offer a person anything particularly significant.

Everything changed in the era of capitalism. Now the state and the market can, in fact, replace the family. They generate and cultivate a new worldview, which is called individualism. In the modern era, a person is quite capable of living, relying on the structures that society offers to him/her, and no longer needs the support of his/her close environment. Hence follows a radical change in attitudes towards the institution of family and kinship. It is given a place only for the emotional filling of life.

However, extreme individualism leads a person to a feeling of uselessness, loneliness and helplessness in front of the soulless machine of the market and the state. For centuries, man has existed

as a social being and now needs the support of a close community. Faced with such a problem, “markets and states instead grow imaginary communities” of millions of strangers <...> Two most important examples of such communities are the nation and consumers” (Harari, p. 428-429). Harari comes to quite provocative conclusions in the process of considering these structures. A modern person perceives his/her world as a given and natural habitat, without thinking about the fact that in fact, a nation, for example, which he/she is used to perceive as something real, and, most importantly, significant for his/her life, is just an artificial construct that is cultivated by capitalist ideology, with the aim of organizing such a society that will best meet the objectives of this ideology.

Summing up, we can say that the work of Harari “Sapiens. A Brief History of Humankind” is an unique work. The author managed to combine the historical, philosophical and economic approaches to the analysis of the development of human civilization. Harari shows how the modern world was formed, and presents history in a completely unexpected way, namely, demonstrates the relationship of such seemingly distant phenomena as science and economics. Following Harari, you come to understand that the capitalist system, which has developed as the basis of the modern world, is based on a specific worldview that was inherent in European culture, and was expressed in the desire to search for new knowledge and new opportunities, in the desire to master and subjugate the world around, in the recognition of their ignorance and belief in the possibility of finding the truth, belief that the future will bring new opportunities and qualitative changes.

This kind of value attitudes turned out to be important not only for science, but also for the economy. Armed with a belief in progress and the technological results of scientific activity, the economy has reached unprecedented proportions. As a result, having united with ideology, science and economics gave birth to the modern capitalist world, which, in turn, brought about global changes in the world outlook.

The capitalist world was finally able to give a person social freedom, and, in principle, the feeling of himself/herself as a separate independent person. However, breaking away from family structures, a person faced a number of new problems, which are now also accepted to be solved not in the family circle, but with the help of imaginary structures.

Perhaps, the modern era, based on the views of Harari, can be considered the result of the development of such an ability of human consciousness as imagination.

Imagination allowed primitive people to overcome the natural boundaries of social ties and learn how to build communities of all sizes. States, nations, corporations and much more, that which is the foundation of the modern world, belongs to this type of community. Imagination made it possible to predict the future and make certain plans. Having learned to trust the future, science and economics began to develop at an unprecedented pace. In this sense, we can say that modern culture is the culture of the “future”.

Thus, the historical and philosophical concept of Harari allows for a new look and comprehension of the principles of the formation of modern civilization, its value attitudes; understand the main contradictions and problems of capitalist society, see their source and, possibly, outline ways to solve them; suggest vectors for the further development of human civilization.

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# **RISK MANAGEMENT IN THE MANAGEMENT SYSTEM OF AN AGRICULTURAL ENTERPRISE**

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During the last decades the structure of trade have changed essentially by increasing the part of high-quality ready food products in the world`s export-import. The social role of agrofood sector as a carrier of public benefits, guarantor of food, social and economic and ecologic safety, carrier of maintenance and development of national culture has also secured. In these conditions it becomes obvious that to ensure permanent development of any country the necessary component of the management systems of economic agents shall be risk management as a risk management system that includes management strategy and tactics aimed at achievement of the indicated development. After all, the risks of all levels make the constraints for efficient development of all the economic relations participants. It is especially concerns the development of agricultural enterprises that are initial in the food products supply chains, and the food safety of the country, social and economic development of rural territories and ecological state of the lands use depend on them.

Agricultural activity is one of the most risky in the economy as aside from the influence of the economic laws inherent to all economic entities; it is influenced by such factors as: climate, weather conditions, epidemics, ecologic problems, etc. At the same time agricultural goods producers feel the consistent need for capital-intensive upgrading, they shall constantly diversify their products in the conditions of advancing demands of the market to its quality. That`s why the achievement of efficient utilization of available resources (financial, natural, labor, informational and other) is a complicated task for agricultural enterprises management.

The problems of enterprises management, in particular risk-management, are studied in different economic fields, especially in commercial, banking, manufacturing industry, etc. The problem got widespread after the World War II; and appears to be relevant today, as the modern economic space features changeability, uncertainty, complexity, vagueness, and ambiguity.

The founding father of risk management is deemed to be Wayne Snider who described the profession of “risk-manager” for the first time in 1956 [19]. The first learning guide on risk management was published in 1963 by Robert Irwin Mehr and Bob Atkinson Hedges named Risk Management in the Business Enterprise [8, 20]. The studies of risk management have been added by the developments of general concepts, principles and terms. Practical application of scientific thought progress is expressed in risk management standards and concepts adopted by international and national organizations and companies. In the meantime national standards of risk management are developed in the most of the world`s major economies [18, 23].

In Ukraine the issue of risk management is materially considered in the works of N. Birchenko [1], T. Barisova [2], V. Vitlinskyi, G. Velykoivanenko [3], L. Donets [11], V.T. Tsvigun [16] and many others.

Taking into account that the mankind hasn`t leant to fully influence the unfavorable weather conditions, the most efficient mechanism for consequences avoidance is application of agricultural insurance mechanism as a constituent of risk management mechanism. Thus, the issue of agricultural insurance is studied by such scientists as: A. Gordiychuk [4], V. Goryovyy [5], I. Zhmurko [6],

R. Kolibaba [7], Yu. Lupenko, A. Sholoiko [9, 17], S. Navrotskyi [10], O. Ostapenko [12], V. Pantelev, O. Kipreieva [13], T. Solomatina [15], V. Onegina, N.Vnukova [21, 22], et al.

V. Onegina`s and N.Vnukova`s articles are devoted to the consideration and generalization of tendencies of development of agricultural insurance, private and public insurance programs, the role of the public policy in the provision of agricultural insurance in the European Union, USA, and Canada [21, 22].

Regardless of the scientific work, all economic agents (notwithstanding the form of ownership, size, scope of activities) in the modern economic conditions are influenced by many negative factors resulting in expenses and being the risk because of internal and external circumstances. Agricultural enterprises make no exception.

According to T. V. Tsvigun, management by the risk or risk-management is a special type of management activity directed at efficient enterprise protection from unacceptable orderly or unexpected circumstances (events, threats) that may eventually influence negatively the work of the enterprise, namely by either enterprise profitability decrease or income deficiency [16].

For T. Borisova risk management is a specific management area providing for application of different approaches, processes, measures aimed at provision of maximally wide scope of possible enterprise risk coverage, their estimate, as well as formation, realization and control of measures to optimize the risk level in order to achieve the enterprise goals [2, p. 116].

N. Birchenko`s research established that the risks represent any uncertainties of circumstances for the pursuit of production and commercial activity, that can be evaluated in monetary form through non-receipt of expected financial results. The author has also proved that the existing methodic instruments for quantitative estimation of the efficiency of agricultural enterprises risk management should be added up with holding of quality analysis through scenario method account. The meaning enables to increase the quality of management decisions as to risk management strategies at agricultural enterprises [1].

Risk management mechanism, in T. Tsvigun`s opinion, is a conjunction of management principles, methods and key factors, different components of maintenance subsystem, interaction and consistency of which shall ensure efficient decision-making in the field of enterprise risk management [16].

It should be pointed out that the information support of risk management mechanism is a source of data for analysis of threats and determination of quantity extent, mainly in monetary form, of enterprise risks with the purpose of their prevention, reduction or evasion. For processing the received information at the enterprise, its qualitative analysis, the necessary component of analytic support is modern software and appropriately trained and skilled personnel. Surely, the analysis of the obtained information shall provide solution of such tasks as determination of risk causes with the purpose of its prevention in future and establishment of the dependence level between the risk probability and the size of expenses.

Aside from the information support the necessary element of agricultural enterprises risk-management is financial support of operation expenses coverage. The possible expenses for formation and realization of the indicated mechanism at the enterprise are as follows:

- mechanism development, review and improvement;
- legal support (drafting job descriptions, regulations);
- information support;
- payment to employees performing duties in the field of risk-management;
- financing the indicated influence measures at the risk level by prevention, reduction, evasion, etc.

All the stated expenses shall be constantly analyzed and systemized as in the future their value shall be compared to the risk “cost” prevented, reduced or evaded. At the same time, to provide predicted harmonious development of the enterprise and its achievement of goals in the modern condition of permanent uncertainty, the enterprise management shall increase expenses on the risk-management system. But the key factor to increase such expenses is that the size of expenses for risk-management operation shall not overcome the “cost” of potential risks, namely the amount of forgone earning of the economic agent.

According to many scientists, the most efficient instrument of risk management in agriculture is agricultural insurance. Thus, the insurance is the appropriate way of protection against risks arising within the framework of agricultural producers' activity, as it operates through the loss reimbursement mechanism [6].

S. Navrotskyi also states that one of the elements to ensure the financial state stabilization for the agricultural enterprises in the market condition is insurance providing continuity of agricultural production development, agricultural market operation and can be a source of investment into the agriculture [10, p. 149-155].

The information about hedging can also be found in the scientific literature. According to T. Solomatina's conclusions, hedging of financial capacity loss risk for the agricultural enterprises make economic relations connected with minimizing the probability of deviation from the movement pattern on the way to the set goals of formation and utilization of financial resources, financial state indicators and the cost of economic subjects under the influence of adverse development of internal and external realities, including climate and environment conditions [15].

The precondition for efficient insurance coverage of agricultural enterprises is clarification of the risk notion in insurance, detection of its main types and determination of possibility to provide insurance coverage in the process of agricultural production.

The majority of domestic financial experts-underwriters determine the risk as a threat or possibility of deviation from actual performance results or taken decisions from the planned ones [2, 6].

Economically speaking, the risk of the agricultural economic agent is interpreted as a threat of income deficiency, deficit or resource consumption being the result of certain types of manufacturing, sales or financial activity [11].

The presence of a certain totality of different risks in the field of agriculture stipulates the necessity of modern financial instruments application in order to minimize them [5, p. 56]. As it was noted before, agricultural production is one of the most risky types of entrepreneurial activity as its development depends both on external realities, in particular, world's financial and economic situation, on social and economic development of the economy, on corresponding legal framework, on weather and climate conditions that become more unpredictable year after year, and on internal environment of the enterprises – product manufacturers.

Insurance of the agricultural manufacture is a system of measures to protect the property interests of citizens, organizations and establishments related to agricultural products manufacture, organized by special insurance state and non-state protection agencies in case of certain events funded with special purpose monetary resources [13, p. 28].

According to T. Solomatina's research, the most demanded insurance products by the agricultural enterprises in crop farming are as follows: total loss and spring frost – 40 % of insurance contracts, 42 % of insured spaces, 51 % of affected spaces, 54 % of insurance proceeds; multirisk insurance of future harvest – almost 46 % in insurance sums, 58 % – in insurance premiums. In livestock production: 99.8 % insured on individuals risk complex by the number of contracts, and 51 % – by the ratio of insurance premiums collected, 100 % – by the share of injured animals and insurance benefits. Nominal risks – 67 % top the ratings by the part of insured animals, risk package (fire, third party offence, natural disasters, incident, diseases, including infectious ones, forced killing related to epidemic control measures) has the highest ratio in all insurance sums – almost 61 % [15].

The law “On Peculiarities of State-Aided Agricultural Products Insurance” is in force in Ukraine [14], in accordance therewith the agriculture insurance risk is the risk of insured crop (bedding) failure (loss, damage), insured harvest failure (shortfall, shortage), death (loss, forced killing, forced destruction, traumatic injury or disease) of insured livestock, poultry, rabbits, fur bearers, colonies of bees, aquatic biological resources and animal products beneficially or otherwise owned by agricultural producer as a result of insured event provided for by the insurance contract. Moreover, as of the beginning of 2020 the license for holding insurance activity in the form of voluntary insurance of agricultural products is held by 64 insurance companies or 27.3 % of their total count [15].

Furthermore, in accordance with the law of Ukraine, state support in the form of monetary resources is provided to the agricultural producers from the state budget in the form of subsidies for a part of insurance payment (insurance premium) accrued under the insurance contract.

Therefore, state-aided agricultural products insurance means economic relations as to insurance protection of property interests of agricultural producers in case of certain events (accident insured) funded by monetary funds raised by the insurance agent by payment of insurance payments (premiums) by the subscriber, the part of which is reimbursed at the expense of state subsidies and income from investment of the fund's resources and is determined by the presence and peculiarities of risks, the carriers of which are plants and animals [14].

Essentially, risk is a combination of events (threats) probability and consequences of adverse conditions (monetary value of the extent of forgone financial results). In accordance with the corresponding legislation all the totality of risks in the agriculture is divided into the following groups [5, p. 48]:

1. Operational risks arising of ambiguity of natural conditions of plant and animal products manufacture. Unfavorable weather conditions, animal diseases and presence of pests are, as a rule, the reasons that can negatively influence the quantity and quality of the agricultural products manufactured;

2. Market risks noticeable because of price uncertainty for agricultural products. Incomplete exploitation of opportunities of market pricing mechanisms such as formation of a product shareholder's value, conclusion of futures contracts, significantly restrict the financial opportunities of the manufacturers when planning their balance of income and expenditures;

3. Credit risks related to commercial credits that cannot be always returned in time by the agricultural producers. Raising of credit means that the producer shall save a certain part of its income to pay the debt in future;

4. Institutional risks. Related to the changes of economic, social, food, ecologic policy of the state, the actions of which indirectly result in agricultural products price changes and cause certain administrative restrictions in agricultural production;

5. Personal risks. The nature of these risks is related to individual peculiarities of the employees. Accidents, diseases and incapacitation, including the household heads and specialists, influence negatively the economic activity of the enterprise, their financial result;

6. Financial risks related to capital stacking and business financing. The risk in this case is stipulated primarily by the changes in the interest rate under the loan capital;

7. Ecological risks jeopardizing natural and manmade threats resulting in soil erosion, cultivated lands contamination, humus soil exhaustion and plant nutrient deficiency, soil acidification.

It is worth mentioning that agricultural insurance shall develop in the following directions: first, Ukrainian legislation improvement regulating insurance services on the market, and providing the agricultural producers with state support on their risks insurance; second, institutional and infrastructure development aimed at growth of the state's ability and rapidity to perform its functions in this system; third, encouragement and promotion of insurance sector aimed at the increase of its ability to provide quality services in the field of agriculture.

Cumulativity is peculiar of the majority of agricultural risks causing their influence on the general social and economic state of the country. Taking into account undercapitalization of Ukrainian insurance companies and immaturity of financial market, Yu.O. Lupenko and A. S. Sholoiko determined the objective necessity in establishment of new means of financing agricultural catastrophic risks, as the use of alternative reinsurance is complicated according to the authors [9]. The executive study of the mentioned authors emphasizes the prospects of application of business platforms in the field of agricultural catastrophic risks reinsurance, data exchange, sale of insurance policies as well as financing of expenses from natural and manmade disasters by means of crowd funding platforms in conditions of high-level uncovered catastrophic expenses in the world. The authors also substantiated the expediency of creation of a state reinsurance company for decreasing the scope of external reinsurance of agricultural catastrophic risks, and as a result – decrease in outflow of capital abroad [9, p. 48].

Z. Varnaliy, S. Onyschenko and O. Masliy substantiated the necessity of implementation and realization of organizational and economic mechanism for prevention of threats to economic safety of the national economy by contextual response to the arising threats. The author's approach lies in development of anticipatory (preventive) management using the methods of scenario modelling. The above-mentioned enables to choose the optimal and the most efficient decision among the alternative

variants by forecasting the possible outcome, including the financial one as a result of their realization. Implementation of strategic monitoring, contextual modelling and forecasting at development of priority directions of economic policy within the framework of the entire procedure for substantiation and adoption of strategic decisions will enable to generate fundamental principles of economic safety assurance both for the country and each economic agent alone [24].

Thus, the research held on the risk-management mechanism in the risk management system enables to provide recommendations to agrofood sector enterprises, in particular, agricultural ones, for implementation of such a mechanism, as its application allows them not only to survive in dynamic ambiguous environment but to have sustainable development that is a condition and a guarantee of food and ecologic safety and social and economic development of the country as a whole.

For the purposes of the foregoing, the development of agricultural production insurance is a viable mechanism for obtainment of positive economic and social results of the economic management in rural regions. If the agricultural producer is aware that in case of partial or full crop damage, animals and animal products destruction (loss), it can count on proper reimbursement, it will surely continue carrying out of agricultural activity even in conditions of significant uncertainty. For this purpose it is necessary to use such instrument as agricultural products insurance with the state support. The abovementioned is a more efficient form of manufacturer income stabilization than the financial support of the state.

It is expedient to realize the risk-management mechanism for agricultural enterprises according to the following action plan:

- 1) Setting of a goal and tasks for the risk-management mechanism;
- 2) Development, documentation of risk-management algorithm, determination of persons involved and assignment of labor activity to them (productive, creative, educational and cultural, public, etc.);
- 3) Complex and system analysis of threats (internal and external) as potential events that can result in reduction or failure to receive the amount of the enterprise expected results;
- 4) Quantity estimate of threats constituting the “cost” of risks (amount of forgone expectations of financial results of the economic agent);
- 5) Choice of optimal, up-to-date, viable methods of risk management (evasion from risk, its reduction and risk assignment);
- 6) Implementation of the chosen management methods;
- 7) Control of the main stages of risk management mechanism;
- 8) Analysis and managerial decision-making on the efficiency of mechanism, including the corrective actions on its improvement.

Implementation of risk-management mechanism in agricultural enterprises risk management will allow them to prevent threat, reduce risks and minimize negative influence on their financial and economic activity.

For the agricultural enterprises insurance shall become the efficient financial and economic instrument for producers' property interest protection during the manufacture and processing of agricultural products. Further development of agricultural insurance shall be aimed at creation of favorable and safe conditions for conducting business by all the participants of agrofood chain stipulating the division of risks among the agricultural producers, processing enterprises of food industry, representatives of trade, banks, insurance companies and the state. Such formulation of the issue will enable the domestic producers to integrate into European and global economic space.

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# COMPETITIVE STRATEGIES OF ENTERPRISE: THEORETICAL ASPECT

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Under modern conditions of economic development in almost all segments of Ukrainian markets there are increased competition, dynamic changes in the external environment, public access to information, deepening crises and more. It is in such conditions that the role of strategic management of the company increases. Based on the research, it was found that currently in economics there are no clear boundaries between the processes of strategic management at different levels. For example, some scholars generally identify the process of strategic management with the process of forming or implementing a competitive strategy [1]. From our point of view, strategic management is much broader and includes in its structure the stage of formation and implementation of competitive strategy. A similar opinion is held by V.V. Pastukhova, who identifies four key blocks in the model of strategic management of the company:

- block for defining key goals;
- analytical unit;
- strategy development unit;
- strategy implementation unit.

In particular, the author emphasizes that the block of strategy development in its structure includes such stages as: generation of strategic alternatives of different options, choice of one development strategy of the company, and also development of the strategic plan. Therefore, to use the substitution of the category "strategic management" with the concept of "strategy formation/implementation" in economics is generally unacceptable [2].

The category "strategy" is now considered one of the most widely used in economics. However, the economic literature contains a large number of interpretations of this category. In particular, in foreign science, strategy is considered as an operational category, that reflects in each case a separate aspect of the long-term planning management process. In general, strategy is understood as a process of long-term planning, which is based on the understanding that all changes in the future can be predicted, and internal processes are controlled. That means, if the company in the market will act in accordance with the chosen strategy, then in the future it will achieve its goals. As a rule, the organization's strategy is developed for the medium or long term and includes structure projects, programs and specific actions. Currently, the key goal of the company is to maintain and expand its position in a particular market segment in order to increase or stabilize the amount of profit. To ensure the achievement of the latter by the company is possible as a result of focusing its activities on profit maximization. In this case, it is a competitive strategy that can give the company a competitive advantage, the opportunity to take a leading position in the market and, consequently, to obtain high and stable profits.

In this article, the authors understand the category of "competitive strategy" as a certain way of action that allows a company to gain a competitive advantage in a particular field of activity by competing and meeting unstable consumer needs, much more effectively than competitors, but without harm to society and the individual consumer. The company's competitive strategy makes it possible to more clearly specify and determine the direction of the organization's corporate strategy. Developing a competitive strategy is to define and understand how the company will compete in the market, what

will be key objectives and what resources the company needs in the process of achieving the objectives. The essence of any organization's competitive strategy is to strive to take a leading position in the industry and keep them as long as possible.

However, after achieving strategically defined goals, the company's policy should be revised because when a business entity develops according to the desired development scenario, the practical implementation of a competitive strategy to achieve the achieved goal does not make sense. Such a strategy does not take into account situations that may arise in the future, urgent tactical and operational tasks.

In the process of developing a competitive strategy, professionals must also look for new opportunities that may arise as a result of the company's projects. As practice shows, in the process of implementing projects for the company there are unexpected prospects, which are almost impossible to predict, so use a general wording that fits within the strategy. The general strategy of the company is formed and implemented at all levels of strategic management: corporate; market; functional; linear.

Research in the field of strategic management was conducted by A. Maslow. In particular, the scientist studied the processes of managing the motivation of individuals. Among the most effective methods of managing employee motivation A. Maslow attributed those methods that meet all levels of individual needs at their best. We believe that modern companies when developing competitive strategies should consider the work of A. Maslow, because each consumer will prefer the product of the company, which will fully meet its needs, both lower and higher levels.

F. Kotler also studied competitive strategies. The author emphasized that companies simply need to use competitive strategies in order to survive in the market. According to the provisions of F. Kotler in economics, given the market share owned by the company, it is advisable to distinguish four competitive strategies:

- market leader strategy;
- strategy of the candidate for leadership;
- strategy to follow the leader;
- niche market strategy (focused strategy).

According to the scientist, the company should focus on such components of competitive strategies as product management, communication, pricing and sales. Also, the merit of F. Kotler is that he proposed the concept of marketing according to which all employees of the organization should strive for corporate interaction based on marketing tools [3].

G. Mintzberg also studied competitive strategies. In particular, the researcher's research was aimed at studying the process of making effective strategic decisions. To the latter, the author included such solutions that can provide solutions to unforeseen problem situations based on intuitive decisions of senior managers. G. Mintzberg believes that the best for companies are those competitive strategies that are forced on the vision of promising options for future development of the organization. We believe that the scientist's contribution was that he was able to point out the shortcomings of the planning process and prove the effectiveness of competitive strategies in the development of the company as a whole. G. Mintzberg also stressed that the company in the course of its activities must constantly assess the effectiveness of competitive strategy and adjusts it depending on changes in the market.

For the first time the category "competitive strategy" was used by M. Porter, although in his work "Competitive Strategy: Techniques for Analyzing Industries and Competitors" the scientist did not provide a clear interpretation of this category.

According to M. Porter, a key component in the development and selection of a company's development strategy is the ability to quickly adapt to the competitive environment. The author argues that the competitive environment of the company is formed as a result of the impact on the market of various factors and is a set of different subjects of economic relations and relationships between them, which further determine the intensity of competition in a particular segment of the product market. Among the most influential factors in the competitive environment M. Porter includes: market power of sellers, market power of buyers, the threat of new competitors, the threat of substitute products and competition between competitors. Some experts suggest highlighting another factor – government policy in the field of competition regulation. Also, when developing and implementing the strategy, the



company must take into account the model of market structure (monopolistic competition, oligopoly, and monopoly), the structure of the industry and the stage of the life cycle of the market segment. M. Porter also believed that universal strategies determine the conceptual approaches to the formation of competitive advantages of the organization and the differences of its strategic positions in the market. The essence of the position proposed by the scientist was as follows: if each company will plan and follow the recommendations of M. Porter, the competition stabilizes over time, and the company seeks to become a leader in minimizing costs, using a strategy of differentiation or concentration (in a narrow market segment), will eventually take its place in the market. However, in today's market development, Porter's model does not provide companies with the benefits it previously provided. Using this model will provide the company only the opportunity to keep their business afloat. For economics, Porter's model is important, but today the choice of competitive strategy from his position does not solve the problem of forming an effective competitive strategy, because the key components are cost management. We believe that the value of M. Porter's scientific approach is that he was able to specifically point out to companies the various options for competitive strategies that should be considered in the process of developing and implementing corporate strategy [4]. M. Porter considered an effective strategy that can increase the company's competitiveness, improve its market position and fit harmoniously into the overall strategy of the company.

G. Hemel noted that the role of strategy is to be able to use all resources in the process of activity and create a dynamic situation that will allow the company to realize its strategic goals. In contrast to A. Maslow, G. Hemel considered the methods of personnel adaptation management to be the most effective methods in the process of forming a competitive strategy. These methods, according to the scientist, are able to fully develop the entrepreneurial skills of top managers and professional opportunities of employees. Subsequently, G. Hemel and K.K. Prahalad came to the conclusion that the company's competitive strategy should be aimed not at fighting a competitor for market share, but at the possibility of avoiding competition.

In Table 1, we have grouped the species of various scholars on the content of the concept of "competitive strategy". The presented species indicate that today there is no single approach to the process of forming competitive strategies. In a market economy, the provisions proposed by M. Porter are mostly in demand.

**Table 1. Contribution of scientists to the development and implementation of competitive strategies**

<b>Author</b>	<b>Position</b>
A. Maslow	Maslow's pyramid, meeting the needs of all levels
F. Kotler	1. Strategy "market leader" 2. "Call" strategy 3. Strategy of "imitation" 4. Strategy of the specialist
G. Mintzberg	Systematic evaluation of the effectiveness of the strategy and its adjustment, both in the short and long term
M. Porter	1. Strategy of differentiation or concentration 2. Cost management strategy 3. Niche market strategy
G. Hemel	Personnel adaptation management

As a rule, competitive strategies are a separate component in the structure of competitive behavior of economic entities. At the initial stage of entering the market, the company's competitive behavior is modeled at the strategic level and takes the form of a competitive strategy. In the future, the company's competitive behavior takes the form of operational procedures, situational reactions and certain actions in the target market segment.

The company's competitive strategy is established when it plans to compete in a particular segment of the target market. Competitive strategy is a set of initiatives, practical actions, and reactions of the business entity to the external environment in order to obtain competitive advantages. That is,

the company's strategy defines a certain set of actions to achieve competitive advantage in a particular segment of the product market [5].

We believe that in the process of forming a competitive strategy, the company must take into account the influence of external and internal factors. In particular, Yu.N. Korolenko proposes to identify the following groups of influencing factors:

a) a group of external influences:

- socio-economic situation;
- informatization of society;
- the impact of the company on society;
- change of priorities in meeting the needs of consumers;
- globalization changes in society.

b) a group of factors of internal influence:

- a new role of marketing in the company;
- features of production;
- product competitiveness;
- changes in the motivational structure of employees;
- investment activity of the enterprise [6].

The rapid changes given in the structure of the market environment, companies simply need to constantly monitor the external environment in order not to lose the chance to identify new opportunities for effective development of the company and reduce the impact of possible threats to its activities. Today, environmental monitoring is the basis of the process of identifying and generating competitive advantages that can provide companies with increased profits. It is the ratio of external and internal capabilities of production structures and forms a system of strategic alternatives to the company. And it is the process of choosing the most optimal solution for the effective development of the company, based on the collected and structured information, and is the process of strategy formation.

Today, the development of a company's competitive strategy should be formed on the basis of strategic management, because the choice of the optimal strategy has specific features and is determined by the level of development of qualification skills of top managers. The choice of competitive strategy also depends on the development of the market situation in a particular period. This means how quickly a company can respond to changes in the structure of the external environment, which has a competitive advantage and what experience management has in the strategic decision-making process.

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# HISTORY OF ECOTOURISM DEVELOPMENT AND ITS SOCIO-ECONOMIC POTENTIAL IN UKRAINE

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Today, global environmental problems are attracting the attention of all mankind. The environmental crisis has given impetus to awareness of environmental issues and further action to improve the situation. In turn, the promotion of a healthy lifestyle is now an important condition for preserving the genotype of the Ukrainian nation. Given this, the development of ecological tourism in different regions of Ukraine is always relevant.

The theoretical and methodological basis for the study of ecological tourism in Ukraine were the data of the State Statistics Service and the Ministry of Culture of Ukraine, reports of international organizations and the achievements of domestic and foreign scientists. Among them it is necessary to single out the works of scientists, such as: O. Beidyk, V. Vyshnevskiy, O. Dmytruk, S.Dmytruk, Yu.Zinko, T.Luzhanska, S.Makhlynets, L.Tebliashkina, M.Rutynskiy and other. The scientific works of these authors note the importance of studying the development of ecotourism, its organization and management, as well as the cultural value of ecotourism, both for residents of a certain natural area and for tourists.

Examining the essence of the category "ecotourism" (ecological), it should be noted that it has a broad interpretation. Today there are many different definitions of "eco-tourism":

- organization of trips with a limited number of participants to natural areas with possible visits to places of cultural value and in order to implement various projects for the protection and rational use of natural resources [1, p. 145],
- responsible travel to natural areas and areas in order to preserve the environment and maintain the well-being of local people (defined by the International Ecotourism Organization) Eco-tourism means combining travel with caring for nature their protection [2, p. 44],
- tourism to places with relatively untouched nature, to naturally valuable objects in order to enjoy being in nature, expanding knowledge about it and improving health [3, p. 43],
- includes the study of the natural and cultural environment and serves to improve the situation in this environment [4, p. 33].

Due to the lack of a clear wording of the term – ecotourism, it is often confused with other areas of tourism: rural tourism, agritourism, biotourism, nature tourism, adventure and some others. They are indeed interconnected, but they are still remotely related to eco-tourism because they have completely different goals..

One of the first and most successful domestic interpretations of ecotourism, proposed by scientists RS Guzhin, M.Yu. Belikov in 1997 – “The basis of ecotourism is care for the environment. At the forefront is the organization of trips with a limited number of participants to natural areas of cultural interest in order to implement various projects for the protection and rational use of natural resources”. [5, p. 55]. This definition has much in common with the definition of the International Ecotourism Organization (IIES): “Ecotourism is a responsible journey to natural areas, areas that preserve the environment and support the well-being of local people. Ecotourism coordinates, helps and stimulates the use of cultural and natural tourist resources, recognizing the importance of preserving the local cultural heritage and natural resources of the region (region) for the local population and future tourists" [6, p. 46].

The first ecotour was made by Thomas Cook in 1841. Soon, visiting untouched corners, especially located in the mountains, became the content of many clubs and circles. It is necessary to mention the First Alpine Club, which originated in Great Britain in 1857. The main tasks of the club were the development of mountaineering and the dissemination of knowledge about the mountains. The activity of the Viennese society "Friends of Nature" turned out to be similar. In this case, an important task was to promote travel in general.

Taking under the protection of natural monuments and intensifying attention to them can be considered a unique and important event in the field of ecotourism. An example is the creation in the United States in 1872 of the world's first Yellowstone National Park. Since then, it has been an important ecotourism site for almost a century and a half. It is visited by several million people every year.

Later, similar parks appeared in other countries. They serve not only to preserve flora and fauna, but also to visit, promote knowledge about nature, environmental education.

In 1880 in the Carpathians, namely near the village of Vorokhta, the first ecological trail on the territory of modern Ukraine was equipped. Within a few years, the Ukrainian Carpathians began to install signs for tourists. In the 80s of the XIX century, there was a group of fans of nature, mountain sports and the Crimean Mountains in Yalta. In recent years of the XIX century, in Crimea was laid the first ecological trail, named after the doctor and tourism promoter FT Shtangeeva. Later, the Botkin Trail was organized.

In 1888, the National Geographic Society emerged in the United States, which set as its main goal the dissemination of geographical knowledge. The society was founded by people who are not indifferent to travel. That same year, the first issue of National Geographic magazine was published. During its existence, the society contributed to the organization of a large number of expeditions and really achieved its goal – to spread knowledge about the world around us.

In the following decades, ecotourism continued to develop and become more widespread. There are certain regions with its greatest development. Public figures concerned about changes in the state of the natural environment also contributed to the formation of ecotourism. The problem of environmental degradation was the main topic of the international conference in Stockholm in 1972. The participants of the conference decided to celebrate the Day of Environmental Protection. It is celebrated on June 5. Every year on this day a number of events are held to increase attention to nature conservation. At the same time, in 1972, UNESCO adopted the Convention Concerning the Protection of the World Cultural and Natural Heritage. Today, about 200 natural sites from around the world are listed as World Heritage Sites, and they have become popular tourist attractions.

The above information can be interpreted as a prehistory of ecotourism. Modern ecotourism, which emerged in the early 80's of the twentieth century, differs from the previous stage by a number of features:

- greater mass;
- organization;
- professionalism.

The activities of many organizations, including The International Ecotourism Union (TIES), have played a role in the spread of ecotourism. The website of this organization briefly covers its history. It is noted that in 1990 her assets for the first time managed to get a grant for their activities. Over time, TIES has held several conferences and published several books. The organization is open for membership, but this requires a certain amount to become a member.

Unfortunately, the 1990s were a failure for Ukraine's tourism industry, primarily due to the protracted economic crisis. At the same time, it was during these years that domestic travel companies began to be established. A milestone in the history of ecotourism was 2002, which the UN declared the year of ecotourism. There is a corresponding resolution on this. This year was also declared the year of the mountains. In 2002, the World Ecotourism Summit was held in Quebec (Canada), which was attended by representatives of 132 countries. Later, in 2007, the World Conference was held in Oslo. Today, ecotourism in Europe is well organized, has a significant infrastructure, and brings economic benefits.

Another impetus for the active development of ecotourism in Ukraine, unfortunately, was covid-19. It was during the coronavirus pandemic that the tourist demand of Ukrainians changed dramatically. Because the first thing a Ukrainian tourist cares about today is security. Secondly, frequent stress and tension at work make you want to go to nature, where you can find peace of mind and balance with the environment. Third, today ecotourism has become a way to earn money "from the air". Fourth – ecotourism has become a "lifeline" for Ukrainians during the world quarantine.

Google Ukraine recently provided statistics on how Ukrainians' online searches for leisure have changed. Compared to last year, now hot tours are almost not in demand, now people are less interested in sightseeing tours. But at the same time, the demand for ecotourism has increased (outdoor recreation – 70% of requests). Especially since Ukraine (in particular Kharkiv region) has great potential for the development of ecotourism.

The area of recreational areas in Ukraine is 12.8% of the country's territory. The main principles of ecological tourism development in Ukraine are 6737 specially designated areas and objects of the nature reserve fund; their total area exceeds 2.8 million hectares, which is more than 3.9% of the total area of the state [7]. In Ukraine, there are 39 reserves and natural and national parks, located on an area of 559, 2 thousand hectares, and of them: biosphere – 4 (137, 2 thousand hectares): Askania Nova, Carpathian, Danube, Black Sea; nature reserves – 17 (160.1 thousand hectares): Gorgan, Dnieper-Oryol, Yelanets steppe, Kazantip, Kaniv, Karadag, Crimean, Luhansk, Medobory, Cape Martian, Opuk, Polissya, Rivne, Roztocze, Ukrainian steppe, Cheremsky Yalta-mountain forest; national natural parks – 18 (261, 9 thousand hectares): Azov-Sivasky, Velykyi Luh, Vyzhnytskyi, Halytskyi, Holosiivskyi, Gomilshansky forests, Hutsulshchyna, Desnyansko-Starogutskyi, Ichnyanskyi, Karpatskyi, Mezynskyi, Podilskyi Tovtry, Holy mountains, Sy Skole Beskydy, Uzhansky, Shatsky, Yavorivsky; 45 regional landscape parks; 3078 natural monuments, 2729 reserves, 616 botanical, zoological gardens, arboretums, and parks of monuments of landscape art, 793 protected tracts [8, p. 123].

In the territories of the nature reserve fund the most interesting types of recreational and tourist activities are: travel by tourist routes and ecological trails; organization of beach and swimming recreation; creation and functioning of visit centers and museums of nature; organization of bird watching; amateur and professional photo and video shooting. Today there are about 350 biosphere reserves in the world and four of them are located in Ukraine.

Today in Ukraine there are a number of such programs that contribute to the improvement of the environment: cleaning of territories, production of navigation signs, planting of trees, reconstruction, restoration of parks, etc. In addition, the number of public environmental organizations in Ukraine is growing every year. In addition, today in every region of the country there are environmental organizations that care about the environment. Such organizations implement their programs through a number of different actions and projects. All this contributes to the promotion of ecotourism in Ukraine.

Due to the sharp deterioration of the ecological situation in the world (particularly in Ukraine), ecological tourism has become one of the priority goals of tourism at the state level. It is logical that it is a promising area at the present stage of tourism development in Ukraine. By developing ecotourism, you can achieve significant benefits in the social sphere of the country. It is ecotourism today that can change the views of our citizens on their way of life, environmental protection, and thus improve the overall quality of life of both local and rural residents. As a result, the ecological situation of our planet may improve.

Ukraine has a sufficient number of nature reserves, reservoirs, caves, various plants and animals. In addition, each region has its own special recreational resources. So ecotourism can be developed throughout Ukraine. And besides, today in Ukraine every year the number of eco-hotels available for accommodation sharply grows – it is both estates, and resort recreation centers.

But the development of ecotourism in Ukraine is also influenced by negative factors, such as: emissions of pollutants into the atmosphere from stationary and mobile sources of pollution, a large number of existing industrial enterprises, the presence of "artificial" reservoirs for hydropower, quarries and other industrial excavations, unauthorized landfills etc. In addition, the problem at the current stage of development of ecotourism in Ukraine is the "green wash" or "green capture", when tourism entities pretend that their services are environmentally friendly, deceiving consumers, creating conditions for unfair competition [9]

So, the problem of pollution and destruction of the environment the environment is extremely relevant today. In particular, in the context of tourism, which today is one of the most popular and widespread forms of interaction between man and nature. There is a need to form a new philosophy of tourism in Ukraine, which would take into account the peculiarities of this communication. Ecotourism is exactly the tourist activity, the purpose of which is to get acquainted with the peculiarities of natural

landscapes and to promote the preservation of landscape diversity. On the territory of Ukraine there are favorable conditions and resources for the development of ecotourism. But for its development and for it to become a priority of national tourism – the basis of its development should be the development of special state, regional and local programs for the development of ecotourism and of course, the conscious attitude of each of us to the environment.

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# ASSESSMENT OF THE MANAGERIAL IMPACT OF THE PERSONNEL MANAGEMENT EFFICIENCY SYSTEM

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Ensuring the efficiency of the enterprise is the main reference point for confidence in its ability to operate in the market in the near future and in the long run. Making a profit as a positive absolute effect from the activities of the entity is a necessary but insufficient condition to ensure its growth and development. Efficiency allows, regardless of the chosen approach to its definition, to assess the relative effect of achieving the goals by using the appropriate set of resources. Thus, this concept is a key tool for evaluation and management, because it is on the basis of quantitative values of efficiency, appropriate decisions must be made in virtually all areas of the enterprise. Understanding the enterprise as a complex system that operates under the constant influence of environmental factors, the definition and evaluation of efficiency should be considered as a complex complex system concept where the appropriate role should be assigned to all subsystems of its internal environment.

A special role among these systems is played by personnel management, as it embodies and integrates all the processes of personnel activities to provide the company with qualified personnel in the required amount, in a timely manner and within the existing budget. The large number of these processes, which is closely interrelated with the functions of management, and the presence of staff in all processes of the enterprise determine the high degree of complexity of personnel management and determine its effectiveness. Based on this, to achieve the goal of clarifying the essence of the concept of personnel management efficiency, it is necessary to clarify the object of study, determine the relationship between personnel management efficiency and enterprise efficiency, outline key human resources processes, improvement of which will increase efficiency, and explore existing staff management tools.

A significant contribution to solving the problem of ensuring the effectiveness of personnel management has been made by domestic and foreign scientists, including M. Armstrong, V. Vesnin, L. Balabanova, N. Gavkalova, B. Genkin, B. Gerasimov, G. Dessler, P. Drucker, O. Yegorshin, L. Kartashova, A. Kibanov, S. Mordovin, Y. Odegov, O. Sardak, D. Torrington, S. Taylor, V. Chumak and others. The issue of improving the efficiency of personnel management as a subsystem of enterprise management has become the object of scientific research by such scientists as O. Amosov, D. Bohynia, N. Verkhohlyadova, O. Grishnova, A. Kolot, M. Semikina, I. Shvets and others. Despite the existing diversity of research in this area, insufficiently disclosed and studied at present are the development of organizational and economic tools to ensure the effectiveness of personnel management and methodological approaches to assessing its level using modern analytical and diagnostic methods to substantiate and model management decisions regarding formation and evaluation of existing and potential opportunities, effective combination and increase of efficiency of use of human resources at the enterprise. Another factor of importance and timeliness of this study is to take into account the regularity of constant adaptation to frequent changes in the external environment to achieve planned business goals, especially in the context of European integration changes that require the formation of appropriate socio-economic standards.

Evaluating the effectiveness of personnel management is an important source for management decisions to improve certain processes of working with staff to increase the level of consistency of the

interaction of the personnel subsystem with other subsystems of the enterprise. As part of the theoretical study, a model for assessing the effectiveness of personnel management was built, which includes two blocks: the first involves evaluating the processes of personnel management that take place in the relevant subsystems, and the second – determining the level of managerial influence on these processes. The overall efficiency of the personnel management system at the enterprise depends on the level of quality of this managerial influence, which determines the need for the implementation of certain measures of organizational and economic support.

We have shown that managerial influence is represented by such functions as: planning, organization, motivation, control and regulation, which affect the processes of personnel management assessed in the previous section. Analysis of existing theoretical developments suggests that such a model for assessing management functions has not yet been built and implemented. Therefore, to obtain a general vision of evaluating the effectiveness of personnel management within this unit, we will focus on assessing the level of managerial influence represented by these functions, presented in Table 1.

**Table 1. Functions of managerial influence on personnel management processes**

Processes	Management functions
HR-strategy (personnel policy)	HR strategy planning
	Organization of HR strategy implementation
	Motivation to implement HR-strategy
	Monitoring the achievement of HR strategy goals
	Regulation of HR-strategy
Selection, recruitment and hiring	Planning selection, recruitment and employment
	Organization of selection, recruitment and employment
	Motivation for proper selection, recruitment and employment
	Control of selection, recruitment and employment
	Regulation of selection, recruitment and employment
Adaptation	Adaptation planning
	Organization of adaptation
	Motivation for proper adaptation
	Adaptation control
	Regulation of adaptation
Rating	Evaluation planning
	Organization of evaluation
	Motivation for proper evaluation
	Evaluation control
	Adjustment assessment
Movement	Staff movement planning
	Organization of personnel movement
	Motivation for staff movement
	Personnel traffic control
	Regulation of personnel movement
Development	Personnel development planning
	Personnel development organization
	Motivation for staff development
	Personnel development control
	Regulation of personnel development
Remuneration	Staff remuneration planning
	Organization of staff remuneration
	Motivation to reward staff
	Control of staff remuneration
	Staff remuneration regulation



Given that managerial influence depends directly on the entity that exercises it, its level, in contrast to personnel management processes, which were evaluated using quantitative methods, it is advisable to determine using qualitative and quantitative evaluation models, which in most cases involves expert survey.

Expert assessments are qualitative assessments based on non-quantitative information that can be obtained only with the help of experts, which means a highly qualified specialist who relies on his knowledge, experience and intuition and ability to assess individual phenomena and the ability to create their own sound model of the analyzed phenomenon.

We agree with the point of view of researchers [7; 8], that one of the difficult aspects of quality assessment by experts is the ability to provide a clear vision of the level of implementation of these functions of personnel management processes. That is why we propose to evaluate those provided in Table 2 functions by linguistic characteristics, represented by a set of definitions of «high, medium, low» level. As a result of the evaluation, these qualitative characteristics should be translated into quantitative values to determine the consistency of expert opinions, and using fuzzy set theory by generalizing a qualitative assessment of planning, organizing, motivating, controlling and regulating functions for each personnel management process. control of this subsystem with the corresponding quantitative equivalent.

Uncertainty in estimating the level of implementation of the control function is taken into account in the framework of fuzzy set theory and fuzzy logic, which are a generalization of the classical set theory Fuzzy sets and the classical formal logic Fuzzy Logic. Fuzzy set theory was introduced in 1965 by Professor Lotfi Zade. The peculiarity of this method is the introduction of linguistic variables as subjective categories, which means such changes that can not be described in mathematical language, ie it is difficult to give an accurate objective quantitative estimate [4]. That is, given the individuality of the level of management of personnel management processes in each company, the same state of affairs can be assessed by different experts using different linguistic meanings.

Given the provisions of the theory of fuzzy sets, we propose our own model for evaluating the quality of personnel management process management functions.

To determine the overall assessment, it is necessary to obtain values for each of the 7 personnel management processes, each of which is described by 5 management functions. This involves the evaluation by experts of these functions in each process using a scale, the values of which will be used in the fuzzy set model to determine the probability of assigning its value to the three above linguistic terms: «high», «medium» and «low» to obtain a point definition of each personnel management process as a source variable for the researched enterprise, taking into account the probability of assigning its value to each of the terms, taking into account the number of experts involved in the evaluation.

To conduct an assessment, it is necessary to determine the company. Given that previous studies have evaluated 11 machine-building enterprises, it is advisable to group them to obtain more homogeneous populations and determine the representative, as conducting surveys at all enterprises is a time-consuming task, and the development of recommendations should be universal, given the average performance of enterprises.

The most common methods of determining enterprise groups is cluster analysis, which also refers to data reduction methods, which allows to obtain groups (clusters) of enterprises without prior classification [9]. There are a number of methods of cluster analysis, in the environment of the program STATISTICA Version 10 it is possible to conduct it in three: tree, k-means method and two-input integration. A detailed description of enterprise groups to determine the influence of factors on the distribution can be obtained by the method of k-means, but it requires a preliminary determination of the number of clusters that can be obtained from the implementation of tree clustering.

Given that at the initial stage the number of clusters is unknown, it is advisable to implement the method of tree clustering. Using the calculated values of integrated coefficients for personnel management processes, the grouping of enterprises was carried out. Enterprises were divided into 3 groups, which allows you to use this grouping in the method of k-means.

According to the results of the analysis, the following conclusions can be drawn: enterprises differed the most in the efficiency of selection, recruitment and hiring, to a much lesser extent in the

efficiency of movement, development and adaptation. The enterprises do not differ in other processes, which indicates a similar level of integrated indicators.

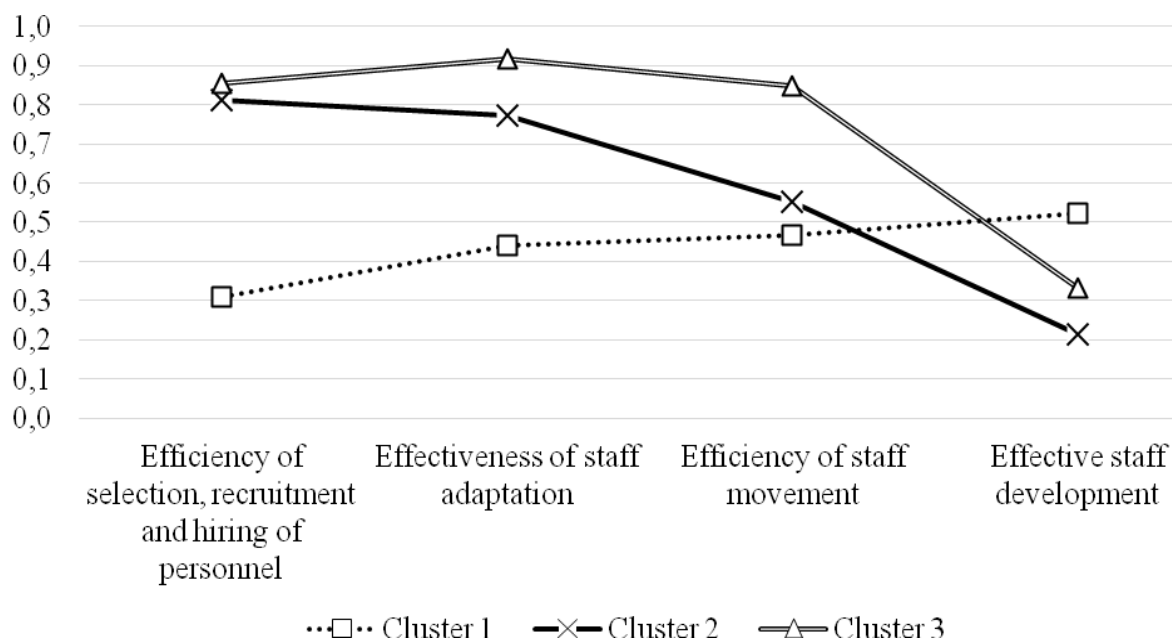
To obtain a more detailed vision of the average values, we present the average value for those processes that have a statistically significant impact on the distribution of enterprises (Fig. 1). To obtain comparable data, the integral values of the processes used in cluster analysis should be divided into groups by qualitative levels. Since the integral values were calculated using a modified algorithm for determining the taxonomic index, the closer the indicator to «1», the higher its level. To do this, use the Harrington method and select similar groups as for the evaluation of control functions:

«High» corresponds to the range of values: [1, 67];

«Average» corresponds to the range of values: (67, 34];

«Low» corresponds to the range of values: (34, 0].

The first cluster includes enterprises with an average level of efficiency of selection, recruitment and employment, adaptation, movement and development.



**Figure 1. Average values of personnel management processes at the surveyed enterprises by clusters by significant processes**

The second cluster includes enterprises with a high level of efficiency of selection, recruitment and employment, adaptation, medium level of movement and low value of development. The third cluster is characterized by high efficiency of the processes of selection, recruitment and employment, adaptation and movement, but a low level of development. The evaluation results are presented in Table 2.

Thus, on the basis of the study, the levels of management of personnel management processes for each of the clusters of the studied enterprises were determined on the basis of an expert survey of employees of the representative enterprises. In the Table 2 presents the results that allow to compare the obtained level of management with the value of the effectiveness of the studied processes. As you can see, the values completely coincide only in the first cluster of the enterprise, which reflects the harmony between the managerial influence on the processes of personnel management and their level of efficiency. Given that the value of the level of efficiency of personnel management processes depends on the functioning of the enterprise, the correspondence between the obtained levels also indicates the consistency of personnel management with the overall management of the enterprise. Since the bottleneck for this cluster is the remuneration of staff, it is necessary to implement measures to improve both the management of this process and increase its efficiency.

**Table 2. Average values of integrated indicators of enterprises and levels of management of personnel management processes in the studied enterprises**

Clusters Processes	The value of process efficiency			The level of their management		
	1st cluster	2nd cluster	3rd cluster	1st cluster	2nd cluster	3rd cluster
HR-strategy (personnel policy)	average	low	average	average	low	low
Selection, recruitment and hiring of personnel	average	low	high	average	average	average
Staff adaptation	average	low	high	average	average	average
Staff evaluation	high	average	low	high	average	average
Staff movement	high	low	average	high	low	low
Development staff	average	low	average	average	low	average
Remuneration of staff	low	low	average	low	low	average

First of all, it is necessary to revise the remuneration system as a whole, which provides, first, for the development of a plan for a gradual increase in wages, the rate of which should exceed the existing rate of inflation and rising prices in the country. Second, according to the level of efficiency of staff remuneration, wage growth should be compared with the growth of labor productivity, as well as the dynamics of wages in the industry. Given the relatively high level of automation and computerization of production processes, productivity growth depends primarily on improving its organization and the introduction of innovations, the source of which should be the synthesized capital of the enterprise. Thirdly, it is expedient to pay attention to social security of employees and cultural and household services, which should be more closely interconnected with the system of remuneration and recognition of personnel in the enterprises of the first cluster. The average level of HR strategy management is due to its imperfect planning, motivation and regulation. To improve the results of this process of personnel management, management should pay more attention to the development of personnel management goals, ensuring consistency between achieving these goals and the system of personnel remuneration, as well as developing rules for adjusting HR strategy depending on changes in business strategy and competitive strategy. The issue of compliance with labor discipline at the enterprises of this cluster should be reflected in the code of ethics, compliance with which should be defined as one of the main goals of HR-strategy. Since the organization received the highest level of all management functions, the staffing of the HR department should be considered mainly in quantitative terms, which requires a review of the actual number of this department in accordance with the complexity of their activities, given the scope of functions. In order to increase the efficiency of selection, recruitment and hiring, as well as the level of management of this process, it is advisable to establish compliance between the implementation of the recruitment plan and the system of remuneration for the implementation of this plan, improve the procedure for allocating time, resources and increase the number of procedures for monitoring the level of staffing, as well as implement procedures to amend the recruitment plan in accordance with the current needs of the enterprise. Regarding the process of personnel adaptation, based on the obtained results, the motivation function is carried out at the highest level among all others. Based on this, it is necessary to pay attention to the definition of those responsible for mentoring, specifying the specific timing of adaptation for each position, which will increase both the adaptation rate and the probationary period, and ensure overall efficiency of the staff adaptation process. In order to increase the share of newcomers who have been working for more than one year from the number of those admitted within two years, it is necessary to introduce a procedure for assessing their productivity with appropriate adjustments. Regarding the processes of personnel development to increase their efficiency and level of management, first of all, it is necessary to increase funding for staff development, because they are the carrier and source of synthesized capital, which provides the company with stable competitive advantages in the market. It is advisable to expand the interaction of enterprises of the first cluster with higher education institutions in the region, especially in terms of training in the field of information technology and process automation. Acquiring such fundamental and applied knowledge by employees will increase the level of computerization of processes, which will help to reduce both the cost of production and improve its

quality. As part of this process, it is necessary to improve the system of incentives to train staff by expanding existing methods of remuneration. Regarding the control of personnel development, this function has received the lowest value in this process, which indicates the need to develop a procedure for evaluating alternatives to human resources development within the enterprise or third parties.

The analysis of the enterprises of the second cluster allowed to determine that the efficiency of virtually all processes except personnel evaluation is low. Management functions were also assessed by experts as mostly unsatisfactory, except for the processes of evaluation, adaptation, selection, recruitment and hiring, which received an average level. The enterprises of this cluster, first of all, need to completely revise the existing HR-strategy, develop and agree on the goals of personnel management, metrics for their achievement and develop an implementation plan in compliance with the requirements for the use of resources and improve the existing code of ethics. In addition, it is necessary to review the existing number of HR-department staff and distribute the responsibility among its employees for the performance of functions. The low level of efficiency of selection, recruitment and hiring of personnel at the average level of management of this subsystem requires a review of the number of unfilled vacancies and staffing of the enterprise. To implement the necessary measures, it is advisable to analyze the reasons for non-implementation of the staffing plan and review the distribution of responsibilities between HR staff to ensure the implementation of this process in enterprises. Since the effectiveness of adaptation are most directly dependent on management, for improving the efficiency of the process necessary to implement these same measures, and as recommended above for the first cluster. Evaluation of staff – the only process that has average efficiency and management. To improve this process, it is advisable to take into account in the remuneration system indicators of staff evaluation both by professional level and qualification level, and by the results achieved. It is also important to pay attention to the analysis of duplication of employee functions to reduce losses from inefficient use of time by management staff. Improvement requires control of evaluation, which is the need to implement procedures to determine the appropriateness of the costs of its implementation and to compare the results of the evaluation with the positions held by employees and the performance of employees. Regarding the movement of personnel, the enterprises of the second cluster should focus on improving the organization of jobs, forming a personnel reserve, developing a career plan for all management positions and implementing a rotation system, set priorities for promoting their employees alongside external and reducing part-time. With regard to staff development, in order to increase both the level of efficiency and the level of management, it is advisable to increase funding, as well as the enterprises of the first cluster, and to establish a direct link between the level of skills and wages in the enterprise. The low level of efficiency and remuneration management requires the implementation of the same measures as recommended above for the enterprises of the first cluster.

The third cluster of the studied enterprises differs in a lower level than the first, but higher than the second cluster in terms of the efficiency of processes and the level of their management. According to HR-strategy, the level of its management is lower than the effectiveness of this process, which indicates the need to pay attention to the development of personnel management goals, metrics to achieve it and assess the effectiveness of their implementation, HR-strategy as a whole in accordance with current business strategy and competitive strategy. schedule of its implementation with the allocation of necessary resources. The selection, recruitment and hiring of staff is at a high level, and in its management there is a bottleneck of motivation, which requires the inclusion in the system of remuneration of HR-staff implementation of the recruitment plan. The high level of efficiency of personnel adaptation in this group of enterprises requires the improvement of management of the regulatory function, which is at a very low level compared to others. Motivation is also imperfect. Therefore, it is worth increasing the amount of remuneration for mentors and reviewing the existing adaptation procedures for new employees, taking into account the current development goals of the enterprise. The only process that has a low level of efficiency in this cluster is staff appraisal, despite the average level of management of this process. This requires increasing the number of certified employees, reviewing the positions held by employees in accordance with their tariff category, conducting a detailed analysis of management activities to avoid duplication of functions, determining the reasons for non-compliance with the staff evaluation plan. The opposite situation with the

movement of staff: with a satisfactory level of staff turnover, organization of jobs, closing positions by internal candidates, the company lacks a personnel reserve, career plan, staff rotation, remuneration growth according to the complexity of the functions of the position. To eliminate these shortcomings, it is necessary to pay attention to the HR department to improve personnel management. The process of staff development in the third cluster received the same estimates as in the first, which allows us to offer the same recommendations. As a result of staff remuneration, only in this cluster, in contrast to the previous two, a satisfactory level of efficiency of both the process and its management was obtained. To improve the situation, it is advisable to implement changes in the remuneration system in accordance with the results of evaluation, movement and development of personnel, as well as taking into account the implementation of the remuneration plan.

All the proposed measures for the considered clusters of the studied enterprises require appropriate organizational and economic support, the rationale for which is discussed in detail in the next section.

Within the framework of the proposed model for evaluating the effectiveness of personnel management, an analysis of the managerial impact on the processes of personnel management was carried out on the example of the studied enterprises. The analysis was performed using expert evaluation by constructing a fuzzy inference model using MatLab as part of the Fuzzy Logic Toolbox. Experts were asked to evaluate the management functions (planning, organization, motivation, control and regulation) for processes (HR strategy, selection, recruitment, adaptation, evaluation, movement, staff development and remuneration) by assigning a score from 0 to 100. The consistency of the experts' opinions was proved on the basis of the calculation of the coefficient of variation of the score for each function of each personnel management process. Using the rules of the fuzzy inference system, the overall level of management of each of the processes for the representative enterprises obtained by calculating the minimum distance between the enterprises included in the clusters was estimated. The clusters were formed on the basis of a preliminary determination of the level of efficiency of each of the processes, which allowed to combine enterprises with similar averages for each of the processes of personnel management. By comparing the importance of process efficiency for selected representative companies and the level of their management, a set of recommendations for improving the efficiency of personnel management was developed.

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## SOME FEATURES OF THE IDEOLOGICAL BASIS OF THE NATIONAL IDEA OF E. KONOVALETS – THE LEADER OF THE OUN

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Evgeny Konovalts belongs to those iconic personalities, whose life and deeds still cause heated debate among professional historians. A military leader and a politician – this is how you can briefly describe him.

The object of this study is a wide selection of scientific papers on the activities of Konovalts at the head of the OUN. The historiography of his activities is quite rich and the variegated thoughts of researchers, which can be conditionally divided into two large branches: Soviet-dogmatic and modern. The negative image of Konovalts was created by Ukrainian Soviet and Polish historiography. Historians of the Ukrainian SSR did not study topics, but were mainly engaged in hanging labels, allegedly he was a staff agent of German scouting and became a victim of the Abwehr. This was done in order to dishonor the Ukrainian national liberation movement.

The first book of a positive nature about Konovalts' activities was published in Paris shortly after the Rotterdam tragedy in 1938. This edition did not yet contain documentary stories and scientific references, but could rather be considered a panegyric in honor of great people. But the first essay about Colonel E. Konovalts appeared 10 years later. It was a posthumous work by A. Kandyba – a famous Ukrainian poet, a member of the Ukrainian Nationalists (OUN) since 1937. In this essay, E. Konovalts appears as "a man of great political talent, a sovereign strategist of the revolution" and a tactician of socio-political work (Oles O., Kandiba O. Є. (1948). *Konovalts. Naris pro zhyttya, chin i smert velikogo ukrainskogo patriota – na chuzhyni*: vid-vo Ukraïnskiy patriot. 31 p.).

In the postwar years, several more studies appeared. In particular, Boyko (Blokhin), a professor at the Ukrainian Free University in Munich, considered the issue of Konovalts' leadership of the national underground in Dnieper Ukraine. Quite a few publications about E. Konovalts have appeared on the pages of the magazines "Liberation Way", "Avangard", "Almanac of the Voice of Ukraine". In the articles of A. Berits, A. Koval, M. Sumyatch, B. Livchak, A. Stetsiv and others, there is a lot of journalism about Konovalts, but little weighted estimates and factual data.

Since the beginning of the 90s of the 20th century, interest in the military and political activities of Konovalts in the independent Ukrainian state has been renewed. Modern Ukrainian historiography, in comparison with the diaspora, has made a certain step forward, creating a positive image of E. Konovalts, his participation in the national liberation struggle, his role in the creation of the UVO and the OUN, his leadership of the activities of underground organizations, the external activities of the OUN. However, some aspects require further scientific research. In particular, his vision of the prospects for the development of the national idea – the main idea of the OUN.

The future leader of the fighters for the national idea was born on June 14, 1892 in the village Zashkov in the Lviv region in a family of Ukrainian intellectuals. He received his secondary education at the academic gymnasium in Lviv. As a student at Lviv University, E. Konovalts received a "baptism of fire": he was arrested as an activist of the youth faction of the Peoples Democratic Party (UNDP), which advocated the Ukrainianization of higher education in Galicia. While studying jurisprudence, Evgeniy attended lectures on the history of Ukraine by M. Hrushevsky, who at that time headed the Department of Eastern Europe. In 1913, during the II All-Ukrainian Student Congress in Lviv, E. Konovalts met with the spiritual founders of the ideology of Ukrainian nationalism M. Mikhnovsky and D. Dontsov. It was they who, not just randomly, but significantly influenced the further development of his worldview, gave him the opportunity to understand the principle of conciliarity in Ukraine and be guided by it as the main principle in his future work. It should be noted that E. Konovalts later treated D. Dontsov very critically. He knew the zigzag evolution of D. Dontsov: from socialism to monarchism, from Germanophilia to the UPR-ovist orientation, since 1920 – an orientation towards Poland. He knew him as the director of the Ukrainian state press and information service of Hetman P. Skoropadsky, and as the one who made the decision of the Ukrainian National

Union in Kiev to declare an uprising against the Hetmanate. E. Konovalts respected the trait of D. Dontsov, which has never changed – hostility against Russia.

During his student years, E. Konovalts came up with the idea of creating a Ukrainian military formation to fight for an independent Ukraine. Brought up in a Spartan spirit, strong-willed, intolerant of idle talk, Eugene early recognized that national revival could not be carried out without an armed struggle to achieve the liberation of the Ukrainian lands. In 1914, with the rank of lieutenant E. Konovalts was appointed to military service in the Austrian army. In the First World War, he managed to smell the smell of gunpowder; in battles he shows personal courage. In the autumn 1915 he was captured by Russian. Under Tsaritsyn in a prisoner of war camp, he met future like-minded people and comrades-in-arms in the liberation struggle: Andrei Melnikov, Mikhail Matchak, Ivan Chmola, and others. The news of the February revolution and the creation of the Central Rada in Kiev inspires Yevgeny to escape. In November 1917, he arrived in Kiev, where he immediately joined the formation of the Galicia-Bukovina kuren of the Sich riflemen as part of the Ukrainian Doroshenko regiment and becomes his commander. In January 1918 kuren distinguished itself in the bloody battles of the Bolshevik uprising in Kiev. According to the sechevik Osip Dumin, "in the Kiev battles, the Sich archers saved the lives of not only members of the Central Rada government, but also the statehood of that time." In the era of the UPR E. Konovalts is aloof from political strife, does not belong to any of the political parties, because in his understanding, parties care about their own interests, instead of solving the common Ukrainian cause.

The failure of the Central Rada to resolve acute social problems led in April 1918 to the hetman coup, during which the Germans disarmed the regiment of E. Konovalts. But on the eve of the collapse of Kaiser's Germany, he recreates the military detachment of the Sich Riflemen. Later he supported the anti-hetman uprising, taking the side of the Directory. During 1919, he numerically increases his army of Sich riflemen, turning it first into a division, and later into a corps.

His corps takes part in fierce battles with Denikin's army, the Red Army, the Insurrectionary Army of Nestor Makhno and the Poles and wins a number of victories.

In November 1919, his army, exhausted in battles, was forced to leave Ukraine. Abroad E. Konovalts comes to the understanding that the past stage of the national liberation struggle has been lost and the next one must be prepared. In July 1920 in Prague, he created the Ukrainian Military Organization (UVO), the purpose of which was proclaimed the armed struggle for the liberation and statehood of Ukraine. In exile, he supervises the activities of the UVO, selects personnel, plans armed clashes. In the process of fighting enemies, he comes to the conclusion that purely terrorist activities can lead to the degeneration of the national liberation struggle. Therefore, he has the idea of creating a political organization.

It should be noted that the formation of the ideological principles of the Ukrainian national movement began in the early 1920s. This was facilitated by the creation of the nationalist magazines "National Thought", "State Nation", "Development of the Nation", on the pages of which the main ideological postulates of the movement were printed. The Prague magazine "Development of the Nation" later became the main theoretical and informational body of the OUN, around which a group of people – theorists and ideologists was formed, who formulated the main provisions of the political program of the future organization. In 1928, E. Konovalts set out its ideological foundations in his work "Causes to the Ukrainian Revolution", in which the nation is proclaimed the highest human community. The main idea is that a nation can develop only in its own independent country, which the people must create and preserve on their own. "It is impossible to build a strong state without a strong nation. We need to formulate the state ideology, define its essence through the prism of the national idea, which reflects the interests of the Ukrainian nation, especially during the period of tough political, economic and informational pressure from neighbors. Every nation of the world did not achieve either statehood, or a high level of scientific, mechanical, economic, social or other development without a progressive national idea, without the spiritual revival of the nation".

In February 1929, the First Congress of Ukrainian Nationalists was convened in Vienna, which creates the Organization of Ukrainian Nationalists (OUN) as a result of the unification of several radical nationalist organizations: UVO (Ukrainian Military Organization), the League of Ukrainian Nationalists, which was formed back in 1925 on the territory of Czechoslovakia, the Ukrainian

National Youth Group (Prague), the Union of Ukrainian Nationalists (Lviv). Its task is to proclaim ideological, political and revolutionary-terrorist activities with the aim of gaining independence for Ukraine. At this Congress, E. Konovalts was elected chairman of the board of the OUN.

For the first time, the decisions of the Congress revealed the worldview and ideological principles of the OUN. The nation was proclaimed as the highest type of social organization as an internal organic whole community of people. The state was proclaimed as the natural form of self-affirmation of the nation and the highest degree of its development. According to the program decisions, the stage of the "liberation movement" should end with the establishment of a national dictatorship, and the final decision on the question of the form of state structure of Ukraine was actually postponed to the future. The adopted program guidelines declared support for the right of private property, the transfer of land to peasants without redemption, a mixed public-private economy, freedom of trade, general social security, an 8-hour working day, and free compulsory secondary education. The first OUN program documents were more of a declaration than a detailed strategic program. But the process of adjustment and radicalization of the basic principles of the organization continued until the end of the 30s against the background of the victory of totalitarian regimes and movements in Europe, the gradual spread of interethnic relations in Western Ukraine.

Having emerged as an underground organization, the OUN has become a powerful force. Despite the repression of the authorities, the number of OUN ranged from 10 to 30,000 citizens. In the conditions that developed after the annexation of Western Ukraine to the USSR, all other non-soviet political forces were defeated, the OUN survived and successfully waged an underground struggle for independence by a significant part of the Western Ukrainian population. OUN structures were active in emigration as well. Five foreign organizations of the OUN were formed – Baltic (Lithuania), Central European (Germany, Czechoslovakia, Austria), Balkan (Yugoslavia, Bulgaria), Roman (Belgium, Luxembourg, France, Italy, Switzerland), North American (USA, Canada). From the second half of the 30s, the OUN center was established in the Far East (Manchuria). E. Konovalts travels to the USA and Canada, where he tries to bring the Ukrainian issue to the Forum of the League of Nations (OUN). He fails to do this, but his attempt to raise the question is gaining international resonance.

He strongly denies rumors of collaboration with German Nazism. At the OUN conference (June 1933, Berlin), he spoke out against "imposing ties with the Nazis", citing the negative attitude of the National Socialist Party towards all the peoples of Eastern Europe – Slavs in general, Ukrainians in particular.

Trying to spread the national liberation movement in Eastern Ukraine, E. Konovalts sends his authorized functionaries there. Bolshevik Moscow closely followed the activities of the OUN and, especially, E. Konovalts, and is developing an operation to destroy him. Moscow was afraid of Ukrainian nationalism. Its goal was not only to prevent the emergence and spread of the OUN network in Soviet Ukraine. She wanted to break, destroy the OUN and the nationalist movement in general, not only in case, but also because she saw it as the main danger to Moscow-Soviet domination in Ukraine.

The death of E. Konovalts, who died in Rotterdam, had a negative impact on the OUN. This was enough for the OUN to split into two independent organizations headed by A. Melnik and S. Bandera. The authority of E. Konovalts was sufficient to contain internal divisions in the OUN. Having lost the leader of the OUN, it entered the Second World War split and quarreled. Instead of uniting around a single chance for liberation and gaining independence, the two leaders fought among themselves both in exile and on Ukrainian lands. It is this conflict, in our opinion, that will prevent the Ukrainians from creating a solid international lobby, which allowed Poland after the war to fight for the revival of the state and return the captured all ethnic lands.

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# **STRATEGIC MANAGEMENT AND MARKETING POLICY OF THE COMPANY: OPPORTUNITIES AND VECTORS OF MARKET SUCCESS**

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The current state of formation and increase of competitiveness of enterprises in the field of agricultural production is based on the principles of using competitive advantages, which can be obtained in terms of commercial success (market success factors), as well as improving production (resource) potential (key competencies). In general, the presence of competition necessitates the creation of advantages for the enterprise through the possibility of introducing the latest tools of strategic management and management in the management system of the enterprise. At the same time, the shift and constant dynamic development of competitive market relations requires the company to constantly update competitive opportunities, as well as to adapt to changes in the environment. At the same time, the processes of project management, as one of the important components of strategic management of the enterprise, become especially relevant. Thus, project management through the prism of marketing activities will allow agricultural enterprises, in particular, and businesses in general, to use all available competitive opportunities through the use of basic enterprise policies. It should be noted that all components of production and commercial activities of the enterprise are fully adapted to the specific direction of project marketing as a single system through the simultaneous formation of product policy, pricing, promotion and distribution of the enterprise. Of particular importance is the communication policy, which is the connecting link between the company and the market.

Project management aims not only to create a strategy for enterprise development, but also to ensure the application of individual marketing management systems that will fully shape the company's development strategies for the long or short term.

Analysis of the theoretical foundations of project management allows us to state that in general there are two stages of project implementation. The first stage – the beginning of the project – should be a new idea or plan, which in the process of the enterprise will be implemented. The second stage – the end of the project – is the stage of complete completion and receipt of results. On the other hand, many scientists have proven that the process of forming project management is complex and dynamic. The latter is influenced by a number of factors. These are the factors of the macro environment of the enterprise that allow you to change projects in accordance with changes in the environment. There are a number of reasons for this. First, it is the peculiarities of the formation of the industry market, which has its own infrastructure (production, commercial, information, etc.) and which does not depend on the conditions of internal activities of the enterprise. Secondly, these are the features of the functioning of the selected object market, which have both static indicators and dynamic development. It should be noted that environmental conditions are completely inherent in the field of agricultural production and the agricultural market, in particular. A feature of the market of agricultural products is also the presence of certain models and types of markets, in particular, oligopsony and monopsony, which have their advantages. This is manifested in the competitive relationship between all market participants, as well as in the opportunities of production and commercial efforts of each participant in the enterprise, which are constantly changing the market position. Third, it is well known that the agricultural sector is not only complex in terms of forming a market model, but also has a number of features related to the natural and climatic conditions of production. These include instability in the gross harvest of crop

products, instability in the production of livestock products, the presence of force majeure, which in general will be able to fully adjust the planned results. It should also be noted that the climatic conditions in agricultural production (raw material segment) do not have a full correlation with the sale of products for further processing at the highest level of distribution channels. Because, given the fact that the sphere of agricultural production has a dynamic development, the sphere of agro-raw processing is more static and the constant planned results and the resources required for them do not change much, based on the capacity of the processing plant. In addition, the final demand for agricultural products is already being formed in the agri-food segment of the market. This requires consideration of the production sphere depending not on the available production capacity of the agricultural enterprise, but on the consumption of the final agri-food products. Therefore, the formation of business plans in agricultural production should begin with the study of final product markets, which will significantly affect the results of planning and forecasting the agricultural enterprise and the formation of its development potential through the use of project management.

The purpose of the article is to theoretically work out the methodological foundations of project management through marketing activities of agricultural enterprises in order to increase its competitiveness and get better results in terms of financial and market indicators.

The formation of project management for the marketing system of the enterprise aims to implement two types of activities: first, it is the management of enterprise projects and, secondly, it is the involvement of marketing tools in the design. If we understand project management through the formation of a specific business plan that implements the idea of the enterprise to create unique products, which is the main task of marketing today, it can be distinguished through the development of various areas of enterprise activity. In addition, project management, like any activity, has its stages, phases and stages. If we talk about the life cycle of the project, it aims to form from the beginning to the end result – complete production of the planned results or elimination due to the impossibility of further implementation.

To date, project management in agricultural production is long-term and short-term. If we talk about the long term, the formation of projects can take several years. This, on the one hand, requires companies to be high enough to conduct research (planned, investment, etc.). On the other hand, it requires constant monitoring of the obtained and perspective results in order to adjust the planned decisions.

At the same time, the terms of projects in the field of agricultural production are very contradictory, because almost all agricultural enterprises sell their products through two channels: intermediaries (for example, in the field of crop production more than 90%), losing significant income due to low prices. processing. If the company wants to reach a new (higher) level of marketing infrastructure, it should attract new projects that will allow it not only to obtain agro-raw materials, but also to enter the primary or in-depth processing to sell agri-food products to end users with higher added value. These are already separate projects, because, as mentioned earlier, a project is one specific business plan with an idea and a result.

If we talk about several projects in the enterprise, their implementation gives the management system of the enterprise a number of both positive and negative factors. As for the positive changes, it should be noted that the company will be able to increase its market attractiveness several times and take a more competitive position in different markets. It can also result in an increase in the mass of income, but at the same time the company will not be able to fully direct all its efforts in different areas of activity effectively. In addition, on the one hand, it is positive to gain a stable market position in several object markets, which will increase the number of existing and potential consumers. At the same time, the company under such conditions should try to increase the product range, because, as we know, the competitiveness of the company depends entirely on the uniqueness of its product. This is due to the fact that new products are constantly appearing and the level of competition in the object markets is constantly growing. At the same time, the negative factors include the presence of several projects, the branching between management decisions that will relate to different projects, but will also have the necessary resources (financial, personnel, etc.).

It should also be noted that the existing production potential of the enterprise still can not change in the short term. At the same time, this is impossible not only due to the need for investment

support, but also due to a number of factors of both production and technological nature (including human resources). Also, several projects for enterprises, on the one hand, are essential to solve the problem of obtaining the necessary volumes of products (for example, to mitigate risks due to climatic conditions), and on the other – they are negative to obtain the greatest results in market relations. This means that if in the first case, when the company in its product range receives less products or does not receive it at all due to low yields, for example, it can fully correlate projects in the field of animal husbandry, which will generally receive the necessary profits for the company. But in reality, the company in terms of management and its management is unlikely to be able to quickly reorient to all market and production changes and effectively interact with counterparties in different object markets simultaneously. Therefore, some of the segments will begin to decline, which will lead to a loss of market position, which will lead to a decrease in market share, thereby changing the number of existing customers, which will ultimately lead to reduced demand for this product.

Given the identified factors, it is necessary to pay attention to the life cycle of project management, taking into account the life cycle of marketing products of the enterprise.

If we understand the life cycle of the project in the management system, then it is important to study and analyze the problem of funding, which primarily face the new project. Moreover, conducting research, analysis of the market situation, analysis of the potential of the enterprise will provide an opportunity to identify a new unique idea and develop an appropriate project. In addition, it should be understood that project management has two main directions. This is the design of the main activity, as well as the system of its provision.

The main activity in project management should include initial research of the market environment, project planning based on the obtained data, preparation of documentation in the form of a business plan with separate blocks on production and commercial areas, project implementation with clear definition of conditions, and further development activities of the enterprise to support this project with the ability to adjust it in accordance with the requirements of dynamic changes in the market environment. In this case, the main activity of the project should not relate to all types and product range of the enterprise, but only some (more profitable or unique in terms of obtaining and gradually increasing financial results). Provision of project management at the enterprise is through the possibility of using other activities of the enterprise. These are, in particular, investment activities, financial and economic, informational, commercial, marketing and others. Moreover, the development of the main activities of the enterprise in the project is not possible without the simultaneous involvement of tools to ensure it.

Given that in project management there are four main stages – the formation of the research task; project planning process; implementation of project activities, as well as stages of completion, each of the stages can be divided into separate phases and stages, which already take place exclusively through the adaptation of the project management system to a separate process or procedure.

The project implementation phase can also be divided into two phases. The first phase of design documentation, which has a complete business plan with certain economic and production costs and possible results, is basic. The formation of a business plan should describe all available tools and mechanisms of management activities at the enterprise, as well as the entire production cycle, so that immediately after the decision to implement this project in the management of the enterprise, it would be possible to start work on the project and gradually move to another phases. The second phase is the possibility of adjusting the existing project as a result of the constant dynamic development of market relations and the market situation in general. Moreover, the correlation is also required by the availability of project resources, which have already been mentioned. Moreover, at all times should be possible to attract marketing resources. The possibility of marketing resources is manifested due to the fact that the understanding of marketing as a market activity of the enterprise is basic when the company enters the market. Therefore, all marketing tools are fully relevant to the formation of product, pricing, communication and sales policy of the enterprise, which, in turn, are all possible areas for correlation of the existing project.

Thus, at the stage of project development the main attention is paid to the definition of goals and objectives while correlating the final results and ways to achieve them. In this case, first of all, the involvement requires the availability of investment support and the necessary complete information on

the current state of functioning of the selected object market for the implementation of this project. The stage of preliminary planning and forecasting of results requires the provision in terms of market research, analysis of similar products and competitors, taking into account both purchasing power and the needs of the market and consumers in general. Also at the planning stage, the existing potential of the enterprise is fully explored, which is able to meet all the requirements for the project. In addition, the resource potential is considered not only at the stage of the existing level, but also with the potential to change it. At the project planning stage, separate phases are formed. The production phase is fixed on the production potential of the enterprise. The investment phase requires finding available investment opportunities to ensure the planned results of the project. In addition, all necessary research on the feasibility of the project should be fully carried out at the planning stage.

The project implementation phase can also be divided into two phases. The first phase of design documentation, which has a complete business plan with certain economic and production costs and possible results, is basic. The formation of a business plan should describe all available tools and mechanisms of management activities at the enterprise, as well as the entire production cycle, so that immediately after the decision to implement this project in the management of the enterprise, it would be possible to start work on the project and gradually move to another phases. The second phase is the possibility of adjusting the existing project as a result of the constant dynamic development of market relations and the market situation in general. Moreover, the correlation is also required by the availability of project resources, which have already been mentioned. Moreover, at all times should be possible to attract marketing resources. The possibility of marketing resources is manifested due to the fact that the understanding of marketing as a market activity of the enterprise is basic when the company enters the market. Therefore, all marketing tools are fully relevant to the formation of product, pricing, communication and sales policy of the enterprise, which, in turn, are all possible areas for correlation of the existing project.

The project completion stage should take into account certain features. If we are talking about agro-industrial production, then this stage should not take place for a long period for the effective operation of the agricultural enterprise. Therefore, to eliminate the threats of the liquidation phase of the project should pay more attention at the stage of implementation in terms of marketing activities of the enterprise to the life cycle of the product. Moreover, the product life cycle under such conditions will be fully associated with project management in the field of enterprise marketing. Thus, marketing tools include opportunities for the formation of product and pricing policies of the enterprise, as well as the policy of promotion and distribution with the appropriate methodology of implementation (methods, techniques, principles, etc.).

Thus, the formation of project management for the marketing system of the enterprise aims to implement two types of activities: first, it is the management of enterprise projects and, secondly, it is the involvement of marketing tools in the design. If we understand project management through the formation of a specific business plan that implements the idea of the company to create unique products, which is the main task of marketing today, it can be distinguished through the development of various areas of the enterprise. Thus, the tasks of the project of the enterprise with the simultaneous introduction of marketing tools can be characterized by maximum profitability for the enterprise. And ensuring the competitive development of agricultural enterprises will be a combination of project management and marketing.

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# **MECHANISMS TO ENSURE THE COMPETITIVENESS & STRATEGIC MARKETING OF UKRAINIAN COMPANIES**

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The current stage of development of enterprises in any industry requires their management system of continuous development in accordance with the requirements of the existing and constantly changing market environment. Agricultural enterprises are also no exception – the main economic entities in the field of domestic agricultural production. Under such conditions, the issues of not only improve the efficiency of economic entities of the market, but also their effectiveness become relevant. At the same time, through the components of effectiveness, it is possible to separate the management system of the enterprise, which is the connecting link between their production and commercial systems. At the same time, the cooperative application of hierarchical connections allows to combine not only separate management tools with production activity, but also to apply it to the marketing complex.

Marketing at the enterprise is manifested through the simultaneous and systematic combination of product, pricing, communication and sales policy. These tools are fully compatible with any type of enterprise. Due to a certain principle of complexity of management and marketing, the process of managing marketing activities becomes especially important. At the same time understanding the similarity of the concepts of "management" and "management" of the enterprise, in our opinion, it is more appropriate to use "marketing management", which is due to the adaptation of marketing procedures to the enterprise management process, and the introduction of individual components management process.

The introduction of marketing management in agricultural enterprises aims to increase their level of competitiveness, as well as to ensure competitive development in general through the availability of proposals and recommendations for strategic management in the form of marketing projects that will fully enable agricultural enterprises to use the principles of system, integrity and adaptability in accordance with the dynamic requirements of the market environment.

The problems of formation of marketing management are given considerable attention of many both domestic and foreign economists. The basis of marketing management is issues of competition theory, the development of which has undergone significant changes and shifts over a long period of time. Ensuring the competitive development of enterprises on the basis of attracting the theoretical basis for the development of competition theory in individual object markets is considered in the works of many prominent scientists. At the same time, according to the results of research of existing scientific achievements, ensuring competitiveness is not possible without the use of modern marketing tools in the management of enterprises. Much attention is also paid to marketing and marketing activities, but today, the combination of marketing management in the system of competitive relations and ensuring the competitive development of agricultural enterprises raises many questions due to constant changes in market conditions and the simultaneous possibility of adapting theoretical principles to applied procedures. At the same time, static and dynamic market relations in a particular environment require constant analysis and gradual renewal of enterprises in various fields of activity, so the involvement of the latest marketing tools is the basis of this study.

The purpose of the article is to develop the theoretical foundations of the components and to identify the basic segments of marketing management for introduction into production and commercial activities of agricultural enterprises to ensure their competitive development in the long or short term.

The genesis of the theoretical foundations of the formation of competitive behavior in different markets allows us to conclude that there are currently more realistic types of market structures, in particular, oligopsony, monopsony and monopolistic competition. These types of markets replaced after the classical stage, where models of perfect competition were predominant and views on monopoly and oligopoly dominated. This understanding suggests that competition requires from agricultural enterprises new approaches and new methods in the management system.

Competitiveness, as a consequence of competition in the market, aims to increase through various activities of the enterprise. The management system pays special attention to a certain field of activity of the enterprise. The enterprise management system creates the necessary prerequisites for the formation of a rational structure and interaction of production and commercial components of the enterprise to ensure the most favorable conditions and get the best results from its market activities. In general, it should be noted that the market activity of the enterprise is not possible without the use of marketing management. Today, marketing is the basic and traditional advantage of the company in entering the market, given that all relations currently take place in a market economy. In addition, it should be understood that management and governance have some differences. Management should be generally understood as a process, while management is only a component of the process of enterprise management. Management has a diverse set of definitions as a concept, but in our case we propose to understand management as a system in the process of managing a particular activity in the enterprise, which has its purpose, functions, principles, objectives and has its own tools with relevant components, elements and components. In this case, the management must perform its inherent functions and provide appropriate procedures for attracting tools (complex) of marketing in the enterprise.

The understanding of the content of marketing management as a management system follows through the essence and possibility of combining the key definitions of "management" and "marketing". Thus, "marketing" has many interpretations, which in different studies have different meanings, but fully adapt to them and explain certain processes or phenomena. To study the prospects for competitive development of marketing management, it is proposed to understand marketing as a market activity of the enterprise. Moreover, this interpretation fully combines all possible aspects through a combination of basic vector directions:

- the activities of the enterprise and the formation of adequate potential for the possibility of entering the market;
- work with the market in the conditions of constant development of competitive relations for reception of steady market positions at establishment of interaction with all contractors;
- marketing audit or management function to control the effectiveness of the enterprise in the selected market to ensure the maintenance of existing positions or the formation of better competitive advantages.

The formation of marketing management through the adaptation of certain vector directions of development combines all the prerequisites for the formation of strategic management in agricultural enterprises. They fully combine the theoretical foundations of the formation of enterprise management strategy, in particular, planning functions, research analysis functions, control functions and others.

The peculiarity of agricultural enterprises is that strategic management is formed not as a separate activity of the enterprise, but as a short- or long-term development plan in the form of business planning. In this case, separate activity should be given to the functions of planning, analysis and control. Carrying out of marketing researches at formation of system of marketing management of the enterprise should be based on theoretical and applied bases which are completely adequate to conditions of activity of each separate enterprise. In particular, this applies to the standard procedure for the analysis of micro and macro environment, which should be supplemented with tools and tasks in accordance with the selected object market on the one hand, taking into account the internal management of the surveyed enterprises on the other. This approach fully identifies all market needs, determines how it is possible to meet the needs of consumers (existing and potential) at the highest level, and also allows companies to focus on interactions with major counterparties that shape



consumer behavior in the market and thus form a proposal. enterprises. Conducting research in this direction will highlight the unique factors of both the external environment of the enterprise and internal. Ultimately, the result will be a competitive advantage through a combination of market success and key competencies.

Marketing research is the basis for planning marketing management in the enterprise. Planning processes are dynamic and they must change in the process of market environment development in selected object markets. Planning is the most purposeful form of using the marketing management system in the enterprise. The control function should provide a marketing management system in terms of internal audit. Control over the implementation of all principles and procedures of marketing management should be entrusted to strategic management, and its implementation is the key to effective development. Thus, one of the components of control in the system of marketing management is the formation of a general system of enterprise management, as well as a general development strategy.

In addition, the formation of the results of the marketing audit of the enterprise should provide not only the analysis of the micro and macro environment. For the active development of the enterprise it is also necessary to provide an analysis of risk management activities, as well as the management of economic security of the enterprise. To date, in terms of agricultural production risk management in the management system of the enterprise is of the utmost importance. This is due to a number of factors, both internal and external, of the functioning of this segment of the domestic market. It should be noted that risk management in the enterprise should be based on a complete analysis of economic, financial, investment, marketing and production systems of the enterprise. Risk management is one of the most important stages of strategic management in the enterprise, because it emphasizes the possible threats, as well as has all the prerequisites for the formation of certain areas of development, which have not been identified before. Management of economic security of the enterprise is important in the formation of strategic management in the field of marketing management. The economic security of the enterprise aims at the formation of various models, diagnostics, the formation of plans for the exit of the enterprise from the economic crisis that has already occurred or to form a competitive advantage in order not to fall into crisis. In addition, economic security affects the level of effective management of the enterprise due to the presence of individual components not only of a production or commercial nature, but also in the field of personnel management and organizational activities of the enterprise as a whole.

In addition to the formation of marketing management strategy in the enterprise, attention should now be paid to project management. Project management in the marketing management system is a specialized plan, which differs from the strategy in that they have a specific "field", a specific task, as well as a specific business plan with defined results. Project materials are documentation that fully substantiates the proposed project to ensure the competitiveness of the marketing management system. If we understand project management through the process of managing labor, material, intangible and financial resources of the project, which must be carried out using special methods and techniques, it will allow to obtain the highest results with minimal investment, which must be fully represented by the relevant economic and mathematical calculation pool. If we understand project management in the marketing system, it should be determined that the main object of project management will be the marketing activities of the enterprise, the main subject is the management process and its components through the management system, and its main resources will be production and market potential.

Today, project management is a globally recognized methodology for conducting strategic management to ensure the competitive development of enterprises. Project management in the marketing management system allows the company to offer all the necessary stages of implementation and development of marketing with clearly defined topics, objectives, mechanisms and procedures.

Development strategies have features in the formation of different markets. Situational modeling for the formation of development strategy has its differences in different factors. As an example, the marketing management of an agricultural enterprise when entering the domestic agri-food segment has more standardized components, management of market activities and policies on the marketing of the enterprise. Thus, forming an export-oriented development strategy, Ukrainian agricultural enterprises must understand that the application of a set of policies of the marketing

complex is not only not possible, but also requires complete replacement by more communication tools and sales mechanisms. When entering international markets, domestic agro-industrial products in most cases are not highly competitive. This conclusion, which is theoretical and not applied in this study, is not influenced by the calculated integrated coefficients of competitiveness, and calibration at three levels (low, medium and high) depending on the overall ratio of "price / quality". It should also be noted that this statement does not distinguish groups of goods that are unique in the total mass of agro-raw materials and agri-food products and that have the highest or lowest limits. The aim of the study was to develop methodological approaches that require optimal adaptation to average data. Thus, the marketing management of agricultural enterprises in the implementation of export-oriented strategy aims to attract progressive tools in terms of promotion strategies. Due to the impossibility of influencing the management of commodity and price policies, and such production components in sales policy, agricultural enterprises have the full use of communications as opportunities to gain a competitive advantage. Moreover, the application of communication policy should be reflected in the management of enterprises through interaction with both domestic and foreign counterparties. If we compare the current state of involvement of communication policy tools in the domestic market and in terms of entering international markets, we can conclude that there is almost no for the first conditions and the presence of insignificant opportunities for the second case. Therefore, the importance of forming appropriate to the specific conditions of marketing management strategies in terms of the use of tools is beyond doubt.

In general, it should be noted that the components of marketing management cover almost all processes that take place in the production and commercial activities of agricultural enterprises. Of course, it is not possible to evaluate them completely, but in our opinion, the most important and significant segments (sectors) of the introduction and continuous development of marketing management of agricultural enterprises to form a high level of their competitiveness include the following:

- research, planning, implementation and control in the field of marketing activities, as well as the introduction of strategic management tools;
- market positioning management;
- risk management;
- economic security management;
- project management;
- formation of a holistic system of marketing management of an agricultural enterprise.

Thus, the study of the content of the definition of "marketing management" makes it possible to understand as a system of market management of the enterprise, which combines the basic vector areas: the activities of the enterprise and the formation of appropriate potential for market entry; work with the market in the conditions of constant development of competitive relations for reception of steady market positions at establishment of interaction with all contractors; marketing audit or management function to control the performance of the enterprise in the selected market to ensure the maintenance of existing positions or the formation of better competitive advantages. It is determined that the components of marketing management cover almost all processes that take place in the production and commercial activities of agricultural enterprises. The most important and important sectors for the introduction and continuous development of marketing management of agricultural enterprises to form a high level of their competitiveness include: research, planning, implementation and control in the field of marketing activities, as well as the introduction of strategic management tools; market positioning management; risk management; economic security management; project management; formation of a holistic system of marketing management of an agricultural enterprise and relevant strategies for competitive development in the long or short term.

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# **COST MANAGEMENT SYSTEMS AS A FACTOR IN INCREASING THE PRICE COMPETITIVENESS OF PRODUCTS OF AGRICULTURAL ENTERPRISES<sup>1</sup>**

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Every company strives to achieve a competitive advantage and to dominate the competition. To ensure success in domestic and global markets, such an enterprise must have either a more attractive price or better product quality. The company is also interested in minimizing costs, which can result in lower prices to increase sales aimed at developing new markets or expanding available ones.

The theory and practice of management in a market economy recognizes that costs are the most important object of management. The profitability and competitiveness of economic entities depend on their size. However, as the analysis shows, agricultural enterprises fail to reduce production costs, achieve optimal levels of profitability, and carry out expanded reproduction, which characterizes the low level of production cost management. To increase the efficiency, financial stabilization, and price competitiveness of agricultural enterprises, it is necessary to form an effective cost management system, constantly monitor them, implement organizational and economic measures to reduce them, and increase production per unit cost. Therefore, the study of the issue of improving cost management systems in agricultural enterprises is extremely relevant.

The issue of cost management has been widely analyzed in the works of many scientists. It is worth noting the scientific publications of Okhrimenko I.V. [1], Partin H.O. [2], Davydovych I.E. [3], Kolisnyk M. [4], Mazur O.I., Bohatska N.M. [5] and others [6; 11-13]. However, the literature sources do not fully present the essence of the cost management system in agricultural enterprises under the conditions of increased competition.

The purpose of the article is to analyze the cost of production and to develop an effective cost management system to ensure the price competitiveness of agricultural products at agricultural enterprises.

The efficiency of production at agricultural enterprises depends on a set of various factors. Ensuring the profitability of agricultural businesses requires maximizing profits from the sale of products, as well as minimizing production costs, which will contribute to the implementation of expanded reproduction and an increase in their competitiveness.

In 2019, all categories of Ukrainian farms gained agricultural products (at constant prices of the year 2016) of UAH 680982.4 million, which is 45.7% more than in 2010, and by 1.4% compared to the previous year. The largest increase in agricultural production occurs at agricultural enterprises: respectively by 75.2% compared to 2010 and by 2.7% compared to 2018. If in 2010, agricultural enterprises produced 48.3% of agricultural products, including crop products – 53.6%, livestock – 38.8%, in 2019, it was 66.1%, 69.9%, and 51.3% respectively. That is, it was agricultural enterprises that have been the main producers of agricultural products in recent years, not households. Agricultural enterprises and farms are gradually increasing their share of total agricultural production.

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<sup>1</sup> The article is executed in the framework of research work on the topic «Agricultural production competitiveness management systems in the terms globalization of agricultural markets» № 0119U001387.

Production volumes are closely related to the advancement of fixed and current assets in the production process. The dynamics of costs for the production of agricultural products in agricultural enterprises of Ukraine are presented in Table 1.

Analysis of the data presented in Table 1 shows that in 2019 the costs of agricultural production at agricultural enterprises of Ukraine increased compared to 2010 by almost 6.2 times, and since 2018 – by 4.6%. At the same time, agricultural production (at constant prices of the year 2016) increased by 75.2%, respectively, and compared to the previous year – only by 2.7%.

**Table 1. Expenditures on agricultural production at agricultural enterprises of Ukraine for 2010-2019 \***

Years	Production costs, UAH million	Years	Production costs, UAH million
2010	75009,6	2016	288499,3
2013	127190,3	2017	404970,2
2014	154313,5	2018	442993,4
2015	228519,6	2019	463271,6
2019 in % compared to 2010	617,6	2019 in % compared to 2018	104,6

\* Source: compiled by the author based on the source [7-9]

The economically unstable environment harmed the cost of agricultural production (Table 2).

**Table 2. Indices of prices for industrial products and tariffs consumed in agriculture (to the previous year, percent) \***

Index	2010	2013	2014	2015	2016	2017	2018	2019
Aggregate index of costs for agricultural production	116,9	101,0	117,9	150,9	113,5	121,8	113,9	99,4
Including material and technical resources of industrial origin	115,5	99,7	120,0	145,6	104,2	124,6	115,9	98,4

\* Source: compiled by the author based on the source [7-9]

As Table 2 shows, the costs of agricultural production at agricultural enterprises in Ukraine increased from year to year. If in 2010, the total cost index was 116.9% compared to the previous year; in 2015, the costs increased by more than half (by 50.9%), and in 2017 – by 21.8%. A significant increase in costs is primarily due to the rise in the price of material and technical resources of industrial origin, which are used in agriculture. Moreover, the increase in their value in some periods outpaced the growth of costs. Thus, in 2014, 2017, and 2018, the cost index for such resources exceeded the total cost index by 2.1; 2.8, and 2%. Oil products (by 4.6%), construction materials (by 6.5%), and wages increased by 21.9% in 2019 compared to the previous year. Traditional types of material and technical resources became cheaper, in particular, fuel – by 28.9%, mineral fertilizers and chemical plant protection products – by 19.1%. In general, the total cost index for agricultural production in 2019 is 99.4% compared to 2018.

It is worth noting that the sales prices of agricultural products grew at a slower pace than costs. The sales price index exceeded the cost index only in 2010, 2014, and 2015 for the period under review. In 2018, sales prices of agricultural products increased compared to the previous year by only 9.3%, and in 2019, they decreased by 7.6%.

Despite some annual increase in sales prices (except for 2013 and 2019), the income of agricultural producers did not always cover their costs (Table 3).

As the data of Table 3 prove, 83.4% of agricultural enterprises of Ukraine in 2019 made a profit, the rest were unprofitable. Although the number of unprofitable enterprises decreased 2.3

times during the study period, the level of profitability of all activities reached only 16.1%, and operating activities – 19.3%, which is not enough to carry out expanded reproduction. To ensure expanded reproduction in agricultural production, the level of profitability should be at least 40-45% [10], and taking into account the cost of land – 25% [6, p. 3].

Agricultural producers are not able to significantly influence sales prices. Therefore, they have the opportunity to increase income and efficiency of agricultural production and remain competitive in the market by reducing costs.

The following aspects have a significant impact on the costs: the scale of the enterprise, the structure of the production program, the duration of a technological process, condition of material and technical base, the capacity utilization, the quality of factors of production, information support of the management process, organization of sales, financing, lending, etc. [6, p. 83]. The formation of costs is significantly influenced by the permanent disparity of prices for agricultural and industrial products, disparities in the equivalence of relations between the enterprises of the agro-industrial complex of all spheres. The state is unable to ensure the equivalence of exchange, inter-sectoral proportions, and price parity, which requires more constructive and effective measures of the state regulation.

**Table 3. Financial results of the activities of agricultural enterprises of Ukraine for 2010-2019 \***

Years	Net profit, UAH million	Enterprises that received a net profit		Enterprises that received a net loss		Profitability level, %	
		in % to the total number of enterprises	financial result, UAH million	in % to the total number of enterprises	financial result, UAH million	of all activities	of operating activities
2010	17253,6	69,6	22094,9	30,4	4841,3	17,5	24,5
2013	14925,7	80,3	26186,6	19,7	11260,9	8,3	11,7
2014	21413,4	84,7	51668,0	15,3	30254,6	9,3	21,4
2015	101912,2	88,9	127525,5	11,1	25613,3	30,4	43,0
2016	89816,3	88,4	102496,1	11,6	12679,8	25,6	33,6
2017	78457,7	86,7	91764,1	13,3	13306,4	18,7	23,5
2018	70461,8	86,7	93249,0	13,3	22787,2	14,2	18,9
2019	90167,0	83,4	114666,4	16,6	24499,4	16,1	19,3

\* Source: compiled by the author based on the source [7-9]

The problem of cost and revenue management cannot be solved only by market methods or a combination of market levers with the methods of public management of economic processes. The reduction of costs depends significantly on the formed effective internal cost management system at individual enterprises.

The cost management system plays an extremely important role in developing a strategy of enterprise behavior in market conditions, substantiation of management decisions under the influence of the external and internal economic environment, in establishing an effective internal mechanism and management, creating effective planning, control, and analysis of costs.

The cost management system should include a set of functions of planning, forecasting, rationing, accounting, analysis, control, regulation of costs, and motivation to reduce or optimize the level of costs, as well as the organization of the cost management system. In this case, the main objects of management in the cost management system are, in addition to the direct costs of production, the financial condition of the enterprise. Despite the specific strategic goals, each company should aim, on the one hand, to ensure continued solvency, and on the other hand to strengthen and upgrade the material and technical base.

A key component of an effective cost management system, in our opinion, is a cost management mechanism, which should include appropriate levers and tools that significantly affect the number of costs. The choice of components of this mechanism involves appropriate organizational, technological, and economic measures aimed at obtaining the optimal cost and increasing the profitability of enterprises.

Important tools of the cost management mechanism, which significantly affect the number of production costs, include methods of cost accounting and calculation. In the scientific works of domestic scientists, preliminary, post-process, out-of-order, and normative methods of accounting for production costs are more often used [11; 12]. In foreign scientific research, such systems and methods as absorption-costing, direct-costing, target-costing, and kaizen-costing have become widespread in management accounting [13]. It is worth noting that although foreign methods of accounting and costing are considered progressive, they have some drawbacks. The disadvantages include their cumbersome, complexity, and cost taking. Besides, the latest concepts of cost management systems are based on the division of costs into fixed and variable, which is a debatable issue.

The need to ensure the competitiveness of products in the context of globalization of markets, increasing the level of informatization, and intensification of competition encourages a fundamental improvement of the cost management system of economic entities. Therefore, as noted by Partin H. O., the modern world pays special attention to the formation of a strategic model of cost management, which is based on a comprehensive analysis of competitive advantages and weaknesses in the enterprise, its participation in shaping the value of products for consumers, studying life cycle stages of its products, and the research of the peculiarities of the influence of external and internal business environment on the level and behavior of its costs [2, p. 43].

**Conclusions.** It has been proved that during the studied period (2010-2019) there was an increase in costs at the agricultural enterprises of Ukraine regardless of the volume of production. Several factors that do not depend on the manufacturer significantly influence the formation of costs. Therefore, increasing the intensity of agricultural activities requires more effective measures of state regulation and cost management.

Under the conditions of increasing internal and external competition, a decrease in profit, an increase in losses, and a decrease in expenses are the most accessible ways of increasing the profitability and competitiveness of production of agricultural enterprises. The development of an effective internal cost management system of an individual enterprise will ensure the optimal cost, increase profitability and financial stabilization of economic entities. A key component of the cost management system is the cost management mechanism, which should include appropriate levers and tools that affect the amount of costs. Among these tools, progressive methods of cost accounting and calculation, which have not become widespread at domestic agricultural enterprises due to the relevant shortcomings, should play an important role.

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# **ANALYSIS OF THE INSURANCE SERVICES MARKET OF UKRAINE: FORMATION, PROBLEMS AND PROSPECTS**

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The key element of the national economy of any country is the insurance market. With the strengthening of the openness of the Ukrainian economy to the international economic space, the issues of competitiveness of the insurance market and reforming the insurance industry are becoming increasingly important. However, due to the protracted financial crisis, the continuation of the military conflict, and due to underestimation of the social role that insurance should play, the level of its development in Ukraine today does not meet the growing needs of the national economy and social reforms. It is no more than 10% of potential risks while in most developed countries it is at least 90-95%. The share of our country in the world insurance market reaches only 0.01% and is equal to 0.05% of the volume of insurance services, which is 400 times less than in the US, 60 times less than in Germany, and 50 times less than in France [1, p. 413]. This is despite the fact that Ukraine is home to more than 7% of Europe's population and has significant industrial, agricultural, and scientific potential.

Despite the fact that the modern Ukrainian insurance market began its development in the early 90s of the last century, there is still a constant improvement of the legal framework, changes in the activities of state bodies of state regulation and supervision of insurance activities. Therefore, the issue of the functioning of the insurance market and identifying prospects for its development does not lose its relevance today.

The study of the theory and practice of the insurance market was considered in the works of many domestic scientists V.Bazilevich, S. Vynohodov, T.H. Marenych, O.A. Lutsenko [12, 13], L.A. Polyvana [12, 13], H.M. Puriy and others. However, despite a fairly wide range of research and a significant amount of work related to the analysis of processes occurring in the insurance market of Ukraine, the dynamic nature of its development requires constant deepening of research, including a conceptual approach to assessing major problems, trends and prospects of the insurance market.

The purpose of the article is to assess the current state of development of the domestic insurance market, identify features and problems of its operation and justify the main directions of further development in order to increase the competitiveness of business entities.

According to the National Commission for State Regulation of Financial Services Markets, the insurance services market is the second largest capitalization market among other non-banking financial markets [2]. Therefore, the insurance market of Ukraine has significant attractiveness and potential for further development.

The main indicators of the insurance market of Ukraine for 2010-2019 are presented in the Table 1 [3].

Analysis of the main indicators of activity and development of the insurance market gives grounds to claim that today the insurance market is characterized by underdevelopment, lack of structure, weak development of reinsurance, instability of financial condition of some insurance

companies, uneven development, when we can see the formation and strengthening of some insurance companies and the bankruptcy of others [13].

**Table 1. The Main Indicators of the Insurance Market of Ukraine**

Indicators	Years					
	2010	2011	2013	2015	2017	2019
Number of registered insurers	456	442	407	368	294	233
among them: life insurance companies	67	64	62	50	33	23
Number of concluded insurance contracts, mln grn	619,1	618,0	185,2	171,9	185,4	196,9
Assets on the balance sheet, UAH mln.	45234,6	48122,7	66387,5	60588,9	57381,0	63866,8
Volume of paid-in authorized capital, UAH mln grn	14429,2	14091,8	15232,5	14483,7	12831,3	11066,1
Formed insurance reserves, UAH mln grn	11371,8	11179,3	14435,7	17244,7	22864,4	29558,8
Gross insurance premiums, UAH million, of which:	23081,7	22693,5	28661,9	21718,7	43431,8	53001,2
from insured individuals	6 171,1	7 478,7	10267,5	7 269,2	15555,6	21632,0
from legal entities	966,8	12549,0	12607,9	17864,6	12937,7	19034,8
from reinsurers	7 050,3	4 111,9	5 521,4	4 564,1	14938,5	12334,4
including from non-resident reinsurers	192,3	429,1	324,0	38,1	46,1	56,8
Gross insurance payments, UAH million, of which:	6 104,6	4 864,0	4 651,8	4 674,8	10536,8	14338,3
insured individuals	2 436,4	2 210,6	2 637,5	2 308,3	4976,5	6618,1
to reinsurers	2 045,4	724,3	112,5	98,9	18333,6	16713,4
the level of gross payments,%	26,4	21,4	16,2	21,5	24,3	27,1
Net insurance premiums, UAH mln grn	13327,7	17970,0	21551,4	16746,4	2849,4	39586,0
Net insurance payments, UAH mln grn	5 885,7	4 699,2	4566,6	4577,9	10256,8	14040,5
Level of net payments,%	44,2	26,2	21,2	27,3	36,0	35,5
Amount of insurance payments paid to reinsurers, UAH mln grn	10745,2	5 906,2	8744,8	6726,3	228864,4	29558,8

Source: compiled by source [3]

It should be noted that during the study period the number of insurance companies tends to decrease, and the number of contracts on the contrary increases, especially for health insurance services from both individuals and legal entities.

The main share of gross insurance premiums (98.1%) is accumulated by 100 non-life insurance companies (47.6% of all non-life insurance companies) and 96.7% by 10 life insurance companies (43.5% of all insurance companies) "Life", with their share in the market is 15%, which indicates a high concentration in the insurance market "Life". The concentration ratio of the insurance market (CR-3) for life insurance in Ukraine is 57.6%, and for "non-life" insurance (13.9%). According to Bazylevych V.D., such a high concentration of the insurance market in Ukraine indicates an overload of the domestic insurance market with a large number of insurance companies, some of which are unable to provide quality insurance services, pay for their obligations and generally compete for at least a small market segment. [4, p.5]. Also, according to experts, the redistribution of the insurance market will be slower due to the adoption of the law on "split" and the transfer of regulatory functions of the National Bank, as provided by the Memorandum of Cooperation between Ukraine and the International Monetary Fund [5].

According to the results of the assessment of the level of concentration of the insurance market according to the Herfindahl-Hirschman index (NIS), which shows the impact of the largest companies on the market, the life insurance market in 2019 amounted to 1517.18, the market of risky types of insurance – 230.88. In general, in the insurance market, this index was equal to 203.90. Such results can be traced throughout the study period and indicate that the risk insurance market is unconcentrated, in

contrast to the life insurance market, which is characterized by moderate concentration, which indicates that the insurance market in Ukraine is developing on an oligopolistic model.

The state of the insurance market is characterized by dynamic development: increasing the volume of gross insurance premiums, especially from legal entities, and insurance payments (2.2 years), which is an important characteristic of market development and reflects the degree of its specific functions related to with protection, financing, assurance, and risk reduction [12, 13].

Thus, the increase in gross insurance premiums occurred in almost all types of insurance, in particular: insurance of financial risks, car insurance, insurance against fire risks and natural disasters, property insurance, third party liability insurance, Medical Insurance, accident insurance, cargo and luggage insurance, aviation insurance, and medical expenses insurance [3].

As for personal insurance, the most common type of insurance in Ukraine is compulsory motor third party liability insurance. Compared to motor hull insurance or voluntary health insurance, where the penetration rate is not more than 3-4%, compulsory insurance covers at least 85% of vehicles. Today, about 7.5 million car owners insure their liability to third parties. More than 50 insurance companies have a license for this type and are members of the Motor Transport Bureau of Ukraine [6].

Regarding the amount of gross insurance benefits, a high level of gross insurance benefits was observed for the following types of insurance: health insurance – 58.2%; compulsory civil liability insurance of vehicle owners – 45.0%, voluntary personal insurance – 36.1%, non-state compulsory insurance – 39%, and financial risk insurance – 36.9%. The share of gross non-life insurance payments was 94.7% and life insurance – 5.3%, respectively [3].

However, the level of insurance payments during the study period is quite low and averages 25%, due to the high level of distrust in insurance companies, weak stock market development, low production growth and high inflation [13]. Ukraine ranks as 13th country in the world in terms of inflation, which in 2019 amounted to 4.0%. It should be noted that in most developed Western countries the level of insurance payments reaches 75%.

It is possible to assess the state of development of the insurance market and determine its impact on the socio-economic development of the country by the volume of insurance transactions. This indicator is quite low and averages 1.5% of GDP in Ukraine. However, the Comprehensive Program for the Development of the Financial Sector of Ukraine plans to gradually increase this indicator by the end of 2020 to 7%, to the level of developed Western countries [7]. For example, the volume of insurance transactions in Finland reaches 11.8%, in the UK – more than 11%, in Italy – 9.09%, in France – 9.73%, in the US – 7.3%, in Germany – 6,84% [8].

We believe that the result of the low level of insurance penetration in Ukraine is an underestimation of the social role that insurance should play, low development of the insurance culture of the population, instability of the economic situation, and distrust of insurance companies.

During the study period, the total assets of insurers increased by 40%. A detailed analysis of the structure of assets of insurance companies shows that the largest share among the areas of investment are investments in securities – 21.7% (in shares – 8.4% while securities issued by the state – 21.6%) and bank deposits – 35.6%. It should be noted that the choice of approaches to investing in foreign insurers is the opposite of domestic, where the assets of institutional investors are only 4-7% formed by banking instruments, and the bulk of funds are invested in stocks (about 60%) and debt securities (25%). The main reasons for this difference between Ukraine and Western countries in terms of investment are economic instability in Ukraine and weak stock market development, which prevents the use of securities as a category of assets for safe placement of insurance reserves, sustainable production growth and high inflation.

The structure of gross insurance payments under property insurance contracts is dominated by payments from legal entities. To ensure their activities from time to time they need to take loans from banks secured by property. At this stage, banks play the role of catalyst, requiring collateral insurance. In addition, the property of legal entities is their productive resource, without which they will not be able to continue to operate, so they need to provide a contingency fund to protect themselves from production downtime in case of unforeseen circumstances. Insurance in this case is an ideal tool, because it allows you to compensate for possible losses without withdrawing a significant amount of

funds from circulation. This, in turn, makes it possible to direct the "saved" funds for development to modernize production.

According to "Insurance Top", there is now a huge demand for lending in the market, but banks are in no hurry to invest in the real sector of the economy. Enterprises lack working capital and investment for business development. This dependence of the banking and insurance sectors of the economy proves once again that the state policy of insurance development should be based on strengthening the market principles of its participants, the priority of the rights of consumers of insurance services.

Another indicator that reflects the prevalence of insurance coverage and makes it possible to assess the level of development of the insurance market is the indicator of insurance density (the amount of insurance premium per person), the amount of which should reach 140 dollars. However, in Ukraine this indicator is only 65.4 dollars, which indicates a low prevalence of insurance services. For comparison, in Poland the value of this indicator is 140 dollars, in Germany – 1482 dollars, and in Japan – 5-6 thousand dollars [10].

An important indicator of the assessment of the insurance market's performance of its investment function is the share of long-term insurance in the total amount of insurance premiums. It should be noted that life insurance in the market of insurance services of Ukraine is the smallest share – 6.7% (Insurance Market Program), while in countries with developed economies; this figure reaches over 60%. Despite the fact that due to the corona virus pandemic in Ukraine, policyholders have changed their attitude to life insurance and the population has felt the need for this type of insurance, but this type of insurance still remains at a very low level of development, especially among voluntary types of insurance.

Activation of life insurance is important both for the development of the insurance market and for the national economy as a whole, because it is in the field of life insurance that domestic long-term resources accumulate, which can be directed in the form of investments in various sectors of the economy. In countries with developed market economies, life insurance companies provide more than 30% of investment in the national economy, and the experience of European countries shows that developed life insurance allows to effectively addressing a number of social problems without creating additional burdens on the state budget [11, p.243].

Successful development and improvement of the situation on the Ukrainian market of insurance services requires coherence and coordination of work of both the state and insurance companies. At the same time, the state must provide the market with a stable regulatory framework, light state supervision, and on the other hand, insurance companies must be as honest and fair as possible in the process of cooperation with their clients.

It should be noted that the stable functioning of the insurance market is significantly influenced by the quality of the national reinsurance market, which provides financial stability of all market participants, additional opportunities to invest insurance resources, ensure profitable activities of insurers, etc.

Examining the current state and development trends of the domestic reinsurance market, we note that the original reinsurance operations increased significantly in 2019 compared to 2011 in 2.8 years, due to the increase in reinsurance within the country from 4723,5 in 2011 to 13,415.2 in 2019, and due to reinsurance operations with non-resident insurers from 1,182.7 in 2011 to 3298.2 in 2019. However, the share of reinsurers of residents and non-residents remains unchanged and is 80 and 20%, respectively, throughout the study period.

Residents' reinsurance was carried out in the following countries: Germany – 22,3%, Austria – accounts for 19,4% of the total reinsurance; 17,3% come to Great Britain; Poland – 10,0%; Switzerland – 7,0%; France – 6,0%; USA, occupying 3,6%.

In the structure of initial reinsurance by types of insurance as of 31.12.2019, the largest share of insurance premiums was paid by such types of insurance as: property insurance – or 22,0; insurance against fire risks and natural disasters – or 17,2%; financial risk insurance – 14,3%; cargo and luggage insurance (luggage) – 9,2%; land transport insurance (CASCO) – 8,4%; third party liability insurance – 6.2%; civil liability insurance of vehicle owners ("Green Card") – 2,9%.

The share of incoming reinsurance occupies a small market share in terms of premiums and payments and is 0,10% of non-residents in 2019 and it did not exceed 2% during the study period, due to the significant economic and political crisis and the refusal of foreign companies to operate in the domestic market under such unfavorable investment climate, as well as the low level of insurance market development, lack of confidence in domestic insurers and reliable reinsurance mechanisms.

It should be noted that the participating domestic reinsurance market is characterized by underdeveloped infrastructure and imperfect legal regulation. Due to the lack of licensing of reinsurance activities, these operations are carried out by insurance and reinsurance companies and their associations, mainly non-resident reinsurers who have a license to conduct insurance activities.

This situation in the reinsurance market is caused by an increase in the cost of reinsurance services in the amount of brokerage fees, as well as the use of the principle of "mutual exchange of risks" to balance financial flows, which does not involve reinsurance brokers. In addition, the reinsurance market in Ukraine is represented mainly by optional reinsurance, which means that it is not focused on the use of intermediaries.

Another disadvantage of the reinsurance market is the low level of its capitalization compared to the markets of developed countries and the low competitiveness of domestic reinsurers.

Thus, the domestic reinsurance market is at an early stage of formation. It should be emphasized that for active integration of the reinsurance market into the international space it is necessary to increase the capacity of the domestic reinsurance market and ensure the stability of insurers, develop domestic legislation close to world standards, ensure high quality reinsurance operations, and increase their openness and transparency.

Thus, the domestic reinsurance market is at an early stage of formation. It should be emphasized that for active integration of the reinsurance market into the international space it is necessary to increase the capacity of the domestic reinsurance market and ensure the stability of insurers, develop domestic legislation close to world standards, ensure high quality reinsurance operations, and increase their openness and transparency.

The study found that the market of insurance services in Ukraine is characterized by underdevelopment, lack of structure, weak development of the reinsurance institution, instability of the financial condition of individual insurance companies, and uneven development. However, in recent years there has been an intensification of this industry. The market of insurance services in Ukraine is in the process of transformation into the international economic space.

The main factors hindering the development of the market are: the lack of a unified state strategy for the development of the insurance market in the country, instability of the economic situation in the state and in the population, weak stock market development, low level of insurance culture, and distrust of insurance.

The main prospects for the development of the insurance market can be outlined as follows: stabilization of the financial position of all economic entities; development of the legal framework of insurance, which would take into account the current situation in the insurance market; formation of stable and reliable insurance companies; intensification of the role of the state and its bodies in strengthening and developing the insurance market; formation of state priorities in the development of insurance, creating a competitive environment in the insurance market; integration of the insurance market of Ukraine into the world insurance market and creation of a modern model of effective management of insurance reserves; further development of reinsurance; development of practical marketing and organization of risk management in insurance activities.

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# THE CONTROLLED FROM DISTANCE TRAINING OF PERSONNELS IS IN SYSTEM NETWORK TECHNOLOGY OF MANAGEMENT OF EDUCATIONAL-CREATIVE ACTIVITY OF STUDENTS

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Problem of organization of the controlled from distance studies in the conditions of epidemic of Covid-19 once again led to the necessity of implementation of elements of digital pedagogics for the system of higher education of Ukraine. Civilization changes stipulate the necessity of preparation of man to new, often fundamentally other technologies. Foremost speech goes about informatization and computerization. Exactly the state of science, education and technologies related to them will define the prospects of further development of education, science and productive sphere in Ukraine (Kremen, 2011).

Information technologies which determined character and essence of XX-th of century SMART-technologies yield today, that open a new progressive way in organization of the controlled from distance form of studies. As registers in the last positions of national strategy of development of education in Ukraine – formation of the future must be based on combination of informatively-digital technologies and individual technologies of development of personality within the limits of general electronic platform (Gry`n`ova, 2010). This technological process must organically connect the controlled from distance studies with the modern elements of digital pedagogics (SMART-educational complexes, informatively-communication technologies, electronic resources and facilities of activation of cognitive activity of students).

The controlled from distance teaching (DT) are an independent form of studies, which uses mainly information technologies which are the leading mean of organization of educational process. DT foresees cooperation of teacher and bread-winners inter se in the distance, that removes all peculiar to the pedagogical process elements (aims, maintenance, methods, organizational forms, facilities of studies) and realized by specific facilities of Internet technologies, which foresee interactiveness (Morze, 2001).

In DT it is possible to distinguish three basic technologies: a 1) case- technology at which teaching-methodical materials are clearly structured and completed in the special set (case), then they are sent to the student for independent studies with periodic consultations of teachers in created for these aims remote (regional) educational focus or points; 2) TV-technology, that teachers have based on the use of televisional lectures with consultations; 3) network technology which is based on the use of network the «Internet», both for providing of students educational and methodical material and for interactive co-operation between a teacher and student (Albegova, 2009; Docenko, 2020).

The controlled from distance studies, at the terms of scientific approach, allow to provide such advantages: 1) to decrease expenses on realization of lessons; 2) to promote the productivity of educational process, bringing over simultaneously to the studies plenty of bread-winners; 3) to promote the level of independence and individualization of studies; 4) to improve quality of educational process due to application of modern hardwares of teaching, electronic informative sources; 5) to modernize the pedagogical system, creating educational SMART-environment after modern principles of digital pedagogics (Bujdina, 2020).

Interesting is experience of Great Britain, where important direction of development of trade education is application of the tutorical system which uses the internet-platform of «Moodle» (Modular Object-Oriented Dynamic Learning Environment) – the module object-oriented dynamic educational environment, giving access to materials of course and offering debatable forums, chats and educational to the web-conference with participation of teachers-tutors (Lushhy`k, 2017).

Scientific researches of authors from introduction of technological bases of pedagogical processes lead to possibility on these principles to work out network technology of the controlled from distance studies with the use of digital contents. This project will allow to create reliable control system by educational-creative activity (ECA) of students in the conditions of the controlled from distance education with the use of corresponding network on-line content in the interactive mode. Separate methodological and methodical bases of this technology are exhausted by us in corresponding monographic researches (Klochko, Nagaev, Klochko, Pradivliannyi, Didukh, 2018; Nagayev, 2012; Nagayev, Nagayeva, 2019).

The purpose of the article consists in the analysis of the existent didactics going near organization of the controlled from distance teaching in the system of the technological providing of pedagogical processes on the basis of development of complex network case of students educational-creative activity frame.

Effective organization of the controlled from distance studies is a thorny pedagogical problem which is interpreted by many factors:

- 1) by an internet environment of transmission and exchange of educational information,
- 2) by the reliable hardwares of studies,
- 3) by a technological case the controlled from distance education frame on the basis of only internet platform,
- 4) digitaling of communication network which must unite all participants of educational process,
- 5) by didactics methods of studies and control of knowledge.

During organization of DT it must be created only informative environment of establishment of higher education, in which automation of basic processes of activity – corresponding Internet-resource is provided for the network contact of on-line in the interactive mode of bread-winners and teachers. The educational systems of different countries use various internet platforms («Unicraft», «Spring of learn», «Webtutor», «Moodle», «Mitapolis Lm» and other), which differ in functional possibilities, terms of organization of on-line studies and availability of their use. Most widespread in educational space is an internet-platform of «Moodle», which is used many establishments of higher education (EHE). Today separate educational establishments perfect this electronic resource, forming more perfect models. However, in our view, a problem consists in absence of only internet platform at level department of education and science of Ukraine, which must provide all EHE only informative educational standards. Materials of such internet platform create corresponding educational SMART-environment, which can serve as simultaneously the informative and instrumental base of organization of the controlled from distance studies (lessons are designed on the basis of materials of informative forums, questioning, annotated Refs.s, methodical developments and methods in relation to a concrete lesson). Educational SMART-environment of network management of ECA of students in the system of the controlled from distance studies must contain the block of electronic educational and methodical complex (Klochko, Nagayev, Kovalenko, Fedorets, 2020).

It is important to build the effective didactics system of organization of management of students educational-creative activity on the basis of technologizing of pedagogical processes. For this purpose it is necessary considerably to promote the level of the methodical providing, informatization and digitalization of all elements of the pedagogical system. This direction needs corresponding pedagogical planning of educational resources after the controlled from distance form in the conditions of management of students educational-creative activity.

One of major tasks to realization of this pedagogical problem there is forming for bread-winners and teachers of skills of work in SMART-environment at the terms of remote access, and also achievement enough high level of independence and individualization of educational-creative activity of bread-winners. Thus the measure of self-government of educational activity of students is closely related to plenitude of grant of data a teacher about maintenance, structure, technology and facilities of studies and control. Taking into account our experience, it is necessary to project interactive network pedagogical technology which would realize administrative conception of organization of the controlled from distance studies on three-level basis: a 1 level – management of ECA of students in the system «teacher-bread-winner»; 2 levels – are a management of ECA of students in the system «bread-winner-



bread-winner»; 3 levels – are a network management of ECA of students in the system «educational SMART is a complex-bread-winner». Thus the pedagogical model of organization of DT will be realized in systems: direct management, mutual management and self-management of students educational-creative activity. Basic directions of decision of this problem lie inplane modernization of the pedagogical system EHE and planning of such theoretical, methodical, informative, administrative, technical and technological measures :

1- planning and organization of educational network SMART-environment on the basis of only Internetresource for the network contact of on-line;

2-creation of network electronic base of informative resources (on the basis of electronic repository of library funds);

3-forming of the electronic controlled from distance educational complexes (DEC) on the basis of electronic textbooks, train aids, recommendations in relation to independent work of students in the network system;

4-creation of diagnostic SMART-complexes on the basis of planning of electronic base of the controlled from distance control (electronic magazines of attendances of lessons, account of independent and individual work, test control of knowledge (current, intermediate, result);

5-development of normatively-legal base of organization of the controlled from distance studies is in the conditions of digitaling of pedagogical processes.

Each of the noted directions needs system and purposeful researches. On the example of educational process of KNTUA named after Petro Vasylenko and KNAU named after V.V. Dokuchayev will analyse marketability of digital educational content of organization of the controlled from distance studies in the conditions of network pedagogical technology of management of students educational-creative activity in 2016-2020. Basis of technology is a corresponding electronic shell of Internetresource for the network contact of teachers and students in the interactive mode. For this purpose universities use the internet-platform of «Moodle» and «Google Meet», as an electronic shell of realization of pedagogical processes. The general model of this model can be presented on Figure 1.

The important link of organization of DT is a telecommunication environment which includes : informatively-digital, educational, methodical and didactics contents (means of intercourse and navigation, teaching and control of knowledge in the mode of on-line). The use of telecommunications in DT enables realization of untraditional pedagogical approaches and forms of studies, which are built after the individually oriented model.

The substantial technological aspect of the controlled from distance preparation of future specialists is development of technological map («Syllabus» is an eng) of the controlled from distance educational courses, which show by itself technological map-sight of independent study of discipline and allow bread-winners to plan personality strategy of self-management teaching on the basis of principles of autodidactics (Nagayev, 2012).

For realization of effective control system of ECA it is needed to provide the high level of decentralization of pedagogical influence, create such structure of didactics process, at which students will have the opportunity to complement an informative subsystem the elements of self-planning, self-organization, self-motivation and self-control accordingly tasks of professional preparation. Organizational elements of network case of ECA of students frame are:

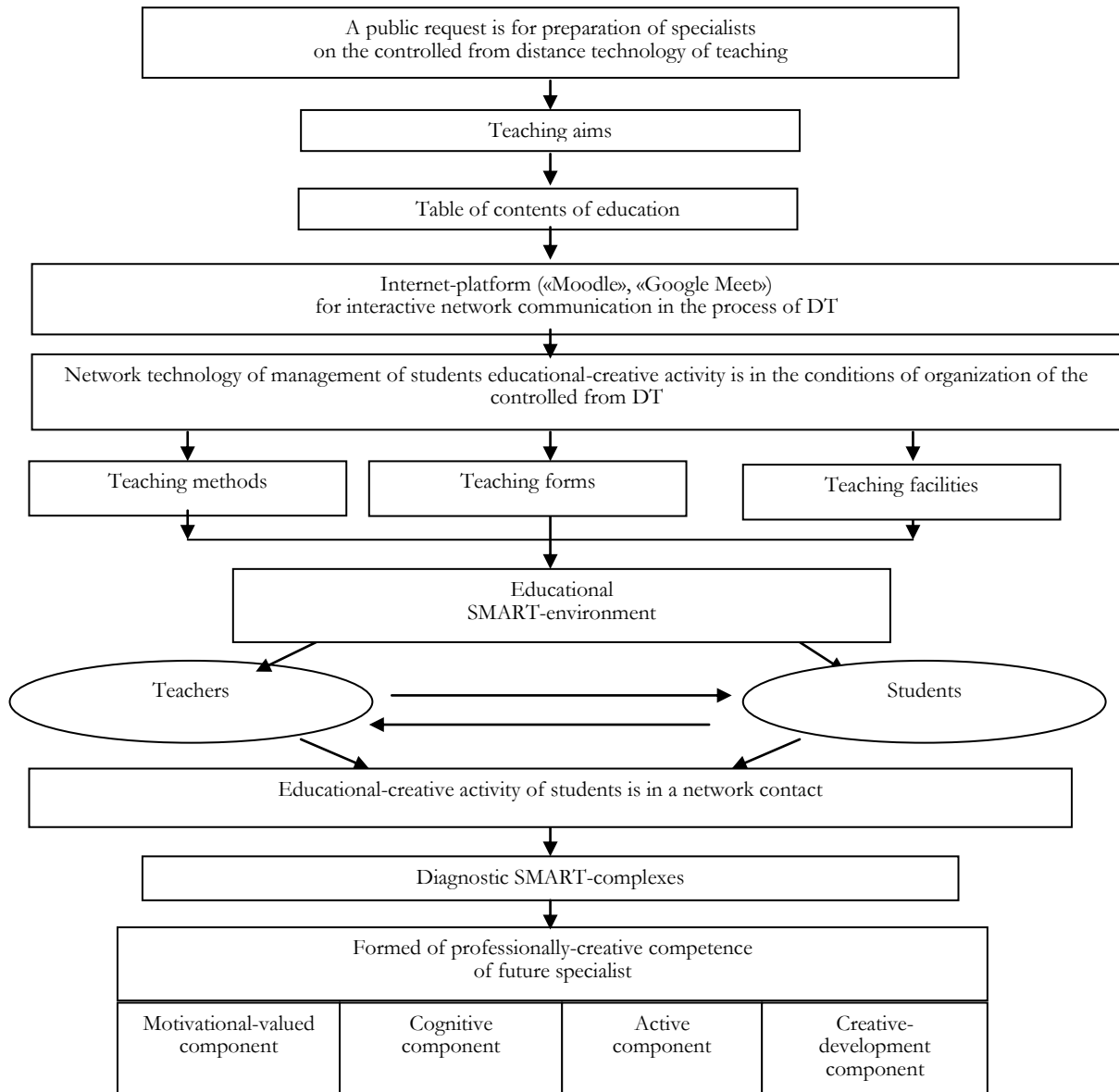
1) organization of work of teacher from development and introduction of pedagogical technology;

2) mutual management with the purpose of adjusting of effective interactive communication in the systems: "teacher-student" and "student-student";

3) self-management of ECA of students are during independent and individual work;

4) controls and self-control of educational results.

On the experimental stage of research an expert way criterion indexes which represent the capacity of bread-winners for self-government of ECA in the conditions of the controlled from distance studies after a personality-developing component were certain. Such criterion indexes of quality of preparation of future specialists were: success, levels of independence and individualization of educational activity, explained and creative activity of students. The level of independent and individual work of students was determined by the coefficients of independence (CS) and individualization (CI).



**Figure 1. A model of organization of the controlled from distance teaching is in the conditions of network technology of management of students educational-creative activity**

Level of independence (coefficient of independence) – characterizes possibility of future specialist to undertake responsibility, independently to execute educational tasks and accept independent decisions:

$$CS_{eca} = \frac{K_{sf}}{K_{sp}}, \quad (1)$$

where:  $K_{sf}$  – is an amount of the actually executed independently educational-creative tasks;  $K_{sp}$  – is an amount of independent tasks on the program of course.

Level of individualization (coefficient of individualization) – it is determined by possibility of students to execute individual educational projects which take into account the specific of professional activity of future specialists :

$$CI_{eca} = \frac{K_{if}}{K_{ip}}, \quad (2)$$

where:  $K_{if}$  – is an amount of the actually offered and executed individual creative projects;  $K_{ip}$  – is a maximally-possible amount of individual creative tasks (on the program of course).

The motivation of students to the controlled from distance studies on pedagogical technology of network management of ECA was determined by the coefficient of motivation (CM), as correlation of level of positive reasons of bread-winners (aims, interests, internal motives) to the general level of positive and negative motives of bread-winners in relation to the offered model of studies :

$$CM = \frac{M_p}{M_p + M_n} , \quad (3)$$

where:  $M_p$  – is positive reasons of students;  $M_n$  – is negative reasons of students.

Creative activity of students was estimated by the coefficient of creative activity (CCA), which is determined by an amount and maintenance of acts of positive activity of student on results current control (participating in scientific conferences and seminars, preparation of the educational-experienced tasks, implementation of creative projects and others like that) as relation of amount of him individual acts of creative activity to the greatest level of creative actions in an academic group :

$$CCA = \frac{CA_f}{CA_{max}} , \quad (4)$$

where:  $CA_f$  – is actual creative activity of student;  $CA_{max}$  – is creative activity of student after maximal criteria.

Will trace efficiency of introduction of methods of network management of ECA of students (table 1).

**Table 1. Analysis of efficiency of introduction of network technology of management of students educational-creative activity in the conditions of organization of the distance teaching, 2016-2020**

Educational disciplines (educationally-qualifying level)	Middle success is on a 100-ball scale		Coefficient of independence (CS)		Coefficient of individualization (CI)		Coefficient of motivation (CM)		Coefficient of creative activity (CCA)	
	MECA	TST	MECA	TST	MECA	TST	MECA	TST	MECA	TST
"Management" (bachelor)	89,4	79,7	0,78	0,65	0,74	0,58	0,77	0,67	0,74	0,56
"Finance" (bachelor)	91,0	82,2	0,76	0,63	0,72	0,56	0,72	0,61	0,78	0,61
"Management a personnel" (bachelor)	89,0	78,0	0,81	0,64	0,76	0,55	0,80	0,66	0,74	0,59
"Insurance management" (master's degree)	88,8	80,6	0,75	0,61	0,69	0,53	0,76	0,62	0,82	0,66
"Conflictologist" (master's degree)	92,6	84,0	0,69	0,56	0,66	0,51	0,78	0,68	0,84	0,62
"Public administration" (master's degree)	86,4	77,8	0,73	0,60	0,68	0,54	0,81	0,75	0,72	0,54
"Management psychology" (master's degree)	91,8	82,4	0,71	0,58	0,67	0,52	0,78	0,64	0,76	0,51
On the average	89,86	80,67	0,74	0,61	0,70	0,54	0,77	0,66	0,77	0,58
Efficiency of introduction of development, %	11,4		21,3		29,6		16,6		32,7	
	22,32									

As evidently from the analysis of quantitative indexes, the mid-coefficient of independence on network technology of management of ECA (CS) laid down 0,74, that on 21,3 % exceeds an analogical index on the traditional methods of teaching (0,61). The mean value of coefficient of individualization

(CI) also increased substantially – from 0,54 to 0,7 (29,6 %). Thus the coefficient of motivation increased on there is an increase of creative activity of students 16,6 %. Especially noticeable on network technology of management of ECA of students (32,7 %), that it is constrained, in our view, first of all with organization of creative educational environment. As practice of introduction of this methodical development led to, the level of creative activity of students considerably depends on possibility of bread-winners independently to elect individual organizational forms and methods of studies (preparation of the individual educational-experienced tasks, testing, stowage of thematic cross-words, decision of situational tasks, design of professional situations and others like that). Thus the level of creative activity of students substantially influences on forming to the component of creative self-development in the structure of professional competence of future specialists.

A high-quality analysis the got results proves that for the students of experimental groups at the level of formed personality-developing to the component of professional competence skills of self-development prevail. Estimating creative and professional qualities, teachers witnessed considerably more wide range of their development for the students of experimental groups. For example, a plan activity of students of experimental groups was characterized by abilities to develop and correct individual strategy of self-management of ECA accordingly the attained level of educational result. Thus the students of control groups, mostly, were limited to only the choice of purpose of individual task and direction of her realization. After the numerous questioning of bread-winners, marked more than 77 % polled about a desire to study on this technology, if there was possibility of choice.

The substantial aspect of organization of the controlled from distance studies is introduction in the educational environment of administrative conceptions and informatively-digital technologies. Basic to organization of DT there must be an informative environment of establishment of higher education for network connection in the interactive mode of students and teachers. For realization of this pedagogical problem it is necessary to provide the construction of only electronic resource of DT on the basis of technologization and digitalization of pedagogical processes.

The results of pedagogical researches proved that realization of network technology of management of ECA in the system of the controlled from distance studies allowed considerably to activate cognitive-creative activity of students, deepen the level of independence and individualization of studies, promote a level them internal motivation, that in a result is determined by the high level of formed of professional competence of future specialists. It follows to consider formed of autodidactics functions of students – motivation, planning, self-organization, self-control, self-examination which is the result of high level of decentralization of pedagogical influence the important conclusion of experiment.

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# INNOVATIVE LAND RECLAMATION TO ENSURE EFFECTIVE LAND MANAGEMENT

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Modern agriculture requires a variety of scientific and practical approaches to the rational, environmentally friendly and efficient use of land resources. One of these techniques is direct land reclamation, which involves a set of works that include organizational, economic and technical measures aimed at radical and rapid cultivation of unproductive soils, as well as their protection from degradation caused by excessive (unacceptable) anthropogenic load and non-compliance of scientifically sound recommendations on their modes of economic turnover.

Among the various reclamation measures aimed at improving the quality of agricultural land, chemical land reclamation occupies one of the leading positions in the system of intensive agriculture [1]. Thus, chemical ameliorants include various substances or their mixtures of natural or man-made origin such as gypsum, phosphogypsum, chalk, defecation mud and rocks containing more than 10% of calcium compounds, including calcium-iron-containing sludge, which is a waste of steel-wire production.

Reclamation measures in Ukraine have a certain territorial distribution, as acidic soil solution prevails in Polissya and Forest-Steppe, and alkaline one – in Steppe. Therefore, it affects the development and carrying out of agro-ameliorative measures, organizational, technological and project bases for its implementation.

According to the X round (2011–2015) of the agrochemical survey of agricultural lands, the area of lands in Ukraine with acidic soil solution is 3621 thousand hectares or 19.1% of the total area. As for the alkaline soil medium, the total land area is 4462.3 thousand hectares or 23.9% of all lands [2, p.20].

Evaluation of the effectiveness of innovations of agro-ameliorative measures is a multidimensional vector of improving the use of land resources and it is not possible to study it only from the standpoint of one or more indicators. For this priority in our study we followed the principles of methodology for determining the economic effectiveness of the innovation that is the direct basis for operating with specific indicators of its evaluation. In general, these indicators in the field of protection and rational use of soil resources are classified according to the method of calculation, the degree of synthesis, content and source data [3, p.100]. However, this study organically combines not only the issue of economic evaluation of innovations in land reclamation, but the emphasis is mainly shifted to the environmental efficiency of their implementation on irrigated lands, ie on lands where there is a high risk of salinization.

In Ukraine, more than 80% of land areas (over 24 million hectares) are characterized by such types of water regime of arable soils, which form the dominance of scarce (or periodically scarce) moisture. At the same time, irrigation can improve the efficiency of land use, but at the same time can cause unnecessary costs and, moreover, environmental damage. For example, low hydro-buffering under conditions of high infiltration capacity of soil-subsoil leads not only to unreasonably high losses

of water masses of precipitation, but also to leaching of biogenic elements from the soil root-containing nutrient medium. Therefore, scientists suggest for irrigated agriculture to adhere to such a limit that the soil moisture is constantly maintained in the range closer to the lower limit of its availability than to the upper one [4, p.38-44].

In general, the negative (dangerous) consequences of agro-ameliorative measures can be obtained on any soil with a disturbed pH balance. Thus, studies of thermodynamics of soil processes show that continuous and excessive liming of acid soils often leads to the development of dangerous phenomena in modern soil formation, which can significantly worsen the ecological state not only of the soil but also the environment medium. It is characteristic that the intensification of negative effects on the ecological state of the soil environment occurs on low-buffer acid-base balance soils. At the same time it is noted the prolonging effect of influence of ameliorant on an agroecological state, in particular aftereffect of the phenomenon (effect) of overliming of acid soils can last till 2-3 and more years [5, p.44-45].

Therefore, in order to achieve a sustainable ecological balance together with the economic efficiency of land use, it is necessary to move to innovative agro-ameliorative measures, although we do not deny the possibility of using traditional or similar technologies, which usually provide higher rates of chemical reclamation. It depends on many factors and conditions, when specific decisions are made in this matter, but any of them must meet both the urgent need and compliance with scientifically sound requirements for their implementation, and the last one must be under mandatory supervision.

On the basis of the National Scientific Center "Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky" scientists developed and tested innovative soil reclamation technology in humid natural and climatic zones. As Yu.L. Tsapko notes, this technology is based on local soil reclamation in which reclamation is achieved not of the entire arable mass of soil (about 3000 t/ha), but only a small part of it (190-200 t/ha), as a result of which it allows saving money on soil cultivation and fertilization with ameliorants [6]. No less important is the fact that with this reclamation technology the yield of crop products remains at the level of the traditional method of applying ameliorants. A special place in innovative technology is given to the preparation of organo-mineral fertilizers.

Insufficient consideration of technologies, minimization of organic and suboptimal application of mineral fertilizers simultaneously with increasing anthropogenic load negatively affects the environmental safety of land use, causing, in particular, significant distortion of the capacity of soluble bases, variables and mobilization of nutrients in soils in Ukraine. According to scientists [7, p.39], the processes of acidification of the soil cover are observed in 15 regions and are manifested even in the agro-landscapes of the Steppe, and the intensity in increasing area of acid soils ranges from 1% to 14%.

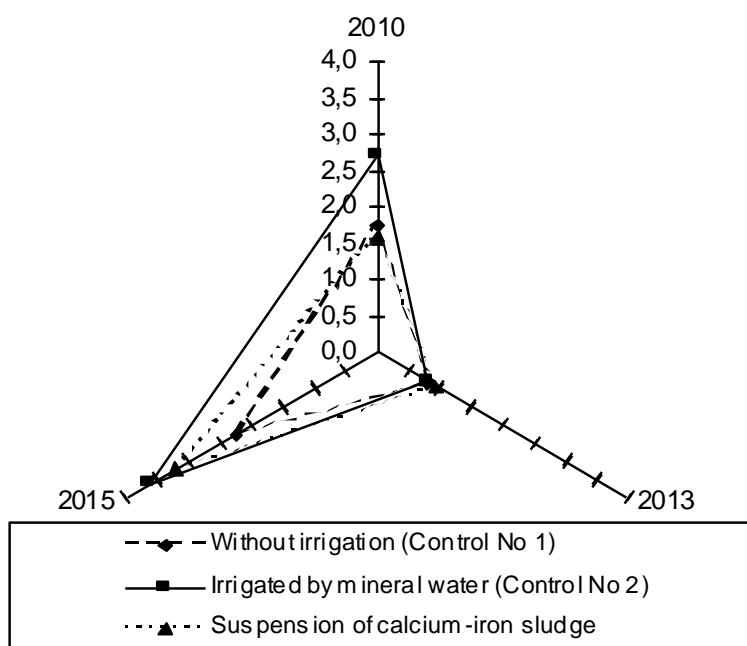
In this context, the development of a mechanism for effective management of land degradation neutrality is relevant, ie the ability to ultimately achieve sustainable use of soil resources, in particular, due to the reasons for the violation of their acid-base balance. This is one of the key components of successful land management, as it requires solving one of the key challenges for the restoration and renaturalization of degraded and unproductive lands. [8, p.7]. We believe that the implementation of these targets is possible with the further development of innovative technologies for land reclamation, which will widely use not only improved technical methods of land application and cultivation, but also the wide application of various scientific and applied approaches to innovation in agrochemically valuable organo-mineral fertilizers on special recipes and ways of "know-how", which will include the variability of the combination of both traditional fertilizers and numerous types of waste from the mining and metallurgical complex and the chemical industry.

In addition, for high-quality preparation of fertilizers with reclamation effect, it is necessary to use beneficial microorganisms on which innovative EM-technology is based, which gave a significant impetus to further development of organic production and positively affects the reproduction of fertility of soils, which are naturally unproductive. The use of phytomelioration is no less important in regulating the reaction of the soil medium.

Given the ability of the soil to provide ecosystem services, they are better depending on the initial state and the natural supply with moisture, while irrigation impairs their importance. As a result of scientific research conducted by L.I. Vorotyntseva, it was determined that non-irrigated ordinary

chernozems with good ecological and ameliorative state are characterized by a high level of ecosystem services, and irrigated ones with satisfactory and unsatisfactory state – medium and low [9]. Given that in the context of climate change and its subsequent aridization, the need for irrigated land will increase, and given the effects of irrigation and local water quality – the risk of deterioration of soil ecosystem services is high.

To improve the situation with the salinizing effect of irrigated water, it is necessary to apply ameliorants, but the application of phosphogypsum and raw gypsum have a number of disadvantages. Thus, even if they are used with the norms calculated taking into account the actual degree of salinity of the soil and at the same time the water quality, they did not completely eliminate the chemical and agrochemical degradation of soils [10]. Therefore, the study in the Northern Steppe was conducted with the analysis of options of agro-ameliorative measures on change of the content of carbonates, which is shown in Figure 1.



**Figure 1. The average content of carbonates in the soil layer (up to 25 cm) according to the variants of experiments from agro-ameliorative measures during 2010–2015, %**

In 2010, the initial content of carbonates in the soil layer to a depth of 25 cm with the variant of irrigation with mineralized water (control No. 2) significantly outweighed the value compared to control № 1 (without irrigation) and the application of calcium-iron sludge. However, in the future, as shown by soil sampling, the content of carbonates between the variants changed in favor of calcium-iron sludge, although in 2015 for the latter compared to control No. 2 their content lagged slightly, but differed sharply compared to control No. 1 (without irrigation). Therefore, it is obvious that the implementation of agro-ameliorative measures positively affected the dynamics of carbonate content in the soil, and the largest increase in the effect is observed with the application of calcium-iron sludge.

Therefore, according to L.I. Vorotyntseva an alternative to known for reducing salinity and soil pollution – ameliorants, is the use of local raw materials – calcium and iron-calcium sulfuric acid industrial waste [10]. The calculated conditional effect from soil desalination (to a depth of up to 25 cm) by types of ameliorants is given in Table 1.



**Table 1. Conditional effect (income/expenses) of the change of carbonate content in the soil layer (up to 25 cm) according to the assessment of ameliorants of desalination action in 9-multicourse crop rotation depending on the variant of the experiment per 1 ha of area**

Variant of experience	Ameliorant	Conditional effect on the volume of ameliorant (physical mass), t/ha	Conditional effect (income / expenses) at the cost of purchasing additional ameliorants, thousand UAH/ha	Conditional effect (income/expenses) on the purchase price and costs of applying ameliorants, thousand UAH/ha
Irrigated with mineral water (Control No. 2)	Phosphogypsum	24.2	8.2	9.3
	Calcium-iron sludge	24.5	5.2	8.0
	Chalk	15.3	7.8	8.5
	Gypsum	22.3	65.4	66.4
Suspension of calcium-iron sludge	Phosphogypsum	66.6	22.6	25.6
	Calcium-iron sludge	67.5	14.4	22.1
	Chalk	42.1	21.5	23.4
	Gypsum	61.4	180.0	182.7

The conditional effect was assessed on the basis of normative values of calcium content in terms of ameliorants, as well as in determining the absolute increase in carbonate mass in the soil by agro-ameliorative measures in comparison with the control variant No. 1 (without irrigation) during the entire crop rotation. Conditional effect, which is essentially ecological, as it improves the equilibrium reaction of the soil solution, the quality of its absorption complex due to the displacement of sodium and magnesium cations, while determining the value of this effect is based on both relative carbonate content in ameliorants and their market price with the cost of delivery and application.

In general, the application of calcium-iron sludge proves that the conditional effect from this agricultural measure significantly exceeds the variant on irrigation with mineralized water and its value is in a wide range depending on the assessed ameliorant. The assessment of the calcium-iron sludge shows that the conditional effect of soil desalination is higher both by irrigation with mineralized water – 24.5 t/ha, and by the application of calcium-iron sludge, which is 67.5 t/ha. It is clearly seen that the assessment of the conditional effect in the physical mass of the ameliorant for calcium-iron sludge is close to phosphogypsum and chalk, and most deviates from gypsum. And given the cost of these ameliorants, the difference between calcium-iron sludge and other ameliorants becomes even more significant.

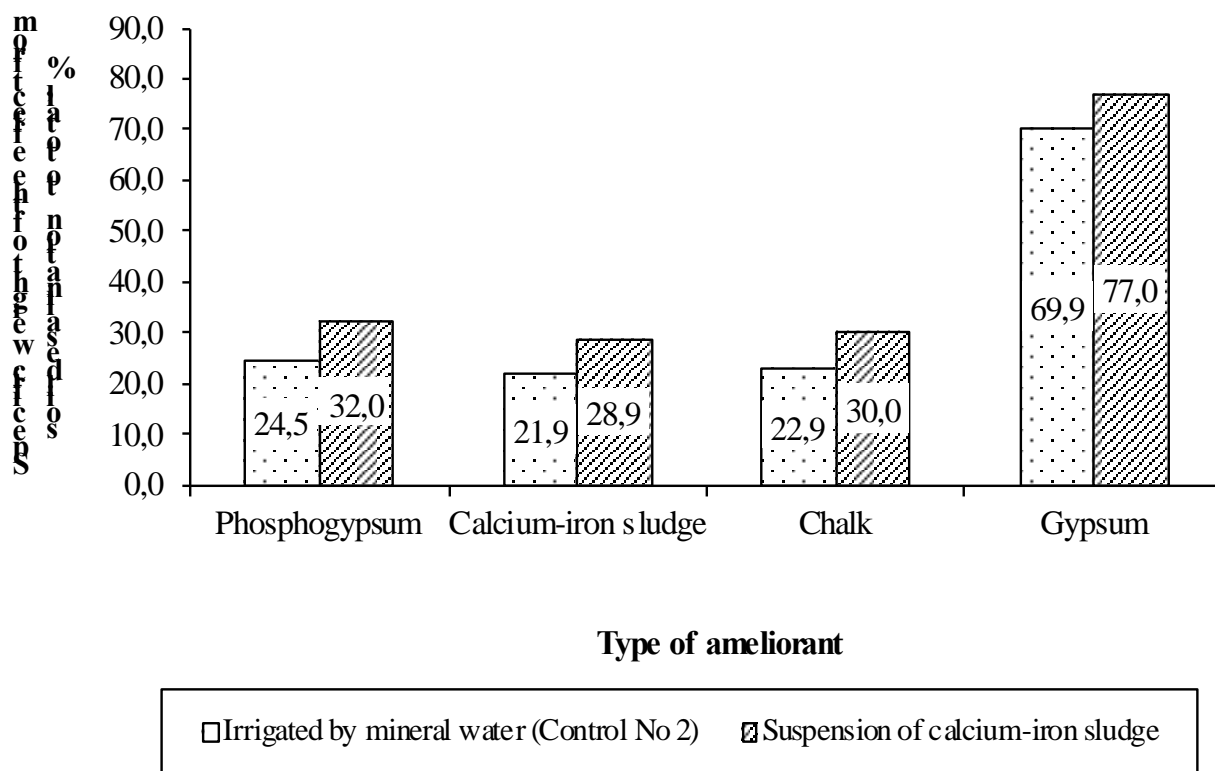
However, it should be noted that at physical weight – the conditional effect was greater than with two agro-ameliorative measures for calcium-iron sludge, where after valuation the same effect became the opposite, and now calcium-iron sludge has the lowest value, which indicates more moderate economic costs compared to other types of ameliorants in case of their possible use for desalination of soil in the studied conditions. That is, the lower value of the conditional effect on calcium-iron sludge is considered not only as the revenue side, but mainly indicates the saved reclamation resource for the implementation of these two agronomic techniques in relation to the control value according to experiment No. 1 (without irrigation). Thus, the data in Table 1 show that the saved costs (income) on irrigation with mineralized water (control No. 2) compared with control No.1 (without irrigation) with ameliorant – calcium-iron sludge, is 8 thousand UAH/ha, when for gypsum – 66.4 thousand UAH/ha, and in the experiment with the application of calcium-iron sludge increase to 22.1 and 182.7 thousand UAH/ha, respectively. Therefore, the conditional effect from desalination of the soil is in a wide cost range, estimated by the cost method to restore the carbonate content specifically at soil depth up to 25 cm, depending on the choice of ameliorant.

Innovations require not only agro-ameliorative measures in agricultural production, but equally important are scientific and methodological techniques (approaches) that allow a more objective analysis to identify these changes, to give a fuller description of them. Therefore, we calculated the

proportion of the conditional effect from improving the reclamation of soils with impaired alkaline reaction, taking into account the modeling of the probability of changes in crop yields and overall crop productivity by the Monte Carlo method, which is covered in detail in the scientific publication [11].

To determine the yield of crops according to the obtained moments of their distribution in time and space dynamics, as a similar experiment had four repetitions during 9 years, ie the entire crop rotation. According to the results of simulation modeling, the most probable scenario was identified, which corresponds to the subsequently calculated and adopted for the economic justification of agro-ameliorative measures the value of the average yield of crops that entered the crop rotation. This is confirmed by the statistical significance of fluctuations in the random value of yield according to the distribution quantile and the significance of the statistical estimate of the normal distribution in 95% of cases.

Only after confirming the normal distribution of the analyzed yield and the ability to achieve the most probable value, we calculated the difference between the conditional effect from land reclamation in terms of its share to the overall environmental and economic effect. The ecological effect continued to include the results according to the survey of the soil to a depth of 25 cm, which is shown in detail in Figure 2.

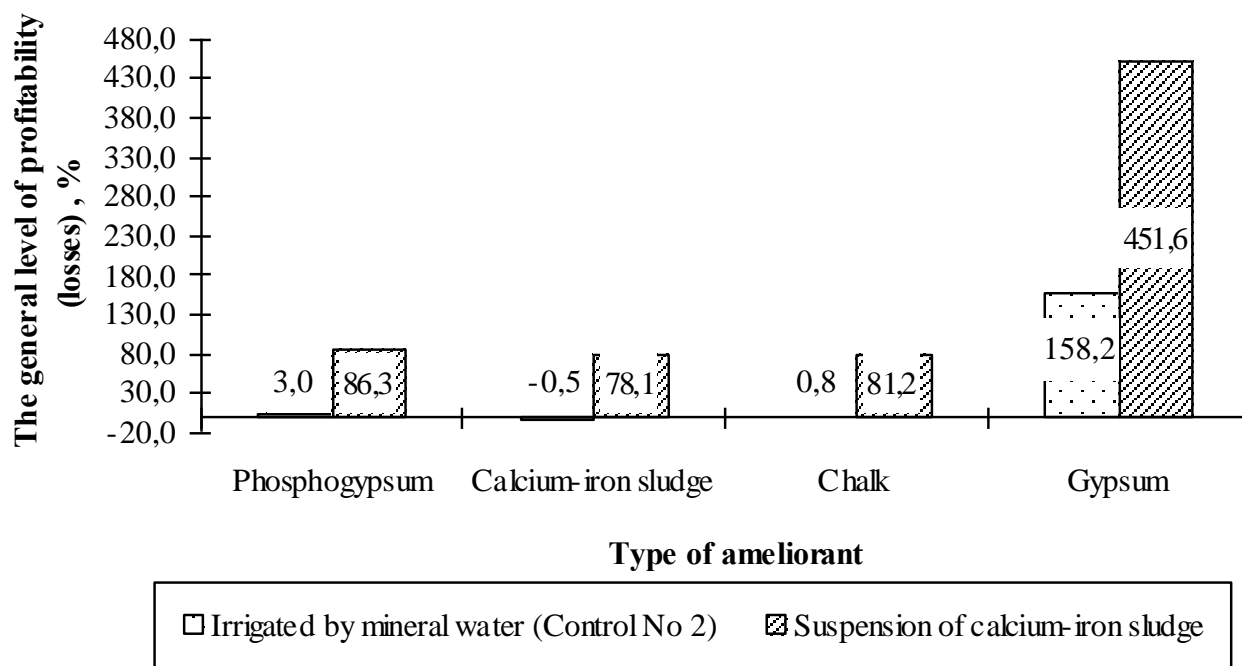


**Figure 2. Specific weight of the conditional effect from soil desalination to a depth of 25 cm estimated by different ameliorants to the total value of the ecological and economic effect compared to the control No. 1 (without irrigation) with a high probability of crop yield**

As shown in Figure 2, the most specific weight of the conditional effect from soil desalination (up to 25 cm deep) is characteristic of the assessment of gypsum, and the least of calcium-iron sludge. Given the positive changes in the ecological condition of soils based on irrigation with mineralized water (control No. 2) compared to the experiment without irrigation (control No. 1), however, the application of calcium-iron sludge adds a better nature of growth, as its share continues to increase, which indicates not only the quantitative but also the structural shift in the overall effect of the application of this agro-ameliorative measure. An additional increase in specific weight of the conditional effect in the overall environmental and economic effect between the application of calcium-iron sludge and control No. 2 for all ameliorants is about 7%. And the approximation is caused not so much by the physical parameters of ameliorants as their cost component due to differences in the cost of their use.

Thus, the conditional reclamation effect according to experiment No. 2 (irrigation with mineralized water) reaches the saved costs (income) estimated by calcium-iron sludge in 21.9%, and by gypsum – 69.9%, according to the experiment with calcium-iron sludge this value is respectively 28.9 and 77%. Evaluation by other ameliorants shows insignificant differences compared to calcium-iron sludge in terms of the studied agro-ameliorative measures.

The results of profitability (unprofitableness) of agro-ameliorative measures in comparison with the control No. 1 (without irrigation), which are evaluated by different types of ameliorants of desalination action are shown in Figure 3.



**Figure 3. The level of profitability (unprofitableness) of agro-ameliorative measures assessed by the obtained ecological and economic effect compared to the control No. 1 (without irrigation) in terms of types of ameliorants with a high probability of crop yield, %**

Calculations show that irrigation with mineralized water is quite expensive, and therefore, depending on the assessment of the ameliorant, its profitability is low for phosphogypsum 3%, and for chalk is 0.8%. In addition, according to calcium-iron sludge, this agricultural measure is worse than in the control No. 1, and the value of the indicator is -0.5%. The high level of this agro-ameliorative measure is achieved only by assessing the reclamation effect of gypsum, but forms an overly optimistic scenario, as there is a significant alternative choice of different ameliorants, and therefore can not indicate extremely high profitability of the measure, as the economic component remains unchanged. In the case of using calcium-iron sludge, the level of profitability is achieved by all evaluation variants of ameliorants and is significant compared to the control No. 2, and also differs positively from the control No.1. In general, the level of profitability of the use of calcium-iron sludge is 78.1% compared to control No. 1 (without irrigation), while at control No. 2 the value is negative (-0.5%). The use in the assessment of other ameliorants proves a similar environmental and economic effect, except for the variant with gypsum. For the latter, the large share is shifted to the conditional effect of desalination and / or salinization, which is caused mainly by the high cost of the ameliorant and the cost of its application, rather than significant savings due to calcium-containing compounds in its composition.

According to the results of research, innovations in land reclamation are very important for managing their sustainability of reproduction, increasing productivity and economic value. It was found that irrigation with mineralized water is an environmentally effective reclamation measure, but its economic efficiency is insufficient, as it was influenced by the quality of irrigated water. However, it is revealed that the ecological and economic efficiency of the application of calcium-iron sludge is not only the highest in comparison with lands without irrigation, but also significantly differs from the experiment of irrigation with mineralized water.

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# IMPROVING THE EFFICIENCY OF QUALITY MANAGEMENT AND SAFETY OF DAIRY PRODUCTION IN UKRAINE IN THE CONDITIONS OF EUROPEAN INTEGRATION

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Dairy farming is one of the most important food industries in Ukraine, the purpose of which is to ensure milk production in volumes that are sufficient to load the production capacity of milk processing enterprises with the subsequent production of dairy products. The state of development of the agro-industrial complex, including its important component – the dairy industry, affects the social and economic stability of the economic system. A healthy nation is the key to a successful economy, and quality raw materials are the basis for the production of healthy products.

The quality management system allows to realize new opportunities of enterprise development. The company that has implemented an effective quality management system defines the main goals: overall improvement of work, profit, effective resource management, quality assurance of products and services, continuous improvement of the organization.

According to the Association Agreement with the EU, Ukraine has to adapt its regulations to European regulations. Standardization, quality certification, perfect expert legal framework is now a challenge of time. The two most important indicators of milk quality are the total allowable number of bacteria and the number of somatic cells in it. According to the Law of Ukraine "On Milk and Dairy Products" [1], the state standard significantly exceeds the requirements for bacterial contamination. This Law defines the legal and organizational basis for ensuring the safety and quality of milk and dairy products for life and health of the population and the environment during their production, transportation, processing, storage and sale, import into the customs territory and export from the customs territory of Ukraine. The presence of bacteria is allowed for milk of higher, first and second grades within, respectively, 300, 400 and 500 thousand cells per cm<sup>3</sup>. The presence of bacteria in premium milk meets the level of standards of foreign countries with developed dairy farming. In the Table 1 the requirements to physicochemical and microbiological indicators of milk according to operating (in part) DSTU 3662-97 [2] are presented (Table 1).

**Table 1. Requirements for physicochemical and microbiological parameters of milk  
in accordance with DSTU 3662-97**

Indexes	EU (№853)	Ukraine (DSTU 3662-97)			
		Extra	Top grade	I grade	II grade
Total bacterial contamination, thousand / cm <sup>3</sup>	<100	<100	<300	<500	<3000
Number of somatic cells, thousand / cm <sup>3</sup>	<400	<400	<400	<600	<800
Acidity, ° t	-	16-17	16-17	<19	<20
Degree of purity according to the standard	-	I	I	I	II
Mass fraction of dry matter	-	>12,2	>11,8	>11,5	>10,6
Fat and protein content, basis	3.8 – 4.0 % 3.2 – 3.4 %	3,4% 3,0%			
Freezing point, ° C	-0,515	Not controlled			
Density, kg / m <sup>3</sup> , not less	-	1027,0			

Today in Ukraine there are 4 varieties of milk. On January 1, 2019, the state standard DSTU 3662: 2018 "Raw cow's milk. Technical conditions" - a document that sets requirements for milk grades "extra", "higher" and "first" [3]. At the same time, the same order abolished the national standard DSTU 3662: 97 "Whole cow's milk. Procurement requirements" in terms of requirements for extra, higher and first grade milk and in terms of requirements for second grade milk – the standard will be valid until 01.01.2020. Until January 1, 2020, milk production by food processing enterprises will continue. From January 1, 2020 to January 1, 2022, such milk will continue to be purchased, but not for the production of non-food products. Currently, there is no ban on the purchase of milk from the population by processing enterprises. Improving the quality of milk from the second grade to the first does not require significant costs. It is a question of observance of hygiene of the personnel and animals.

The national standard from January 1, 2019 is replaced by DSTU 3662: 2015 "Raw milk. Specifications", which aims to increase the requirements for milk quality and permission to use second-grade milk only for non-food purposes. According to DSTU 3662: 2015 "Raw cow's milk. Technical conditions" there are three types of milk: extra, higher and the first – in contrast to the standard valid until 2019, which provides for the acceptance for processing of second grade milk. Regarding the requirements for second-grade milk, the national regulatory document DSTU 3662-97 "Whole cow's milk. Procurement requirements" will be abolished from January 1, 2020. A two-year transition period has been established, during which second-grade milk will be accepted, but only for technical purposes (animal feed, casein, etc.) (Table 2).

**Table 2. Microbiological indicators of milk according to DSTU 3662: 2015**

Name of indicator, unit	Norm for measuring grades			Control methods
	extra	higher	first	
Number of mesophilic aerobic and facultative anaerobic microorganisms (KMAFAM), thousand CFU / cm <sup>3</sup>	< 100	< 300	< 500	According to DSTU 7357, DSTU 7089, DSTU ISO 4833, DSTU IDF 100B
Number of somatic cells, thousand / cm	< 400	< 400	< 500	According to DSTU ISO 13366-1, DSTU ISO 13366-2, DSTU 7672

It should be noted that the EU has established uniform requirements for raw milk without division into grades (Regulation (EU) № 853/2004 of the European Parliament and of the Council of 29 April 2004). Thus, the introduction of a new standard partially solves the issue of harmonization of regulatory requirements for raw milk, but the introduction of a new standard does not solve the problem of shortage of raw milk and improve its quality.

Classification of milk by varieties in the statistical reporting of enterprises until 2019 is in accordance with GOST 3662-97 "Whole cow's milk. Requirements for procurement." The standard stipulates that all milk, depending on the level of bacterial contamination and somatic cell content, is divided into extra, higher, first and second grade.

The study of milk quality indicators received for processing from enterprises shows that only for the last 4 years the quantity of "extra" class milk has increased by 94% – from 366.4 to 710.3 thousand tons, premium grade – by 1.6% – from 923 to 937.4 thousand tons, which indicates an increase in overall quality indicators (Table 3).

In contrast to enterprises, households are not able to provide quality characteristics of raw milk, which is confirmed by its structure by varieties – in 2019 they did not sell milk of "extra" class, the share of premium milk – 0.1%, the first – 12, 0%, the second – 40.5% and non-grade – 4.7%. Enterprises processed 77.6% of milk chilled to 10 o C, and households – only 43.1%. The indicators of mass fraction of fat (by 0.14%) and protein (by 0.19%) are lower in the milk of households.

Improving the quality of milk delivered by households to processors is economically feasible, as compliance with technological requirements for hygiene and safety of production does not require significant financial resources, but the cost of premium milk reimburses the costs incurred.

**Table 3. Quality of whole cow's milk purchased by processing enterprises by grades**

Indexes	Enterprises				Population					
	2016	2017	2018	2019	2019 in % to 2016	2016	2017	2018	2019	2019 in % to 2016
Weight of raw cow's milk, thousand t	2375,5	2533,1	2560,1	2428,1	102,2	1161,50	1199,80	1054	822	70,8
in terms of raw milk of the established basic fat content	2511,9	2688,5	2719,9	2610,4	103,9	1197,70	1239,30	1089	851	71,1
including by grades:										
extra	366,4	441,1	586,2	710,3	193,9	0,10	0,40	-	-	-
specific weight, %	14,6	16,4	21,6	27,2	x	0,00	0,10	-	-	-
of the highest grade	923,	987,1	1036,2	937,9	101,6	0,60	1,60	2	1	137,0
specific weight, %	36,7	36,7	38,1	35,9	x	0,10	0,10	0,2	0,1	x
I grade	1056	1018,1	894,6	844,4	80,0	107,80	110,40	136	102	94,5
specific weight, %	42	37,9	32,9	32,3	x	9,00	8,90	12,5	12,0	x
II grade	160,2	234,7	193,8	97,1	60,6	1028,20	1081,00	904	708	68,9
specific weight, %	6,4	8,7	7,1	3,7	x	85,80	87,20	83,0	83,2	x
non-grade	6,3	7,4	9,0	20,6	327,6	61,10	45,90	47	40	66,3
specific weight, %	0,3	0,3	0,3	0,8	x	5,10	3,70	4,3	4,7	x
Of the total mass of raw cow's milk in kind										
cooled to 10° C	1760,1	1947,8	217,3	1884,1	107,0	489,40	544,00	559	354	72,4
specific weight, %	74,1	76,9	84,9	77,6	x	42,10	45,30	53,0	43,1	x
Mass fraction in purchased raw cow's milk, %										
fat	3,6	3,61	3,61	3,66	x	3,51	3,51	3,51	3,52	x
squirrel	3,06	3,08	3,11	3,13	x	2,93	2,95	2,96	2,94	x

Therefore, it is advisable for milk producers to implement innovative measures to comply with sanitary and hygienic working conditions and keeping cows.

With the transition to higher standards, the problem of increasing milk production and improving quality will not be solved immediately. To improve the quality of milk, it is necessary to provide equipment to each farm, to organize milking parlors, to purchase refrigeration and filtration equipment. Such measures are necessary not only to obtain the highest quality milk, but also to encourage the population to create family farms and cooperatives. This requires funds, so the budget

for 2018 was laid 1 billion UAH, aimed at the development of cooperation and farming. In Europe, the cooperative movement is a common phenomenon that gives small farmers the opportunity to share machinery, equipment, sales system and more favorable lending conditions [4, 5].

Significantly increase the quality of raw milk from households is possible through the introduction of world experience in establishing cooperatives, family dairy farms and dairy business development with the involvement of international technical assistance projects aimed at reconstruction and efficiency. It is advisable to study and implement the experience of European countries in the field in order to increase its competitiveness, in particular Poland. The main factors that enabled Polish milk producers not only to rebuild the industry, but also to enter the top 5 leaders of the European Union are cooperation, association of milk producers with processors, as well as the introduction of the latest technologies. The association of producers in cooperatives is an effective form of doing business, because cost optimization opens up many prospects for expanding production, and as a result – increasing profits.

The sanitary and hygienic quality of milk production is a complex problem, which is determined by a number of factors, which are united by the concept of "technology and culture of production". Analysis of the factors that negatively affect the quality of milk in terms of its production, shows that the main of them – contamination during the milking process. Therefore, in order to have milk of high sanitary quality, it is necessary to clean the milking equipment as thoroughly as possible before using it.

Further development of the domestic dairy industry and dairy industry will depend on how quickly Ukraine will master the quality management system of milk production and processing at all stages of the technological link: complex – plant – consumer. For milk producers, the most effective product quality management system is the HACCP system (Hazard Analysis and Critical Control Points) – risk analysis and critical control points (CCP). The definition of CCP allows you to identify in a timely manner the reasons for the decline in the quality of indicators and take corrective action. In addition, the identification of risks includes an assessment of the likelihood, entry or spread of a dangerous agent in terms of applicable sanitary and phytosanitary measures, as well as an assessment of the associated biological and economic consequences, or an assessment of the potential adverse health effects [6]. Critical Control Point (CTC) is the stage of production at which control is possible and which is crucial to prevent or remove a hazard or reduce it to an acceptable level. It can be raw materials, technological operation, process. If at a certain point in the process line there is a high probability of potential danger, then such a point is considered critical. The definition of CPC consists of the following elements: – identification of dangerous factors, assessment of their degree of danger and probability of occurrence; – identification of critical control points necessary to control the identified hazards; – determination of critical limits in a specific critical control point; – creation and implementation of a monitoring system; – elimination of shortcomings in excess of critical limits; – checking the system and accounting [7, 8].

HACCP methodology is a direct logical control system based on the prevention of hazards at all stages of production of a particular food product, from raw materials to the sale of finished products. For each technological operation it is necessary to identify hazardous factors that may threaten the safety of products, and to ensure process management, which eliminates the influence of these factors. The HACCP system has recently become widespread internationally, and many governments now see it as a way to address food safety and quality issues. As a result of violation of the rules and techniques of production and primary processing and transportation of milk, it may have various shortcomings due to the causes of feed, bacterial, technical, technological and physico-chemical origin. Such raw materials are unsuitable for processing, and it is impossible to produce high quality products from such milk [9,10]. Milk quality is formed during the whole technological process, starting from feed and ending with the sale of milk, so the HACCP quality system in the technology of milk production on the farm should be divided into the following stages: preparatory work before milking, the milking process and the subsequent route of milk: cleaning, cooling, storage and transportation to processing plants [11].

Prospects for European integration of the dairy industry of Ukraine and supply of products to the EU depend on the implementation of a set of requirements at the state level and individual producers: – implementation of the HACCP system and ensuring traceability of the movement of raw milk and dairy products; – production of dairy products only from milk of "extra" grade; – compliance



with the established requirements for proper identification and registration of animals, labeling of dairy products [12].

Today, the domestic dairy industry is not ready for fierce competition with powerful international companies. Therefore, further work is needed to continue the harmonization of existing standards to European and global requirements, the introduction of ISO quality management systems and HACCP safety management systems. The quality system should be considered as a target subsystem of organization management and as a multifaceted mechanism for managing processes and resources of all components of the enterprise, improving product quality management system provide an overall increase in quality costs in the structure of production costs. One of the main issues that needs to be addressed immediately is that the main volume of milk production (71.8%) has moved to the small private sector, so there is a strong need for a program to develop these farms and improve the quality of raw materials to improve the competitiveness of dairy products.

Based on the analysis, it can be concluded that among the main problems in the market of milk and dairy products of Ukraine should be mentioned the insufficient amount of milk as a raw material; quite significant seasonality of production and low quality of dairy raw materials, which clearly has a negative impact on the production of dairy products and exacerbates the problem of sales, especially in foreign markets; lack of quality standards for dairy products that would meet the requirements of the European level, which inhibits the entry of domestic products into foreign markets; insufficient protection of consumers from low-quality dairy products (with a high content of harmful substances to human health, replacement of milk fat with vegetable, etc.); reducing consumption.

It should be noted that one of the priorities of further development of the domestic dairy industry is to improve the quality of raw milk, because it also affects the markets for finished products. Until recently, a significant share of dairy products produced in Ukraine was exported to Russia, as Russian and Ukrainian standards were very close to each other, and the requirements for milk quality were lower than in Europe. A significant reason that limits the export of our dairy products to the EU is that most milk is produced by households that do not have the necessary technology to store it. Efforts should be made to improve the quality of milk through the purchase and use of modern milking and refrigeration equipment. Therefore, we believe that households engaged in the production of raw milk today need financial assistance and attention from the public sector.

In Ukraine, the crisis processes in the field of dairy farming have not stopped: milk production is constantly declining, the level of milk consumption by the population is declining, the volume of exports. This is due to the fact that most farms refuse to keep cows, and the number of industrial and family farms is not increasing. At the same time, the quality of the product coming for processing is improved at the expense of enterprises on the basis of harmonization of regulations on the quality of milk to European requirements. The problems of raw milk quality are especially acute for households. The prices for milk of enterprises are much higher than the prices for households precisely because of the qualitative characteristics of milk. The real situation in the dairy industry shows that the volume of second-grade milk occupies a significant share in the structure of milk processing of many enterprises and households. Therefore, in order for Ukrainian milk to be competitive with entry into the European market, it is necessary to bring it to high quality standards.

Ukraine has embarked on a path of positive changes in improving the quality of milk and bringing it closer to European standards. The best solution for small and medium-sized producers in this situation is to unite in cooperatives. For small farms, cooperation is a guarantee and a necessary condition for the implementation of measures to improve the quality of milk and compliance with the new legislation on the industry. On the basis of merging households and small farms into cooperatives, the issues of purchase and commissioning of the necessary equipment, establishment of effective sales channels, provision of appropriate sanitary and veterinary control will be resolved. The potential of cooperatives in the dairy industry at the present stage is realized at a low level.

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# FACTORS OF DEVELOPMENT OF COMPETITIVE ADVANTAGES OF AGRICULTURAL ENTERPRISES OF UKRAINE<sup>2</sup>

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The formation of competitive advantages depends on the level of competition in the industry. In addition, the state and structure of demand in domestic and foreign markets within a particular industry allow us to assess the possibility of creating and implementing specific strategies of competitive advantage. That is why the analysis of these elements within the «diamond model» of M. Porter is considered a reasonable and effective source of management information. The peculiarity of the agricultural sector are its own special features, characteristics, operating conditions and the appropriate level of competition. The structure of supply and demand, price dynamics, market stability and predictability allow to characterize the industry in terms of efficiency of ensuring the desired level of competitiveness. The development of competition and demand conditions should be considered in parallel, taking into account the peculiarities of the agricultural market.

The agricultural market is often seen as seasonal, volatile and inelastic. In fact, this characteristic does not fully correspond to the current state of affairs. In fact, this characteristic does not fully correspond to the current state of affairs. For example, the wheat grain market [1] as one of the most important in the context of food security of our country and the world as a whole is characterized as follows: worldwide average annual production grows in parallel with consumption with a moderate increase in final stocks; world prices are very unstable, where elements of seasonality and cyclicity appear and manifest themselves, but dependence on yield and level of demand prevails in the context of price determination; retrospective analysis of changes in production and consumption allows us to predict a significant slowdown in the trend of increasing wheat production, which should lead to stabilization of prices and a shift in emphasis on product quality. For Ukraine, these trends are difficult to consider positive, because, despite the 5th place among the world's exporters of this crop product. Ukraine occupies the lowest price segment with the worst level of quality.

Thus, in the near future Ukraine risks to lose its share of the foreign market. In this aspect, when analyzing the elasticity of demand in the foreign market with the activation of competitors regarding the cultivation of higher quality wheat varieties, it can be considered as moderately elastic. In the domestic market, given the constant consumption of bakery products, demand for wheat remains inelastic, but relatively stable. Regarding seasonality, in the domestic market it is observed depending on the period of greatest demand.

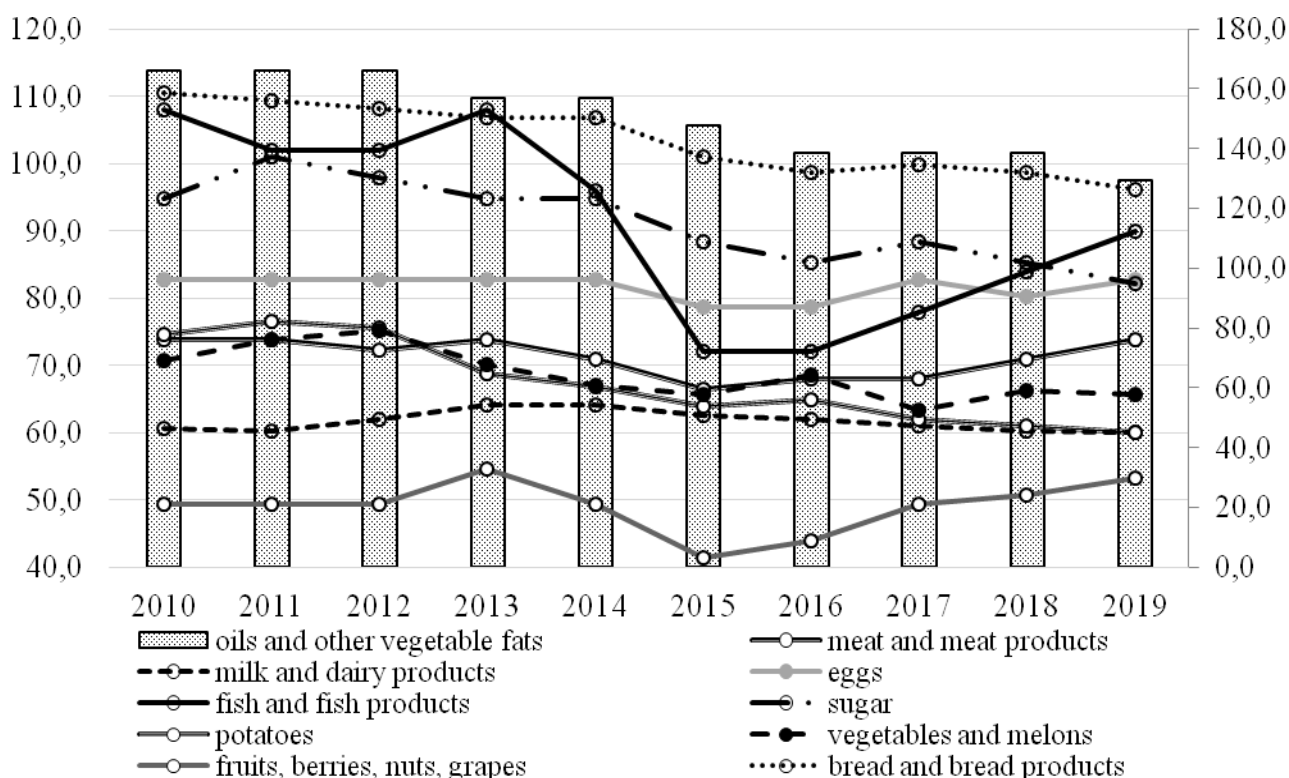
Other markets, such as the consumption of meat, milk and dairy products, and potatoes, despite their inelasticity, are characterized by significant underconsumption compared to the standards. The dynamics of consumption indicators is presented in Figure 1.

The presented results allow us to conclude that there is a share of unmet demand in the domestic market for food. Given these trends, it is considered promising to increase the production of these goods with a decrease in price. Underconsumption of key foods is associated with excessive cost.

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The nature of competition also depends on the type of market for a particular product. Among agricultural production there is a model close to perfect competition, the quality of power by small producers – the economy of the population engaged in the cultivation of vegetables, berries, viticulture, dairy farming. Their number is very large, they do not have information on the behavior of competitors, there are virtually no barriers to market entry. But pricing is based on a scheme that differs from perfect competition – due to underdeveloped market infrastructure, some products, such as milk, are sold by producers to processors or intermediaries at dumped prices due to the inability to communicate with direct consumers. In general, such a model prevails in the production of primary agricultural products. Monopolistic competition is more inherent in processed products, the difference in quality of which creates advantages for end users.



**Figure 1. The share of food consumption Ukraine from the recommended norms**

An important feature of the market and competition in it is a direct dependence on demand for products, ie market conditions, due to the complexity of storage, long production cycle, diversion of working capital and the need to return them when selling products.

Regarding distribution, it should be noted that many products are sold spontaneously, and the sale of cereals and industrial crops is more coordinated by the activities of intermediaries and the current situation in world markets.

The disadvantage of the current state of the agricultural market is the overestimation of the price of products, which do not allow producers to receive a reasonable profit, and consumers to receive quality inexpensive products. This situation is due to the underdeveloped infrastructure of the market, the lack of reliable information on the level of demand, the underdevelopment of organizational structures capable of implementing effective marketing activities for the combined small producers.

A key aspect in the analysis of competition and demand in the agricultural market is the impact of economies of scale. Most products of the agricultural sector are profitable to produce and sell by large enterprises and vertically integrated structures that produce both primary raw materials and final consumer products. A separate market segment is created by the so-called «niche» products, the profitability of which can be achieved even with a small scale of production and, accordingly, in small areas. The obstacles to the development of these industries are the same underdeveloped market

infrastructure, the lack of a culture of consumption of certain new products, regulatory barriers to exports (limited quotas). This suggests that in the future, the trend of merging producers into holdings will only spread, and the level of competition, respectively, will decrease, which may lead to difficulties in the formation of competitive advantages. On the other hand, the process of creating holdings is gradual, which gives grounds to consider the current structure of competition in the market as a constant.

The last component in M. Porter's «diamond model» is state regulation of the relevant industry. This issue is especially important for agriculture, as in developed countries, despite the effectiveness of the market mechanism and competition, agriculture itself is often considered in the context of state support.

The Law of Ukraine «On State Support of Agriculture of Ukraine» [2] regulates public policy in budget, credit, pricing, regulatory and other areas of public administration to stimulate agricultural production and market development, as well as food security. This normative act regulates the powers of the agrarian exchange; determines the list of agricultural products, wholesale prices for which are regulated by the state; determines the minimum and maximum intervention prices; substantiates commodity and financial interventions, temporary administrative regulation of prices and temporary budget subsidy; determines the purpose of the agricultural fund; substantiates other types of support for agricultural producers: state mortgage purchases of grain, financial support of economic entities of the agro-industrial complex, financial support for family farms, market deregulation; provides the principles of state support for producers of livestock products in the form of direct subsidies, certification of budget subsidies for their export; determines the directions of state support for producers of certain types of agricultural products.

In general, state support for agricultural enterprises can be divided into areas, forms and methods. Directions are directly defined in the Law of Ukraine «On state support of agriculture of Ukraine» (as amended from 07/10/2018).

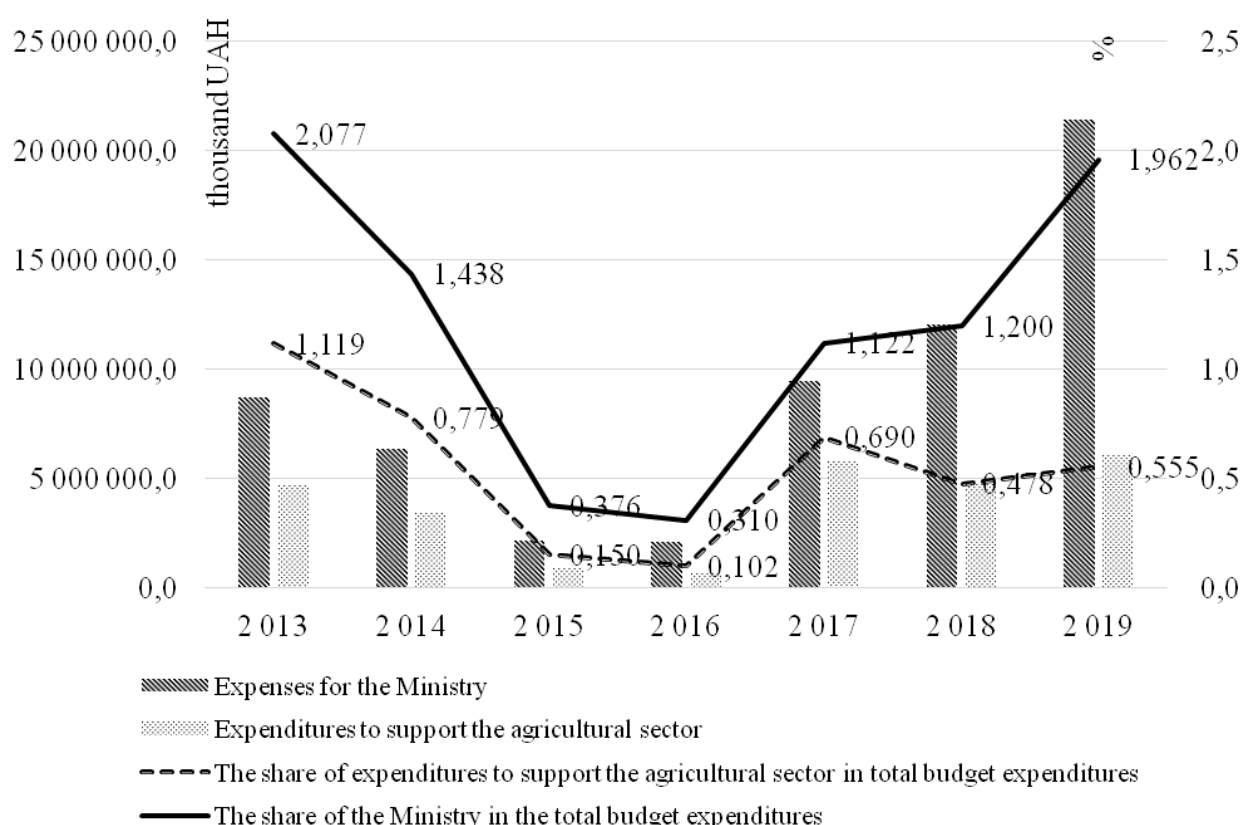
Forms are divided into direct, indirect and indirect. Direct include loans, subsidies and grants, as well as insurance costs. Indirect include the intervention of agricultural products, setting prices and customs tariffs. Indirect include the intervention of agricultural products, setting prices and customs tariffs. Indirect ones include the write-off and restructuring of tax arrears, the establishment of a special tax regime and government incentives for research. Methods are divided into administrative and economic. Administrative are related to antitrust regulation, compliance with standards and regulations, implementation of targeted development programs. Economic relate to market pricing, subsidies, preferential taxation and lending, rationing of production costs [3].

Among the priority areas of state support for the development of agricultural production are fiscal, budgetary and credit policies. Fiscal policy provides for the establishment of a tax regime for transactions with changes in land ownership, the transformation of the tax system, a special tax regime, the development of new tools for taxation of agricultural businesses. Budget support includes the introduction of medium-term indicative budget planning, giving preference to state-owned enterprises for efficient allocation of resources, targeted support on a revolving basis, transition to compensation payments against the application principle, priority of financing innovative projects on public-private partnership, establishing criteria for direct access to funds taking into account the level of environmental friendliness. Credit policy provides for the creation of an effective system of land mortgages and the development of a credit system for agricultural production on the basis of agricultural receipts and electronic warehouse certificates [4].

For a direct analysis of the degree of state support should consider the dynamics of state budget expenditures on the agricultural sector (Fig. 2).

As we can see from the above dynamics, the lowest share of expenditures fell on 2015-2016. In the future there is an increase in spending on the Ministry to pre-crisis level, but, unfortunately, this trend is not directly related to support for farmers – the share of expenditures decreased to 0.478% with a slight increase in 2019 to 0.555%. This shows that within the Ministry, the priorities have not changed in favor of the agricultural sector. Regarding the growth rate, during the period up to and including 2016 there was a decrease, especially in 2015 – 74.5%; further in 2017 there was an unprecedented increase of 8.4 times, and in 2018 again a decrease, in 2019 there is an increase of 30%.

A significant shortcoming in state support is the incomplete implementation of planned indicators. At the moment, funding is not fully  $\frac{3}{4}$  implemented, and in the livestock sector only by 45.7%.

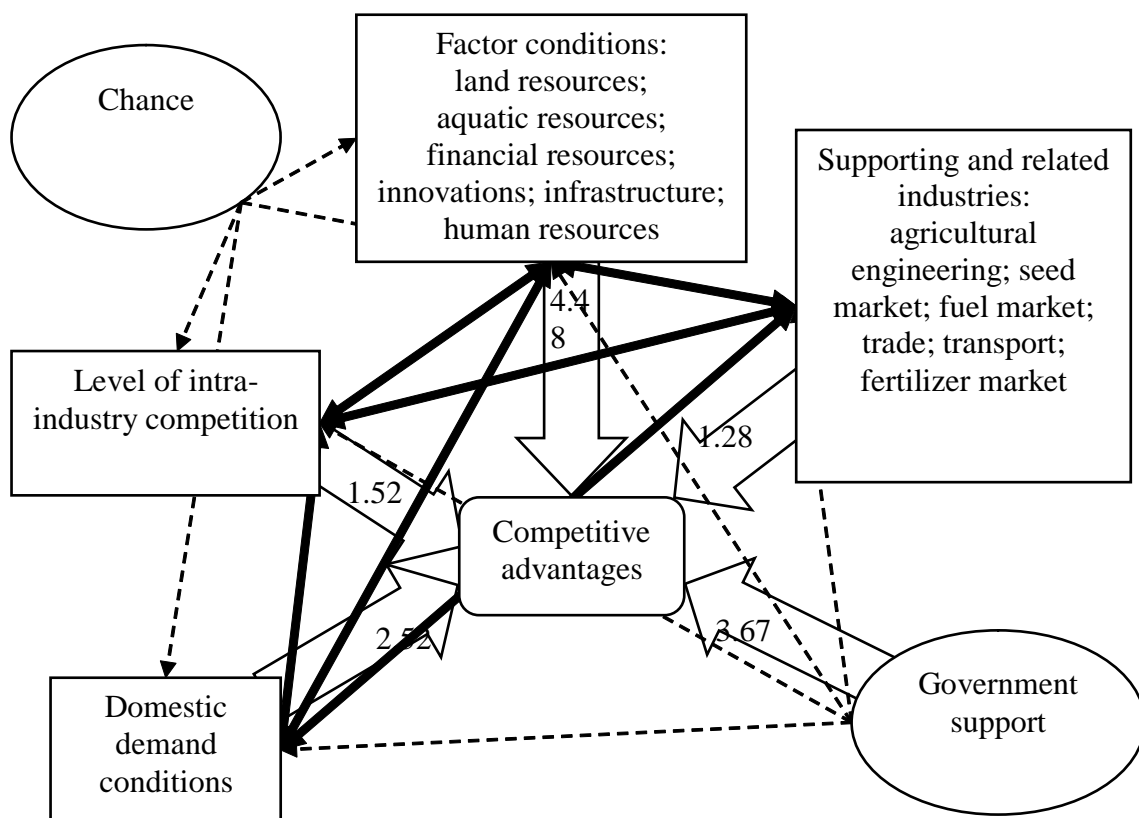


**Figure 2. Analysis of expenditures for the Ministry of Agrarian Policy and Food of Ukraine (from 2019 the Ministry of Economic Development, Trade and Agriculture of Ukraine)**

Currently, the The Ministry of Economic Development, Trade and Agriculture of Ukraine provides the following support to farming: a budget subsidy for keeping cows (from 5,000 to 250,000 UAH), additional payment in favor of insured members of the SFG (from 0.9 to 0.1 minimum insurance premium), partial reimbursement of costs for advisory services (90% of the cost, but not more than UAH 10,000), subsidy per unit of arable land for newly established farms, financial support for cooperatives (up to UAH 3 million) and support on a repayable basis, but not more 500 thousand UAH). Livestock support includes: a subsidy for the presence of a bee family (from 10 to 300 – 200 UAH each), reimbursement of the cost of purchased breeding animals, bees, sperm and embryos (up to 50% of the cost, but not more than the threshold for each type of animal); reimbursement of the cost of livestock facilities (up to 30% without VAT); compensation for the cost of facilities financed by bank loans (up to 25% of the amount of funds up to 5 years); reimbursement of the cost of facilities and storage and processing of grain (up to 30% of the cost excluding VAT). The development of horticulture, viticulture and hop growing involves reimbursement of the cost of seedlings (up to 80%), reconstruction of fixed assets, purchase of processing lines (up to 30% of the cost). Compensation for the purchase of domestic machinery and equipment for the agro-industrial complex is offered at the level of 25% of their value. The financial support provides for compensation of 1.5 NBU discount rate on loans, but not higher than the amounts provided by loan agreements, reduced by 5% to UAH 15 million for livestock entities and up to UAH 5 million for agricultural enterprises for the implementation of projects on renewal and construction of fixed assets [5].

Thus, the analysis of state support for agricultural producers shows significant changes during the study period in terms of cost structure, the amount of support and the use of indirect forms and economic methods. The constant reduction of cattle remains a problem. This reflects the imperfection of the mechanism for supporting livestock – that is, despite the significant costs in some years, the

negative trend is overcome. The positive situation is only in the field of poultry farming, due to the high level of vertical integration among these industries. Sustained successes of crop producers, given the constant increase in the number of farms, indirectly indicate the effectiveness of state support for this sub-sector. The analysis allowed to identify the main components of the «diamond model» and to assess their impact on the formation of competitive advantage. The evaluation was performed using an expert method of ranking comparison of the strength of the main components of the rhombus and its internal components. The reconciliation was done by calculating the concordance coefficient, taking into account the degree of related ranks, the value of which was 84.04% (Fig. 3).



**Figure 3. Analysis of the influence of M. Porter's «diamond model» on the formation of competitive advantages of agrarian business entities by middle ranks**

The obtained data indicate the predominance of the influence of factor conditions, as the lion's share of agricultural products refers to crop production, where these conditions are crucial in terms of ensuring the desired level of productivity and productivity. In second place, despite the imperfection of implementation, is government support, due to increased funding for soft loans for micro-enterprises that most need assistance, further subsidies for farm development, state support for hops, livestock, agriculture and farmers in general.

The significant impact of domestic demand parameters is due to a significant underconsumption of key food products compared to hygiene standards, which reflects unmet demand as a promising market share. The small impact of the level of intra-industry competition is due to the high level of product standardization, a significant number of producers, especially among households and micro-enterprises, which allows us to consider this market as close to perfect competition. Monopolistic competition is more inherent in processed products, where there are competitive advantages depending on the requirements of end consumers. Supporting and related industries have the least impact due to significant import dependence: in particular, in 2019 the share of imports in agricultural engineering is more than 90%.

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# ACCOUNTING AS A TOOL OF STRATEGIC MANAGEMENT OF THE DEVELOPMENT OF SOCIO-ECONOMIC SYSTEMS

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Accounting occupies one of the leading positions in the enterprise management system. It reflects the real processes of production, circulation, distribution and consumption and is an information base for characterizing the financial condition and planning of the enterprise. With the help of information provided by accounting, you can develop a strategy for the operation of the enterprise, which includes the following:

- 1) the most efficient use of available resources;
- 2) control of the current activity of the enterprise;
- 3) planning its strategy and tactics;
- 4) elimination of subjectivity in making management decisions;
- 5) forecasting indicators of enterprise development and
- 6) finding reserves to improve the efficiency of its work.

Thus, the accounting system is of great importance for the work of any enterprise, as it must provide complete, accurate and reliable information for sound management decisions by both internal and external users [1].

Thus, the accounting system in the enterprise management system performs the function of providing management staff at all levels of management, formed in accordance with common methodological principles, analytical and generalized information necessary for current and strategic planning, analysis, control and management decisions to achieve certain goals. economic activity of the enterprise.

In the process of management (management decisions) interact objects and entities, which makes it possible to consider the process of enterprise management as a management system, supplemented by regulatory tools, information and performance components, and so on. Thus, the enterprise management system is a way of interaction between management staff and executors to achieve the goals of financial and economic activities of the enterprise. The realization of the ultimate goal of the enterprise is ensured by the effective interaction of the managing and managed components of the management system, which is ensured through the implementation of its basic management functions: planning, organization, motivation, control. The accounting system has a significant influence on the performance of these functions in achieving management goals.

The influence of external and internal socio-economic environment on the economic activity of the enterprise produces a number of facts of economic life related to the processes of supply, production and sale. The versatility of these processes is due to the need to involve in the economic turnover of financial, material, labor, information and other resources, determining the subject of activity, the choice of production methods, the formation of pricing and sales policy and more.

The facts of economic life that lead to changes in the structure of economic assets and sources of their formation are identified in the accounting system as business transactions in which they are registered, systematized, grouped and summarized. Thus, an array of accounting and economic information is formed, which is used by the managed system as an information source in making management decisions [2].

Although accounting is an important element in the information system of the enterprise, in strategic management, its importance decreases due to the inability of accounting to accumulate data on the external socio-economic environment. Disintegration of accounting is manifested through a certain information limitations in the implementation of enterprise performance indicators, which necessitates the achievement of the integrity of the information system with theoretical and methodological tools, the concept of which should be based on "harmonization of all its elements: accounting, control and planning".

However, the accounting system as an information source of the process of making strategic management decisions should be considered primarily in the application of information and computer technology, which significantly increases the analytical information about objects, phenomena and processes of the internal environment.

The functioning of the accounting system at the strategic level, the main tasks of which are to meet the information needs of management staff in strategic decision-making, involves the identification of subsystems of strategic accounting and strategic analysis. Information at this level is modified by analytical procedures, which significantly increases its value for management. In addition, the traditional accounting system should ensure the identification of relevant objects for strategic management, in particular, such as the facts of economic life with uncertain consequences [3].

Accounting in the conditions of strategic management of the enterprise should correspond to the basic principles. Namely:

- accounting for the purpose of strategic management of the enterprise should not only support the process of making strategic and operational (tactical) decisions, but also take an active part in creating a strategic policy of enterprise management;
- accountants-managers who take part in creation of mission of the enterprise, strategy, strategic plan, should not during the control of the strategy to take over the powers and take over virtually all management functions;
- accounting for the purpose of strategic management of the enterprise should be a system that provides information (financial and non-financial) to employees of the enterprise at all levels of management;
- accounting for strategic management should be such management technology that is capable of self-development and change depending on changes in the external and internal environment of the enterprise.

Adherence to the basic requirements (principles) of creation and functioning of accounting for the purpose of strategic management of the enterprise will allow (together with other management technologies) to successfully implement the chosen strategy and to achieve strategic goals [4].

In the system of strategic management, given the need for strategic, atypical, global, informal, multi-purpose, long-term management decisions, decisions in conditions of uncertainty and with many criteria in the formation of its information support, we should talk about the need to build an information model of strategic management [3].

The key to a company's success is a properly chosen strategy and an effective control system for its implementation.

Understanding the strategy begins with defining the purpose and long-term activities of the company, which determine its mission.

The company's mission is transformed into specific goals, which are then embodied through appropriate corporate strategies.

A strategy is a set of policies, procedures and approaches to business to ensure long-term success.

Development and implementation of a competitive strategy is the main task of strategic management [5].

Effective strategic management requires reliable information support, which is strategic management accounting, which is a system of management accounting aimed at making strategic management decisions.

- The accounting system can meet the needs of strategic management in various ways, including:
- using accounting data to analyze the markets in which the company will operate;

- providing key information related to the selected strategies;
- providing feedback on the results achieved and their alignment with strategic goals;
- providing information on the long-term consequences of different areas of action [6].

In the field of accounting, the following possible options for the relationship of strategic management and accounting are identified:

1. The accounting system can be information support (support) of the strategic management process. This approach is the most common among domestic researchers. Its feature is the consideration of accounting as a supporting information subsystem of the strategic management system, which acts as a generator of accounting information for the development of draft strategic decisions and an information source for strategic control. Today, in Western European countries, the approach has become widespread, when accounting is considered as a comprehensive information system that describes the process of creating and implementing a strategy.

The accounting system is considered in its current form, and the information generated by it in the form of financial and management reporting can be expanded and supplemented based on the use of traditional accounting methodological tools – varying the available alternative options for estimating accounting objects, increasing the number of analytical sections, expansion of financial reporting indicators (notes to the annual reporting), development of new forms of management reporting on the basis of dedicated analytical accounts, etc. [7].

2. Strategic accounting (financial and management) is only one of the stages of strategic management, which provides a scan of the internal and external environment of the enterprise. Representatives of this approach (I.M. Bogataya, S.P. Suvorova, O.M. Shchemelev and others) distinguish a separate functional area of accounting – strategic accounting (financial and management), the further development of which necessitates significant changes in the existing accounting methodology, transformation of existing accounting principles and accounting values formed over a long historical period.

The application of this approach allows to unite in a single system of strategic accounting all existing and develop new methodological tools that will effectively ensure the process of preparation and implementation of enterprise strategy.

The main problem that causes the impossibility of effective implementation of this approach in the practice of enterprises is the lack of thorough theoretical developments on this issue, which does not allow to create theoretical and methodological prerequisites for the implementation of strategic accounting as a means of strategic management in enterprises.

3. The accounting system can be one of the tools of the strategic management system in the implementation of the function of redistribution of resources in the national economy. The founders of this approach are E.S. Hendriksen and M.F. Van-Breda, who understand the main function of accounting as the redistribution of resources in the national economy. In particular, as the authors note, financial statements provide for the occurrence of economic consequences, which are the basis for choosing the benefits of a particular group of users. Ya. V. Sokolov and I.A. Smirnova interpret the position of the authors: “... the first task accounting in accordance with the views of the authors of this book – to obtain and present to society information about the economic efficiency of economic entities and thus create an information basis for the redistribution of productive forces between efficient (highly profitable) and unprofitable sectors of the economy [8].

Thus, the accounting information disclosed in the financial statements of enterprises is a means of influencing the investment and loan decisions of its users. As the financial statements disclose the status and results of the enterprise, depending on their changes, the investment and loan policy of users of such information changes. As a result, the investment and borrowing resources available to enterprises are invested in those enterprises whose published results in the financial statements correspond to the established level of risk and profitability of investors and borrowers. Accordingly, the accounting system as a means of generating financial statements is a tool that determines the decisions of investors and borrowers, thus redistributing the available investment and borrowing resources in the financial market.

Depending on the type of enterprise strategy and the type of defined strategic goals, the accounting system can be considered as a tool for implementing the strategy. This is due to the fact that

in accordance with the Law of Ukraine "On Accounting and Financial Reporting in Ukraine" and the National UAS, the company may apply its own accounting policy, the choice of which depends on the financial statements. As a result, accounting policy as a means of adjusting financial reporting indicators depending on the needs of owners and management of the enterprise is a strategic tool that influences the decisions of users of accounting information.

For example, to implement the financial strategy of enterprises, which is associated with the effective attraction, use and redistribution of financial resources to achieve financial goals, when formulating an order on accounting policy should use those accounting methods among the available alternatives in P (S) BU that will improve financial condition of the enterprise and will increase the efficiency of attracting financial resources [9].

The existence of this approach is confirmed by E.K. Hex, who considers the problems of building a corporate strategy for annual reporting, based on the relationship between shareholders and the actions of the company's management, which is reflected in the financial statements. For example, frequent changes in the company's accounting policy, abandonment of the provisions adopted last year, return to previous provisions indicate the existence of problems in the company's activities, which may deter potential investors. According to K.R. Herrigen, in the implementation of corporate strategy an important place is occupied by the policy of capitalization of advertising costs, research and development, other intangible assets and more. The reflection of these objects as costs or their capitalization as assets significantly affects the performance and activities of the corporation, its business reputation, which in general can be a significant obstacle / advantage in attracting additional investment resources, concluding agreements with potential partners, companies, etc.

4. The accounting system can be the object of strategic management. This approach involves the transition to the plane of the organization of accounting and concerns the analysis of further strategic prospects for the development of the accounting system at the enterprise as one of the types of information systems of the enterprise.

When applying this approach, there is a dichotomy of the role of the accounting system in the system of strategic management. On the one hand, the accounting system is used as a source of information, a means of scanning the environment of its operation, and on the other – is the object of strategic management, which will be formulated and implemented strategy, evaluated and monitored in the enterprise. In this case, the accounting information represents the results of effective or ineffective management decisions in terms of organizing the accounting system at the enterprise.

An example of such an approach is the implementation of the strategy of transition to the organization of accounting on the basis of outsourcing, which involves a set of actions and strategically planned measures that will ensure the gradual transfer of accounting functions from employees to employees of the outsourcing company.

To implement such a strategy, it is necessary to determine the goals and plans to achieve them (for example, reducing the cost of accounting procedures), detailed recommendations for their implementation at the level of the accounting system, develop a set of programs, budgets and procedures to be implemented. accounting outsourcing (search for an outsourcer company, discussion and conclusion of an agreement on the level of payment of accounting procedures, determination of their list and establishment of qualitative and quantitative requirements for their implementation, dismissal of the company's accounting service, etc.), monitoring and constant control over the chosen accounting strategy.

The analysis of the existing approaches of researchers in the accounting field on the relationship between accounting and the concept of strategic management has identified four possible relationships, each of which may be available at the present stage of development of accounting science and practice. Of particular note is the consideration of the first two approaches, which provide for the positioning of accounting as a tool for information support (complex or partial) process of development and implementation of enterprise strategies. In particular, we believe that these two approaches should be synthesized into one approach, which will involve the development of comprehensive information support for strategic management of the enterprise based on the use of existing and development of new methodological tools for accounting to deepen its strategic orientation.

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# PERSONNEL MANAGEMENT IMPROVING IN LOCAL GOVERNMENTS OF UKRAINE

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In the modern concepts of personnel management role of the individual employee motivational characteristics of its facilities, skills and direct them to form a line with the objectives and goals set by the organization efficiently increases. Personnel management allows generalizing and implementing a certain set of measures to adapt the employee to external conditions, taking into account the personal factor in building a personnel management system of a public institution.

An important issue in the personnel management system of public institutions is the development of personnel, renewal of management staff, which directly determines the level of social services, the development of the organization and social and labor relations in it. The basic factors of staff development are the following: the first factor – the hierarchical structure of the organization, where the main means of influence – the relationship of power-subordination; the second factor – culture – ie common values, social norms, attitudes, which are formed in the team and regulate the actions of the individual; the third factor is the market, where the supply of free personnel for this sector is formed.

In management, such a category as personnel, is the most complex object of management in the system, because, unlike the material factors of production, has the ability to make decisions, act, critically evaluate the requirements for it, have subjective interests and other unforeseen factors. This is the reason for radical changes in the personnel management system in the public sphere in particular.

Modernization of the civil service system in accordance with the best world practices and standards is a key task of state administration reform in Ukraine. The quality of public administration at the central and local levels depends on the professionalism of civil servants, their ability to provide quality public services, motivation and decency. Serving the people are serving every citizen – it is responsible, requiring not just exercise proper selection of the best professionals in the public service, but also to help civil servant professionally develop and become more efficient and productive.

With the entry into force of the Law of Ukraine "On Civil Service" dated 10.12.2015 № 889 there is a need to strengthen the strategic role of personnel management services in public administration, which will be responsible for the implementation of personnel management in public administration, personnel selection, planning and organization of activities. issues of raising the level of professional competence of civil servants, documenting the entry into the civil service, its passage and termination, etc. [2].

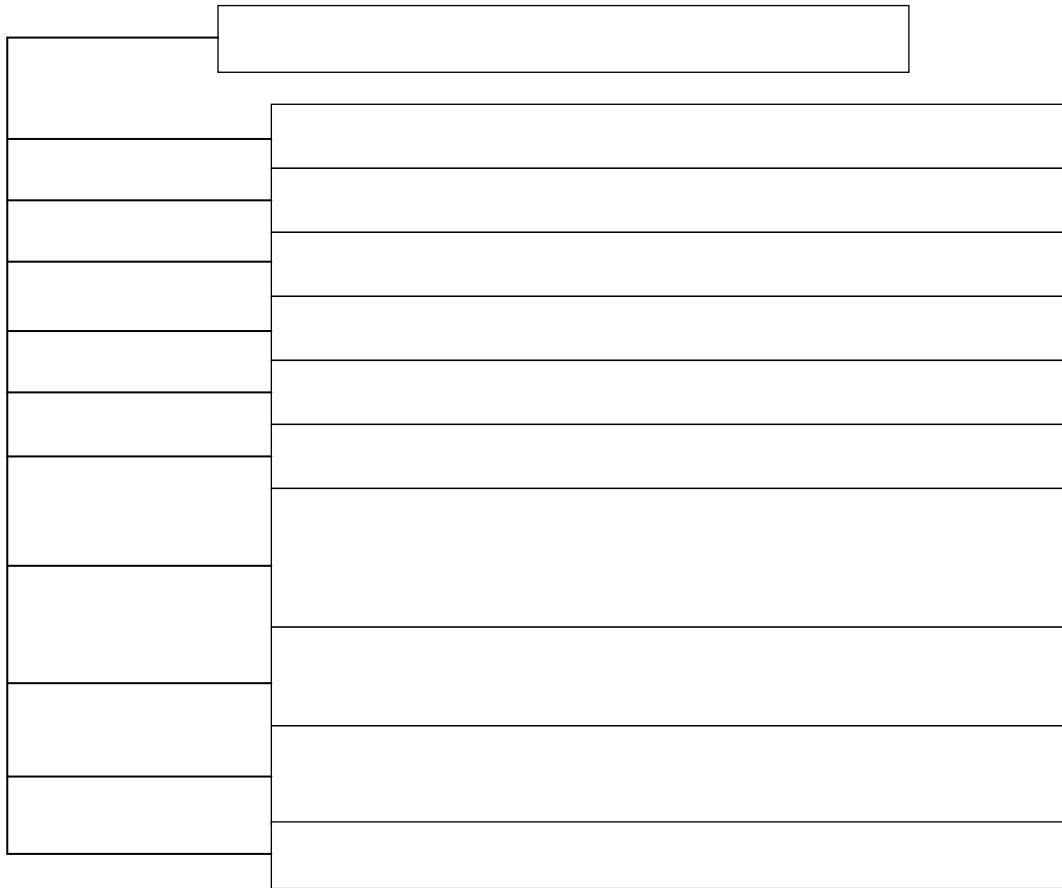
Personnel management service in matters of implementation of state policy in the field of civil service is guided by the Constitution of Ukraine [3], laws of Ukraine "On Civil Service" [2], "On local state administrations" [4], "On service in local governments" [5], "On Prevention of Corruption" [6] and other laws of Ukraine, international treaties approved by the Verkhovna Rada of Ukraine, resolutions of the Verkhovna Rada of Ukraine, decrees of the President of Ukraine, acts of the Cabinet of Ministers of Ukraine and the central executive body formation and implementation of state policy in the field of civil service [7].

The object of the investigation was the Kharkiv City Council, which is a local government body that represents the territorial community of Kharkiv and performs on its behalf and in its interests the

functions and powers of local government defined by the Constitution of Ukraine, the Law of Ukraine "On Local Government in Ukraine" and other laws.

Kharkiv Mayor, City Council and its executive bodies operate on the principle of division of powers in the manner and within the limits defined by law.

The activity of Kharkiv City Council is carried out on the principles shown in Figure 1.



**Figure 1. Principles that guide the Kharkiv City Council in its work [1]**

The tool of personnel policy implementation in Kharkiv City Council is the personnel management service, which can be seen in the organizational structure of the institution. The main task of the service is to ensure the implementation of state policy in the field of personnel management in the Kharkiv City Council.

Note that the personnel management service of the Kharkiv City Council is accountable and controlled by the city council, subordinated to the executive committee of the Kharkiv City Council, the Mayor, Deputy Mayor – the manager of the executive committee of the City Council.

The main tasks of the personnel management service of the Kharkiv City Council are shown in Figure 2.



**Figure 2. The main tasks of the personnel management service of the Kharkiv City Council [1]**

Table 1 contains data on the number of employees of the organization.

Analyzing the number of employees of the Kharkiv City Council, we identified a structure that characterizes the share of individual groups (categories) of employees in their total number.

**Table 1. The number of employees of the Kharkiv City Council in 2018-2019 [1]**

Categories of staff	2018		2019	
	Persons	Specific weight, %	Persons	Specific weight, %
Total employees, pers., of them	147	100	149	100
managers, pers.	15	10,2	15	10,1
employees, pers.	114	77,5	116	77,8
support staff, pers.	18	12,3	18	12,1

According to the materials of the studied institution, it is seen that the share of employees is stable. The share of employees in quantitative terms increased from 77.5 to 77.8%, ie by 0.3% (however, this did not have a significant impact on the overall change in staff structure). The stability of the staff of the Kharkiv City Council is a significant prerequisite for increasing productivity and efficiency of the service delivery process.

We will note that employees of service of management of the personnel of the Kharkiv City Council annually review and form lists of the persons who are enlisted in a personnel reserve for the corresponding positions. The personnel reserve is created for holding positions and promotion in the Kharkiv City Council.

At the same time, the composition of the personnel reserve is dynamic, because it can include new people and exclude individual employees during the year. So, in case of necessity and if there are motivated reasons, the list of "reservists" may be amended during the year in accordance with the procedure established for admission of persons to the personnel reserve.

Note, that the responsibility for efficient preparation and use of personnel reserve is Mayor of Kharkov.

The creation of the reserve is by decision of the Kharkiv City Council and approved by the Mayor. When organizing work with the personnel reserve, the Kharkiv City Council uses the Standard Procedure.



We will note that the personnel reserve includes the persons who expressed desire to occupy a position in the Kharkiv City Council, have the corresponding qualification and education or get it. For positions in the Kharkiv City Council the personnel reserve is formed from:

- local government officials who have improved their skills or passed internships and are recommended by the attestation commission for higher positions;
- civil servants who wish to transfer to the service of local self-government bodies;
- specialists in production, socio-cultural, scientific and other fields, as well as graduates of higher educational institutions of the relevant profile, including those enrolled in educational and professional training programs for masters of state administration.

It should also be noted that enrollment in the personnel reserve in the City Council is carried out with the consent of the person who has expressed a desire to take a position in the council. As a rule, this is a written application, set out in any form.

It is also important to note that the personnel reserve of the Kharkiv City Council is formed from the calculation shown in Table 2.

**Table 2. Calculation of the personnel reserve of the Kharkiv City Council [1]**

Position	Number of people
For elected positions, for which persons are elected by the territorial community or the relevant council	Not formed
To the positions of heads of departments, divisions and other executive bodies of rural, settlement, city, district councils in cities and to the positions of heads of departments, divisions of the executive staff of district and regional councils	At least two people
For the positions of specialists of departments, offices and other executive bodies of rural, settlement, city, district councils and departments in cities, departments of the executive staff of district and regional councils	At least one person, taking into account the actual need

It is also important that enrollment in the personnel reserve is approved by order of the Mayor. And in cases when for appointment to positions for which the personnel reserve is formed, coordination of candidates with the corresponding executive bodies is provided, enrollment in the reserve is carried out after such coordination.

Professional training of employees, heads of local state administrations, their first deputies and deputies, local government officials and deputies of local councils is the acquisition and improvement of professional knowledge, skills and abilities of civil servants, heads of local state administrations, their first deputies and deputies, officials local self-government and deputies of local councils, which provides an appropriate level of their professional qualifications for their professional activities.

The system of professional training of Kharkiv City Council is based on the following principles:

- mandatory and continuity of professional training during the civil service and service in local governments, work in state bodies, exercising the powers of a local council deputy;
- purposefulness, predictability and anticipatory nature;
- innovation and practical orientation;
- individualization and differentiation of approaches to learning;
- openness and academic integrity;
- proximity of educational services to the place of residence and service of the person;
- guaranteed funding for vocational training.

Professional training of Kharkiv City Council employees can be of several types (Table 3).

Officials do not always feel the lack of correlation between competence and performance. Therefore, the potential competencies that need to be developed in local government officials include those where there are difficulties in performing official tasks. According to the analysis, these are local public transport and local roads (79.9%), environmental protection (79.1%), water resources management and solid waste management (67.5%), agriculture and rural development (67.3%).

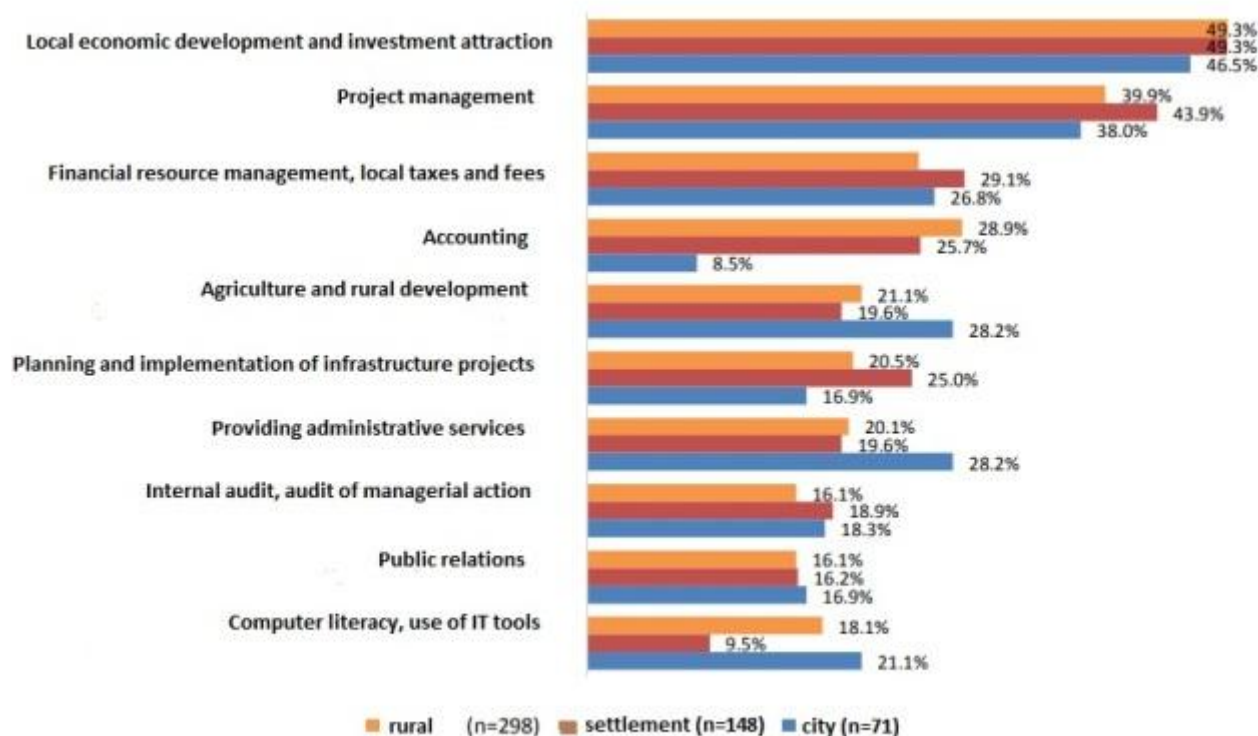
**Table 3. Types of professional training of civil servants of Kharkiv City Council [1]**

Type of training	Characteristic
Preparation	Successful implementation by participants of vocational training of the relevant educational and professional program, which is the basis for awarding a master's degree in specialties required for professional activities in the civil service and local government, in particular in the specialty 281 "Public Management and Administration" field of knowledge "Public Management and Administration"
Certification training	Acquisition by participants of vocational training of new and / or improvement of previously acquired competencies within the framework of professional activity or field of knowledge
Internship	Acquisition of vocational training participants experience the tasks and responsibilities in a professional activity or field of knowledge
Self-education	Self-organized acquisition of certain competencies by participants of vocational training, in particular during daily activities related to professional, social or other activities, leisure

Based on the analysis of the training needs of Kharkiv City Council officials, the characteristics of the City Council should be taken into account when planning the relevant training programs.

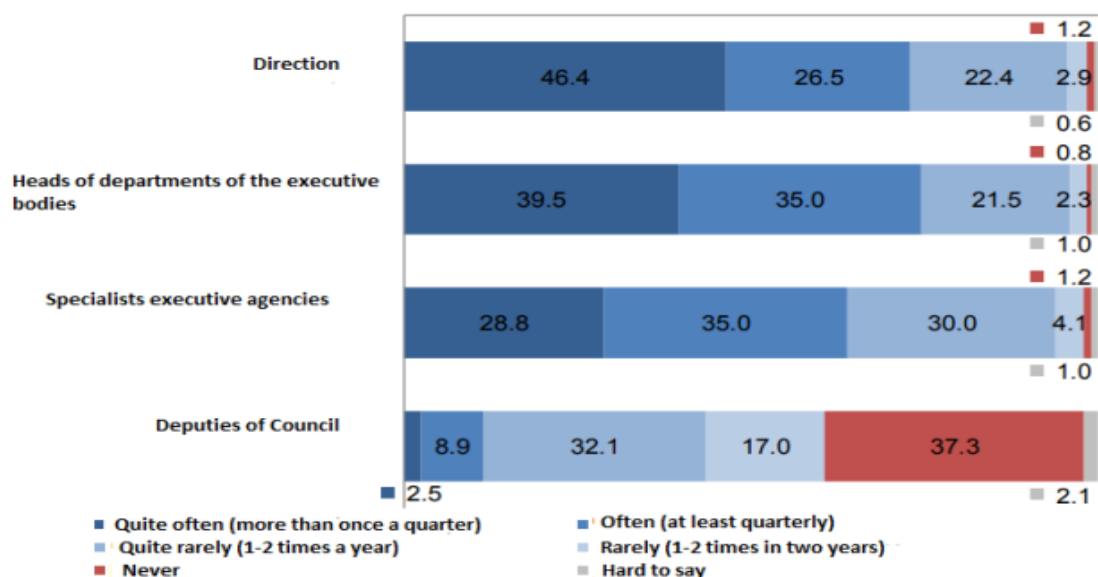
As shown in Figure 3, competence in the field of local economic development and investment attraction; internal audit, audit of management activities; public communication needs to be developed by all local governments.

Whereas competence in the field of accounting needs the greatest improvement in rural and settlement councils (and this can be explained by the increase in tasks after the creation of united territorial communities).



**Figure 3. Priority directions of advanced training of local self-government officials in terms of local self-government bodies (% among all respondents)**

Figure 4 shows the frequency of participation of representatives of the Kharkiv City Council in vocational training (% among all respondents).



**Figure 4. Frequency of participation of Kharkiv City Council representatives in vocational training (% among all respondents).**

We can say that 98.8% of Kharkiv City Council representatives have participated in training events 1-2 times in the last 2 years. Moreover, in most cases (at least 63.8%) we are talking about regular participation – at least once a quarter or several times a quarter. 37.3% of Kharkiv City Council Deputies have never participated in vocational training, and only 11.4% regularly participate in such events.

Based on the results of professional training of civil servants, local government officials, ECTS credits are accrued, which are subject to accounting, which is conducted by personnel management services. Civil servants within the implementation of individual programs and local government officials have to gain at least a ECTS credits per calendar year.

During the personnel management of the public service staffing technology used in some way different from HR technologies in commercial organizations. Direct transfer of management technologies from sphere to sphere is impossible due to the specificity of the functions performed and the incompatibility of organizational goals. Personnel technologies can be defined as a set of methods and organizational procedures aimed at optimizing decisions on the development of civil service personnel.

The conducted analysis and generalized experience on the problems of introduction of innovative technologies gives grounds to note that it is necessary to improve the personnel management system of the civil service in three directions:

- improvement of the state personnel policy in the field of personnel management of the civil service;
- improving the activities of the central body of state power that manages civil service personnel;
- improving the activities of personnel services that manage civil service personnel.

Public engineering should become an innovative form of reforming and improving the human resources management system. Public engineering is related to reengineering, which is more commonly used in the private sector and is not used at all in the state sector. From reengineering, restructuring business as a method using a radical restructuring of business processes, management thought crossed to the concept of "business engineering", ie the architectural construction, creation of business through engineering and science by designing business process management. In our opinion, it would be expedient to introduce the concept of "public engineering" in the practice of public administration, which can mean the creation of public institutions (institutions, organizations) on the basis of engineering science through the design and management of state processes.

The purpose of public engineering is not to restructure the structures of public authorities, but to increase the efficiency of these authorities, a significant improvement in performance. Based on the practice of reengineering, the following principles of public engineering can be formed:

1. Get rid of stereotypes and consider the system of state administration in the eyes of the designer and architect. One of the key concepts that forms the basis of public engineering is processes, and in this case, administrative processes. It is their optimization and improvement that make it possible to discover and use new opportunities, reserves and resources for the development and improvement of management efficiency.

2. Go from managing administrative functions to managing administrative processes and goals. To perform such a large-scale task, it is necessary to apply innovative approaches and modern techniques and management technologies.

3. Support the current "design" of administrative processes, constantly improve them and adapt to changing conditions. Public engineering provides an opportunity not only to manage production processes, but also to re-create them, qualitatively model and modify them, building them into a single integrated and efficient system.

4. Conduct regular monitoring and analysis of administrative processes and to search and develop their optimal model.

The model of the administrative process (real or desired) due to the clarity of its description makes it possible to analyze how effectively it contributes to the achievement of certain goals and results. Operational tools of process analysis in the system of state administration can be the logistics of the administrative process, its duration and cost (including its distribution into separate stages), as well as other factors on which depends or may depend on the effectiveness of its implementation.

5. Clearly and constantly focus on the meaning of the concept of "process". The process is a sequence of functions (works, operations) aimed at achieving a result that has value and usefulness for its consumer.

Note that public engineering is closely linked to changes in the external and internal environment of the organization. Thus, through public-engineering can make a radical restructuring of the system of government that administers public service personnel. When creating innovative models of civil service personnel management, it is necessary to focus on modern global challenges, trends in the development of national and world society.

The modern system of personnel management and approaches to its implementation should use the fundamental and latest principles of the theory of scientific management. These include the selection of employees that best meet as to perform various job descriptions, efficient use of material incentives, the implementation of the necessary training and retraining of civil servants, the use of scientific analysis in determining opportunities for solving problems.

In the future, with the formation of directions of development of the personnel management system, its focus on social aspects and interests of the individual, the tasks and priorities in the personnel management system of the Kharkiv City Council will change significantly. Given the growing role of the human factor, one of the most important tasks of improving personnel management is to ensure staff development, which implies the need to invest in staff, rather than simply forming its number in accordance with existing jobs. Thus symbiosis of the accepted administrative decisions not only with interests of city council, but also with interests of a social component – its collective is considered necessary.

It should be noted that the formation of personnel management of the Kharkiv City Council on the principles of a systematic approach is determined by the coverage of all employees of state organizations, the relationship of management decisions within the subsystem to determine their impact on the system as a whole. Thus the program-target approach causes necessity of coordination of tasks and the purposes of development of each separate civil servant with the purposes of the organization. After all, only such a combination will ensure the sustainable development of the institution, which will be accompanied by the formation of personal interest of each employee in the effective operation of the Kharkiv City Council.

Personnel management should be based on the principles of system, functional and program-targeted approaches, the use of which will allow to consider it as a system consisting of an

interdependent set of components and interacting subsystems; to ensure the unity of goals of both the organization as a whole and each individual employee, the effectiveness of the entire personnel management system; decide on priority practical measures in management; to achieve the harmonious development of activities in market conditions, which is not possible without the organization of personal interest of each employee in the final results of the organization; not only to achieve the interests of the organization, but also to implement social programs that are adopted at the state and territorial levels and act in accordance with labor legislation. This setup creates motivation for efficient and effective work, which ensures long-term employment relationship and improve the quality of life as an individual civil servants and staff in general [8-12].

Therefore, to meet the challenges of improving the management of public personnel management is necessary to determine the algorithm of strategic tasks in HR; training each employee integrity, humanity, patriotism to achieve their goals.

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# **DIRECTIONS OF IMPLEMENTATION OF INNOVATIONS IN THE DEVELOPMENT OF TOURISM ACTIVITIES**

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At the present stage of development of international economic relations, all spheres of the world economy (including the global market of tourist services) have been covered by globalization processes that have important consequences. There is an increase in the level of integration of tourism industries and individual enterprises of different countries, on the one hand, and an aggravation of competition between countries for the distribution of tourist flows, on the other. The shares of tourist products in both the structure of gross domestic product (primarily developed countries) and the structure of consumption are growing significantly. In turn, the formation of diversified needs and consumer demand leads to the creation of innovative tourist products.

It is worth noting that innovations in tourism are largely determined by the specifics of this industry, which cannot function independently, but depends on many related industries and interrelated areas of activity, namely: hotel and restaurant management, transport, entertainment infrastructure, specialized marketing companies, informative and technical support, etc. Thus, radical innovative changes in tourism in the late XX century and early XXI century. They occurred under the influence of the intensive development of new information technologies, which made it possible to introduce electronic commerce in the tourism sector according to a simplified scheme and, consequently, more effectively promote tourist products to the market, influence not only the sales volumes of certain tourist products, but also provide new opportunities to have complete up-to-date information about a certain destination, place of residence, transportation conditions, etc.

However, the specifics of innovations in tourism activities also depend on macrofactors (such as political and economic stability in the country, the level of income of the population, the legislative framework, intergovernmental and international agreements, etc.) and mesofactors (in particular, the availability of natural and recreational resources, favorable environmental conditions, etc.). After all, each subject of tourism business operates in a specific market environment, characterized by a certain system of relations and its features [1, p. 30]. These objective and subjective operating conditions are rapidly changing, which requires constant monitoring with subsequent analysis / evaluation of the mega-, macro-, meso-, micro – and internal environment of the tourism enterprise, as well as the tourism industry as a whole.

The main factors contributing to the creation, development and introduction of innovations in the activities of tourist enterprises, scientists and practitioners consider the following:

- growing interest and needs of the population in obtaining new knowledge and impressions from traveling, getting acquainted with the culture of peoples and historical places of other countries;
- increased competition, an increase in offers of standardized tourist products and a richness of classic and traditional destinations, which encourages tourists to search for new places;
- the need to restrain the departure of their own citizens abroad and reorient them to domestic destinations that are similar in conditions (nature, culture, climate), as well as create a domestic competitive tourist product;
- the need to develop inbound tourism as a promising innovative factor of an individual territory and the country as a whole;

- creation of individualized forms of tourist consumption and the need to create conditions to meet the needs of individual tourists;
- transition from the supply economy to the demand economy, from the product economy to the impression economy, and so on.

Tourism today is a dynamic industry. New markets in tourism industry are constantly being developed. The regulatory framework is being improved the introduction of updated information technologies and modern forms of organizational and managerial activities, the use of virtual tourist and excursion services, etc. [2, p. 204]. Therefore, the competitiveness of tourist enterprises largely depends on the introduction of innovations at any level of the business environment-enterprises, destinations or the state.

Taking into account the above, it is necessary to study the external factors of innovation introduction in the activities of tourist enterprises, determine the types and components of innovations in tourism, as well as generalize and systematize them. Thus, the mega-environment of tourism is a driving force in the process of introducing innovations at Ukrainian enterprises, modernizing and actively developing their international tourism activities. In other words, as a necessary attribute of market relations in the process of economic globalization, megafactors largely orient tourism entities of all these levels to successful and promising work. In addition, the market model of the economy determines the need to introduce innovative and improved organizational and economic mechanisms for the development of international tourism, which is associated with the intensification of this industry, increased competition in the world market, the development of new organizational forms of international tourism, increased capital mobility, expanding the boundaries of markets and business contacts, and so on.

At the macro level, the presence or absence of appropriate economic-organizational, technological-informational, socio-cultural and infrastructure conditions also affects the pace of development of tourism activities, and therefore requires constant updating and innovative influence to ensure sustainable development, stability and competitiveness of tourism [3, p. 67]. In particular, the use of innovative systems of economic regulation makes it possible to stabilize such economic factors as the level of inflation, the exchange rate, the state of the market of goods and services, stimulates the development of investment and innovation activities, increasing the level of income of the population, as well as the accumulation of capital for their own needs, including for travel.

The priority area of innovation activity in the economy, which can have an unconditional positive impact on tourism, is the creation of an innovative business model that will ensure the economic security of the state and the balance of its development due to the correct selection of appropriate projects and taking into account the optimal conditions for their implementation by forecasting financial indicators. Modeling of the most important indicators of innovation and investment activity of the enterprise (as an element of this business model) contributes to the choice of priority management decisions and the implementation of tasks for managing the development of innovatively active tourist services in the market. This model will allow enterprises to deepen their specialization, distribute internal risks, increase the generation of innovations, and so on.

A stable political situation in the country is the key to the success of international relations with other states, and cooperation with international associations has a positive impact on the overall development of tourism activities [4, p. 782]. As a result, the latest methods of work are introduced, quantitative and qualitative indicators are improved, the geography of travel is expanded, new modern information technologies are used, and the formation of innovative infrastructure becomes more attractive for both domestic and foreign consumers.

Improving regulatory legal acts and mechanisms for their implementation will improve the investment attractiveness of tourist destinations for investors, contribute to the development of the infrastructure of the innovation process, information support for the development of small related businesses, and so on. Perhaps the most important factor influencing the attraction of investment, both foreign and domestic, is tax incentives.

The most common forms of tax incentives are the differentiation of tax rates depending on the socio-economic significance of the industry and its products, full or partial exemption of business entities from paying taxes, providing them with benefits, narrowing the tax base, providing tax holidays



and other forms of incentives [5, p. 249]. Scientific and technical developments and inventions are the use of new knowledge for the purpose of their practical application, and scientific and technical innovations are the materialization of new ideas and knowledge, inventions and scientific developments in the production process in order to implement them to meet the relevant needs of consumers.

A mandatory requirement for technical innovations is utility, simplified automated work for tourist enterprises, the possibility of production use and commercial implementation, improved or fundamentally new material and technical support. Socio-demographic innovations that determine the material and social status of the population, the level of education, the duration of vacation, professional employment, etc. Are also important factors that will influence the development of the tourism market in the future. The main goal of developing such innovations is to promote the improvement of the population, ensure an appropriate level of education and culture, encourage the search for new knowledge and impressions, form spiritual and moral values, and so on. Changing the age and social structure of the population requires innovative tourism programs and reorientation to a new segment of the target audience. This trend, caused by the general rate of population aging, contributes to the unification and differentiation of tastes and wishes of customers.

The geographical direction of innovative development involves the study of new destinations, which will allow expanding the range of tourist routes, looking for alternative new natural resources, promoting and implementing domestic tourist attractive places, etc. [6]. It is known that tourism as a branch of the economy is a constant and rather intensive user of natural resources. However, the tourism industry not only makes extensive use of natural resources, but also pollutes the environment. Therefore, further development of tourism is generally possible only on the way of its greening. Environmental issues should be integrated into the economic sphere of tourism activities, that is, it is necessary to develop such economic levers that will ensure the restoration of the state of destinations and ecological balance.

Thus, the introduction of innovative programs will improve the mechanism of environmental policy implementation at the state level, expand and strengthen the environmental monitoring system based on the existing network of observations of the state of environmental components and restore ecological balance [7, p. 92].

We have also systematized innovations at the meso level as those that are of key importance for the development and implementation of regional policy, including in the field of tourism. In turn, the implementation of this policy can turn tourism into a kind of lever for overcoming the uneven economic development of individual territories. The main means of implementing a long-term strategy of regional policy in the field of tourism is the creation of innovative regional programs for the tourism development of individual districts and regions and programs for the development of cluster systems. Together with the regional policy, it is necessary to carry out investment activities that should have a specific regional direction, that is, to stimulate revenues, capital investments in regional facilities, infrastructure, reconstruction and construction of modern tourist complexes, sanatoriums, hotels that must meet international requirements and standards, the creation of tourist centers, etc.

At the same time, the improved legislative framework of the regions should become a guarantor for foreign and domestic investors, support and coordinate the reliability of invested funds [8, p. 51]. Innovative activities of regional policy are also aimed at creating a favorable image of the regions in the field of providing recreational and tourist services, developing new tours that should take into account the ethno-cultural, geopolitical, and environmental factors of tourist regions. The meso level also includes coordination of the activities of tourist enterprises in regional markets, so relations with local authorities, established cooperation with partners and employees of branches play an important role in the development of destinations and the formation of high-quality innovative goods in general. Thus, cooperation with local authorities can significantly improve and simplify work with intermediaries (hotel and restaurant companies, transport organizations and leisure companies, etc.), which directly form a tourist package of services and influence the creation of domestic tourist routes and the development of the tourist region as a whole. A well-established scheme with branches and intermediaries, the creation of innovative work schemes makes it possible to widely cover the territory of consumers and implement tourist services more efficiently.

So, the active development of tourism entrepreneurship depends on the implementation of adopted state programs for the development of Tourism and the availability of a legislative framework that encourages and supports mechanisms for financing and investing in the industry [9, p. 152]. In addition, for the successful development of tourism, it is necessary to ensure its rational planning and effective management at the level of direct factors, which include, in particular, suppliers, partners, government agencies, consumers, competitors who directly affect the operations of the enterprise.

The analysis of innovations in the microenvironment of tourist enterprises' activities began with the consideration of competition, which manifests itself in the features of interaction between tourist enterprises in the relevant market segments, characterizes the degree of development of market relations, since it is competition that is the driving force of market processes. The competitive environment forms criteria for the quality of a tourist product, determining the volume and conditions of sale, prices, advertising methods, sales promotion, and so on.

Competition in the tourist market can be considered both at the macro and micro levels. At the macro level, it is represented by the competition of states to attract the largest number of tourists, which will provide them with significant incomes [10, p. 189]. Therefore, the use of innovative management methods, the production of innovative goods, access to new sales markets, the use of new marketing methods and market strategies is a necessity, since it allows you to be differentiated from others, and therefore resist in competition.

So, the study of innovative methods of competitors allows you to assess the level of development of each subsystem and concentrate management efforts on the most priority area, use a full set of innovative strategic opportunities, determine priorities in development in accordance with the goals set, reflect the sequence of planning and management in order to effectively function in the market. The consumer of travel services is considered as a person who has his own goals and a scale of values, so the current market trend is focused specifically on the consumer as a potential customer who provides the company with profit. Predicting future tastes and preferences of customers is the first necessity for marketers. The information obtained allows you to analyze the needs and interests of a given product or service. So, marketing research allows us to identify some characteristic indicators that can be used to model the process of forming demand for tourist services.

So, the consumer's expectations are based on their own experience, recommendations from sellers, friends, and other information sources. Given that modern consumers have significant access to new knowledge and any information, are more educated and demanding, it is worth creating innovations that will meet the needs of the consumer, provide them with new experiences and provide an opportunity to get new experiences. It is also worth noting that innovations in tourism can cover both the full range of services that form a tourist product, and concentrate on one of its components. However, other components may remain unchanged. After all, a tourist enterprise is dependent on many related industries, so the quality of a tourist product is determined by the professionalism of all the partners involved, who also need to introduce innovations.

Innovations in tourist transport services involve the introduction of a new or improvement of an existing technology for transporting tourists. In the field of tourist transport services, it is also possible to distinguish technical and technological innovations that relate to technical and technological improvements in the process of transporting tourists. These may include innovations related to the modernization of vehicles and their maintenance systems, the introduction of fuel and energy – saving technologies in transport, and so on.

Innovations in transport process management may consist in improving the management structures of transport enterprises and organizations, their work and cooperation with travel companies. Innovations in the informatization of the transport process relate to the improvement of systems for collecting and processing road information, in particular, booking tickets in the online system, managing the transportation process in real time using navigation systems, which will reduce the number of traffic jams on the roads, etc. [11, p.632].

The hotel and restaurant industry also needs innovative activities aimed at constantly improving the quality of work, improving service, improving the conditions of stay of tourists, introducing innovative automated programs that allow you to instantly book a room, table online in a restaurant, and so on. Working with intermediaries requires a specific and well-established organizational work, as

this determines the company's image and retention of regular customers. The effectiveness of a tour operator's work with a travel agent is determined by the number of services sold, so the introduction of innovative offers is a fundamentally important tool for motivation and reliable cooperation. In particular, the loyalty system offers new services, professional trainings and seminars, participation in information tours, interest payment, bonus system, etc., and allows you to distribute your product to a wider range of intermediaries.

The growth of internal and external competition increases the importance of innovation and changes in organizations (enterprises, associations, etc.), the implementation of which in the form of new technologies and products (services) provides the necessary level of economic stability of business entities [12, p. 35]. The entry of travel agents into the association gives travel operators additional reasons to feel insured against poorly provided services and unreliability of the travel agent regarding cooperation.

The next important determinant of innovation activity is the internal environment of a tourist enterprise, which forms the conditions for its functioning. The need to improve its efficiency actualizes the need to solve problems related to the goals and structure, technology of providing services, personnel, finances, adaptation of a tourist enterprise to changes in the external environment, etc.

The development and use of the mechanism of interaction between the external and internal environment of the functioning of tourist enterprises is associated with the mobilization and effective use of tourist resources by building an effective management system, where the main functions are organization, planning, motivation and control. Achieving more effective performance requires the development of new models, methods and approaches.

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# **FORMATION OF THE MECHANISM OF DEVELOPMENT OF JOINT INVESTMENT INSTITUTIONS AND VENTURE BUSINESS IN UKRAINE**

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Creation of appropriate conditions for activities of investment funds will make it possible for Ukraine to have an effective mechanism represented by such funds to develop the market of securities, which play a significant role in intersectoral redistribution of capital, enhance the stock market stability, stimulate both the domestic and foreign investments, promote expansion of the governmental opportunities as for domestic borrowings. A positive role of the joint investment institutions in macroeconomic terms is confirmed by the preferential nature of taxation of investment funds, which is peculiar to the national law of overwhelming majority of countries.

In addition to the aforesaid results of joint investment in Ukraine, which are positive for the economy, there are several more. The joint investment institutions mean an efficient tool for accumulating significant capitals, circulation of which ensures a harmonious development of the national economy. The joint investment funds are not directly involved in production. However, as it is known, the production and financial market are the elements of one and the same system. Development of the manufacturing sector causes a revival in the stock market, and vice versa, an efficient capital market stimulates development of the economy as a whole. The joint investment institutions are the tool that can make the public savings work for the benefit of the country and its nationals.

The inflow of money into the area of joint investment will not relieve the state of the problems connected with the budget deficiency or necessity to raise foreign loans, but it will expand the potential of domestic borrowings, whereas the joint investment institutions are the major buyers of governmental debts worldwide.

Development of the joint investment industry is one of the indirect incentives for development of the stock market; in particular it is a prerequisite for raising capital to the national economy [1].

The Development Program of the National Securities and Stock Market Commission for 2020 as developed by the experts of the Change and Risk Management Committee determines and sets out in more detail the regulations of the National Program of Economic Reforms on the Securities Market, in particular, the draft laws "On Virtual Assets", "On Depository System of Ukraine" (as amended), "Improvement of Activities of Joint Investment Institutions in order to implement the EU Law".

The stock market development program is aimed at solving the following major tasks: increase of capitalization, liquidity and transparency of the securities market; improvement of the market infrastructure and provision of its reliability and efficient functioning; improvement of the mechanisms for state regulation, stock market supervision and protection of the investors' rights; tax and currency incentive for further development of the securities market.

A specific role in the document is given to the issues of educational activities as regards the mechanisms of the stock market's functioning and its benefits, as well as the new methods of interaction between the regulator and market participants and self-regulatory organizations.

One of the vital issues in development of the domestic stock market is to stimulate emergence of new financial instruments. This process, in particular, should be facilitated by the Law "On Joint Stock Companies", which provides for mandatory inclusion of shares of the public joint stock companies into the listing of trade organizers.

Moreover, it is necessary to promote development of the derivatives market. Introduction of trading by futures on trade index by one of the Ukrainian stock exchanges, which is a very attractive

financial instrument, can be treated as positive. At the same time it is necessary to promote development of the underlying assets market.

It is also essential to increase the amount of the existing financial instruments and to encourage issuers to issue them, which fact will stimulate development of investment activities.

An acute problem is improvement of the currency regulation mechanisms at the stock market, whereas an unbalanced currency policy is one of the factors hindering its development. The program contains a number of arrangements to improve the situation in the area. Without improving the currency regulation system, it will be impossible to integrate the Ukrainian capital market into the world market. Failing the above, the domestic issuers will not be able to sell their securities to foreign investors efficiently, and the domestic investors will not be able to buy foreign securities.

Development of the rating system is the key matter. The rating system's improvement will be based on the best world practices. It is planned to intensify supervision of the rating agencies, as well as the requirements as for disclosure of information about their activities and their clients.

It is planned to introduce incentives, in particular, the tax ones, for implementation of IPO (Initial Public Offering) by the Ukrainian companies, in the area of development of the organized securities market. Alongside, it is important to expand access to stock exchanges for individual investors. It is expedient for the exchange trade to be focused, as only a few exchanges carry out actual full-fledged activity in Ukraine. In particular, it is scheduled to increase the requirements for organizers of securities trading. Particular steps in this direction have been prescribed legislatively in a number of the recent instruments adopted by the Commission. However, this process will be effective provided that only appropriate changes are made to the law.

There is a considerable unrealized investment potential of individuals in Ukraine [2]. Development and improvement of the joint investment institutions can become one of the key mechanisms for mobilizing savings from public and for directing them to meet the investment needs of the economy.

The major legal instrument regulating activities of the joint and corporate investment funds in Ukraine is the Law of Ukraine "On Joint Investment Institutions" (hereinafter JII) [3]. Features of functioning of Law of Ukraine "On Joint Investment Institutions" in Ukraine are as follows:

- corporate investment funds are created as open joint-stock companies with an exceptional type of activity, and joint investment funds as a set of assets owned by investors under the joint partial ownership and do not have the status of a legal entity;

- depending on the term of redemption of securities, JII are divided into the closed, open and interval ones. The first two kinds have existed before. The interval fund, in contrast to others, for some time operates as a closed one, but on certain dates it practically fulfils the responsibilities of an open fund to meet the demands of the investors to repurchase securities JII from them;

- depending on the type of assets, where the money of JII is invested, the funds are divided into the diversified and non-diversified ones. The latter can invest in more risky assets, but they can also be more profitable. An example of a completely non-diversified JII is the venture fund, which is from the very beginning focused on investing into the non-market, high-risk, but potentially profitable and growth-enhancing assets.

As for the diversified JII, the law clearly defines their characteristics, as well as it introduces a direct prohibition for certain transactions of such funds. For example, it is prohibited for the diversified JII to hold more than 30.0% of the total value of assets in cash, on bank deposit accounts, in saving certificates and bonds issued by commercial banks, or to purchase the securities of one issuer for the amount exceeding 5.0% of the value of the assets. They are also permitted to hold not more than 25.0% of the total value of their assets in government securities, 20.0% of their assets in corporate bonds, and not more than 40.0% in shares. That is why the venture funds are currently extremely popular. However, the law prohibits them to accept money from individuals [4].

The law introduces the concept of JII asset management as a separate type of professional activity at the stock market to be licensed by the National Securities and Stock Market Commission (NSSMC) and strictly controlled by the state. The activity of the asset management companies is quite clearly regulated; openness of information is a prerequisite of their work. The law establishes a system of restrictions on the activity of the asset manager with the aim to protect the investor's money and to

prevent improper transactions. Furthermore, the contract with the asset management company is a fixed-term one (within 3 years) and it means an additional tool of the investor control. An asset management company may simultaneously manage the assets of several JII and bears the full property liability for damages caused by JII, their actions (omission) or actions of their officials. Creation of the reserve fund for JII, which shall be kept on a separate account, is a binding condition. In case JII are wound up, the money will be returned, in the first line, to the depositors. Avoidance of double taxation of the joint investment funds and of the income from the investment transactions of JII is ensured [5].

Development and standardization of the accounting and reporting system will promote to increase of the venture funds' efficient performance. It is essential to improve the training system. It seems necessary to increase the share of accountants specially trained in the area of asset management, to introduce the general standardization of JII reporting and to improve its quality, as well as to upgrade the information disclosure system.

In order to ensure formation of the venture JII portfolio with better assets, it is proposed:

- for the Ministry of Economy regularly to post information, on the official website of the Ministry, about the companies, which have been declared bankrupt, and about the companies, in respect of which the financial recovery procedure has been commenced;

- for the National Securities and Stock Market Commission regularly to publish information, on its website and on the website of the Ukrainian Association of Investment Business (UAIB), about the cancelled issues of the securities and about the securities, the circulation of which has been suspended;

- to prepare explanations of the Commission as for the types of assets that cannot be used to form the venture fund portfolio;

- it is proposed in the UAIB directorate to introduce a system of control over compliance<sup>0</sup> by the members of the Association with the current law and internal standards and regulations of UAIB. In particular, to determine a set of the arrangements that create a single system of control of SRO (self-regulatory organization), over activities of its members without interfering with their business, and to develop specific regulations, rules, standards for performance of the above tasks;

- to enhance the level of information to the public about activities of venture funds;

- to direct joint efforts for adoption of the laws regulating the stock market, in particular, the amended version of the Law of Ukraine "On Securities and Stock Market", Law of Ukraine "On Joint Stock Companies", amendments to the Law of Ukraine "On Joint Investment Institutions";

- to work out a partnership between the business and the state for development of the innovative component of the economy and assignment of money from venture funds to implementation of innovative projects.

Thus, the researches confirm that the joint investment institutions, in particular the asset management companies, corporate and joint funds, play an increasingly important role in the Ukrainian economy. In recent years, the actions by both the state and the financial market participants have contributed to development of the investment market. The current system of income taxation of the joint investment institutions promotes development of investment processes through such a mechanism. Joint investment acquires special interest in the period of technical re-equipment of companies, transition to energy-saving technologies.

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# SYSTEM OF SUSTAINABLE DEVELOPMENT GOALS AND COMPETITIVENESS OF AGRICULTURE OF UKRAINE: CURRENT STATUS AND POSSIBLE PROSPECTS

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Ukrainian agriculture is one of the system-forming in the national economy. It provides the principles of state sovereignty – food and within certain limits of economic, environmental and energy components of national security. It also creates the basis for the development of technologically related sectors of the economy, forms socio-economic and environmental foundations of rural development.

In September 2015, the UN Summit was held, which approved 17 Sustainable Development Goals (SDGs) and 169 targets for the period up to 2030. Ukraine, like other UN member states, has joined the process of ensuring sustainable development. The result of the inclusive process of adaptation of Sustainable Development Goals for Ukraine, taking into account the national specifics, was a system of SDGs, which consists of 86 targets with 183 indicators for monitoring. Since 2015, Ukraine has launched reforms aimed at implementing socio-economic transformations and, thus, achieving the SDGs. For the agriculture, such transformations are defined in the economic dimension – an increase in the degree of processing and productivity; in the social dimension – raising living standards and reducing inequality in all its manifestations; in the ecological dimension – the cessation of the depleting use of land, forest and water resources [15].

Under such conditions, the question of the relationship between the achievement of the SDGs and competitiveness, as a basic category of economic system based on market principles of management, becomes relevant.

Sustainable development of the agriculture is the subject of research by both foreign and domestic scientists [2, 5, 19, 24].

Competitiveness as an economic category is in the field of scientific interests of P. Drucker, M. Porter, Stakhiv O.A. [21, 25].

Based on the achievements of leading scientists, we aim to analyze the dynamics of competitiveness of Ukrainian agriculture and progress in achieving SDGs. Such an analysis will contribute in the theoretical aspect to the establishment of the relationship and interdependence of these processes, in the applied aspect – the formation of the concept of development of the Ukrainian agriculture.

The category «competition» belongs to the main elements of the market mechanism. The essence of competition was first revealed by A. Smith, comparing competition with the «invisible hand» that rules the world in market conditions [3]. The modern understanding of competition has many interpretations. K. P. McConnell and S.L. Brew, define competition as the presence in the market of a large number of independent buyers and sellers and the opportunity for buyers and sellers to freely enter the market and leave it [4]. According to M. Porter, competition is a «specific mechanism that encourages entrepreneurs to follow the instructions of the «invisible hand» [20].

Generalization of approaches to understanding competition allows to determine its functional purpose:

- Regulation of the price-quality ratio in production;
- Promoting the efficient allocation of limited resources;
- Incentives for the implementation of scientific and technological progress.

The concept of «competitiveness» was first introduced in the late 1970s by M. Porter. In his view, competitiveness is the property of goods, services or the subject of market relations to appear on the market equally with similar goods, services or competing subjects of market relations [20].

Domestic researchers emphasize the complexity of the category Competitiveness and note that its advantages are realized through trade, but the basis of competitive advantages is created at all levels of social production [23].

The levels of coverage can determine the competitiveness of the enterprise, region, industry, national economy. The purpose of our study determines the identification of competitiveness at the industry level.

We agree with the opinion of M. Gelvanovsky, V. Zhukovskaya, I. Trofimova that competitiveness is determined by the presence of competitive advantages in the industry. Competitive advantages allow, firstly, to produce (with costs not higher than international) high quality products that would meet the needs of specific consumer groups, and secondly, to supply it to a competitive market in the optimal time, dictated by the market situation [9]. In substantiating the importance of sectoral competitiveness for national economy, we will use the position of M. Porter on this issue. M. Porter believed that «when trying to answer the question of competitiveness at the national level, it is necessary to focus not on the economy as a whole, but on specific industries and segments of the industry. It is necessary to understand how and why commercial viable skills and technologies arise, and it is possible to understand it quite fully only at the level of analysis of competitive industries» [20, 21].

The competitiveness of agricultural enterprises is interpreted ambiguously. A systematic vision of the competitiveness of agricultural enterprises is presented in the study of M. Malik and O. Nuzhna [13]. According to them, it is the ability of economic activity to adapt to new economic conditions, use their competitive advantages and win the competition in the markets of agricultural products and services.

Competitiveness provides the most efficient use of land resources, meeting the customer needs by analyzing the structure of the market and a flexible response to changing conditions. At the same time Fishchuk B.P., Lukashenko O.P., Khmaruk O.M. note that ensuring the competitiveness of agricultural enterprises is not limited to the use of land resources. The specificity of agricultural production is significantly dependent on weather conditions, long production cycle, etc. [8].

The specificity of the industry has given impetus to researches, which are devoted to the analysis of factors of agricultural competitiveness [7, 11, 10, 22, 13].

Such studies have suggested conceptual approaches to assessing the competitiveness of the agricultural industry. N. Patyka made a significant contribution to the assessment of the level of agricultural competitiveness [16, 17, 18]. The researcher suggested using the author's integrated competitiveness index (ICI) to assess the competitiveness of Ukrainian agriculture. ICI is based on the generalization of six indices: the level of economic development of the industry, efficiency of production process management, profitability, financial stability and solvency, business activity and efficiency of sales management, participation in foreign economic activity.

Highly appreciating the author's achievements and the author's methodology for studying the level of competitiveness of the industry, we note, that the agricultural competitiveness, and in a broader sense – the agricultural industry, should be assessed against the functional purpose of this area at a particular stage of social development.

We believe that the agricultural competitiveness at the post-industrial stage of social development should be determined not only by economic indicators, but also take into account social and environmental components. The scientific basis of this position is the concept of multifunctionality of agriculture and its reflection in the European model of agriculture [1]. This model assumes that it is important for agriculture to ensure the growth of social welfare, food security, ecologically safe human environment and unique landscapes preservation for today's and future generations. The European Union's approach is based on the fact that multifunctional agriculture is the basis for achieving sustainable rural development.

The multifaceted nature of competitiveness at the industrial and national levels is evidenced by the methodology of compiling the Global Competitiveness Index. Competitiveness is influenced by twelve main factors, on the basis of which the global competitiveness index is formed, namely: institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labor market, the financial system, market size, business dynamism. and innovation capability.



Thus, according to the Global Competitiveness Index, Ukraine is ranked 79th out of 140 countries participating in the ranking in 2015, 85th out of 138 in 2016, 81st out of 137 in 2017, 83rd out of 140 in 2018, and 85th out of 141 in 2019 countries [28]. These indicators show the negative dynamics of Ukraine's competitiveness.

In 2015, the World Bank proposed a ranking of countries, which is formed on the basis of an analysis of bureaucratic procedures that affect the activities of farmers. Enabling the Business of Agriculture provides data on eight quantitative indicators: supplying seed, registering fertilizer, securing water, registering machinery, sustaining livestock, protecting plant health, trading food, and accessing finance [6]. Indicators range from 0 to 100, where 0 is the worst and 100 is the best. The analysis of the indicators of Enabling the Business of Agriculture in Ukraine showed the positive dynamics in the issues of registering machinery, accessing finance, securing water. The situation with protecting plant health was also positively assessed – 100 points. Regarding other indicators, there is a negative dynamic. This ranking helps to identify economic factors that hinder the development of agriculture and increase its competitiveness. It also identifies strategic guidelines for improving the agricultural business environment.

Despite the leading role of the agro-sphere in the national economy of Ukraine, its positive dynamics is achieved mainly due to low prices for factors of production, primarily land rent and wages.

Based on the First Voluntary National Review of the Sustainable Development Goals in Ukraine, we systematized and analyzed the achievements and challenges towards achieving certain goals (Table 1). The choice of these goals is due to the direct or indirect impact of the agro-sphere on progress in achieving them.

**Table 1. Progress in achieving the Sustainable Development Goals in Ukrainian agriculture**

Goals, targets, indicators	Years				
	2015	2016	2017	2018	2030
<b>Goal 2. End hunger, promote sustainable agriculture</b>					
Targets: Ensure accessibility to balanced nutrition to the level of scientifically based standards for all population groups:					
Consumption per capita, kg/year:					
- meat	50.9	51.4	51.7	52.8	80.0
- milk and dairy products	209.9	209.5	200.0	197.7	380
- fish	8.6	9.6	10.8	11.8	To be clarified
- vegetables	160.8	163.7	159.7	163.9	To be clarified
- fruit	50.9	49.7	52.8	57.8	90
Target: Double agricultural productivity					
Labour productivity in agriculture, thousands of USD per employee	8.68	8.71	9.30	10.8	15
The index of agricultural production, %	95.2	106.3	97.8	108.1	102
Target: Ensure the development of sustainable food production systems that help maintain ecosystems and improve the quality of land and soil, primarily through innovative technologies					
The index of food production, %	88.6	108.9	107.1	98.5	103
Share of food industry and agricultural raw materials processing production in exports of UCGFEA groups 1–24	38.3	42.0	41.0	39.4	65
Share of agricultural land under organic production, %*	1.0	0.89	0.89	0.67	1.7
The consumer price index for food, %	144.4	108.5	113.4	111.5	105

Goals, targets, indicators	Years				
	2015	2016	2017	2018	2030
<b>Goal 10. Reduce inequality</b>					
Target: Ensure access to social services					
Share of rural households which suffered from deprivation due to lack of access to ambulance services in the settlement, %	39.9	–	38.2	-	15
Share of rural households which suffered from deprivation due to the lack of regular daily transport to another settlement with developed infrastructure, %	22.7	–	22.5	–	10
<b>Goal 12. Sustainable consumption and production</b>					
Target: Reduce the loss of food along the production and marketing chains					
Share of post-harvest losses in the total production of cereals, %	2.3	2.0	1.8	1.8	0.5
<b>Goal 13. Mitigate climate change impact</b>					
Target: Limit greenhouse gas emissions					
GHG emission and removal in agriculture, mln t CO <sub>2</sub> -eq.	39461	42178	41091	44239	To be clarified
<b>Goal 15. Protect and restore terrestrial ecosystems</b>					
Target: Ensure the combat land desertification, restore degraded lands and soils, achieve a neutral level of land degradation					
Share of arable land in total area of the country, %	53.9	53.9	53.9	53.9	47
Share of agricultural land of extensive use (hayfields, pastures), in total area of the country, %	13.0	13	13	13	15

Source: composed for [15]

The analysis of the tasks and indicators of the Sustainable Development Goals, summarized in the Table 1, allows us to state that progress is not uniform for all goals. Progress for Goal 1 is within 60-80%, for Goal 11 progress is within 20-60%, achieving targets for Goals 10, 13, 15 compared to the targets set for 2030 is unlikely (less than 20%). Progress towards Goal 2 has been facilitated by a more rational use of resource potential and technological renewal, which has increased labor productivity in agriculture. Thus, in 2018, labor productivity amounted to 10.89 thousand US dollars per employee, which is higher than in 2015 by 25.5%. Increasing productivity has made it possible to increase production. Thus, the volume of cereals in 2016 amounted to 66.1 million tons, in 2018 – 70.1 million tons, which solved the problem of food price volatility. In 2018, compared to 2015, the consumption of basic food products increased: meat, fish, vegetables, fruits. The only exception was milk consumption.

Along with the positive trends, there are indicators for which there is no progress or the progress is insufficient: there was a decrease in the share of agricultural land under organic production, a slow increase in the share of food industry and processing of agricultural raw materials in exports (from 38.3% to 44.3%).

In the approach to Goal 10, there is almost no progress in reducing the share of rural households that have suffered from the lack of timely ambulance services, the lack of regular daily transport. For Ukrainian villagers, the problem of timely medical care, education and other services, unfortunately, remains one of the most pressing.

Progress towards the goal 11 is ensured, inter alia, by reducing the share of post-harvest losses of agricultural products.

Goal 13 envisages limiting GHG emissions in the economy, while total GHG emissions in agriculture in 2018 increased by 12.1% compared to 2015. This dynamic is explained by the growth of arable land and the growth of mineral and organic fertilizers.

Progress towards Goal 15 is constrained by the dynamics of arable land and eco-stabilizing land indicators, as well as their shares in the total area of Ukraine. During 2015-2018, the area of arable land increased from 32531.1 thousand ha to 32544.2 thousand ha, and the area of agricultural land of

extensive use decreased from 7848.3 thousand ha to 7820.8 thousand ha. Such trends are caused by economic and institutional factors: an increase in agricultural production in the absence of effective mechanisms to stimulate land protection and soil fertility in the conditions, where over 70% of agricultural land and more than 80% of arable land is already privately owned.

The analysis of competitiveness and progress in achieving the Sustainable Development Goals of the Ukrainian agriculture allows us to draw the following conclusions.

Competitiveness as an economic category at the post-industrial stage of development should be interpreted and assessed in a broad sense: to cover economic, environmental, social components.

For agriculture, taking into account the concept of multifunctionality, competitiveness implies not only the production of competitive products, but also the ability of the industry to ensure social welfare, food security, ecologically safe human environment, unique landscapes preservation for today's and future generations. In this sense, competitiveness is an effective tool for achieving Sustainable Development Goals. Competitiveness and sustainable development become complementary and interdependent phenomena. Increasing competitiveness in a broad sense creates the basis for sustainable development. The transition of the agriculture to the trajectory of sustainable development, in turn, increases its competitiveness for the long term.

Generalization of research results of leading scientists, official statistics show that the competitiveness of Ukrainian agriculture is achieved through the economic component. Competitive advantages, as the basis of competitiveness, are mainly due to the use of natural resources and cheap labor, which corresponds to the linear model of the economy. Under such conditions, progress in achieving social and environmental Sustainable Development Goals is slow or absent. Therefore, there is a need to reconsider the ways of conducting economic activity. We believe that the result of such a revision should be a transition from a linear economy model to a circular model. For the agriculture, the circular economy model provides for the spread of organic production with the adoption of innovative technologies 4.0. This applies not only to the final product, but also to the whole complex of production and delivery of agricultural products.

The concept of circular economy has already become a priority in the strategic planning of post-industrial countries, in particular, the European Union, whose experience should be used by Ukraine in the process of developing a strategy for agricultural development.

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# ENSURING THE ECONOMIC EFFICIENCY OF IMPLEMENTATION ORGANIZATIONAL CHANGES IN THE ENTERPRISE

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With increasing competition due to rapidly spreading globalization processes, it is becoming increasingly difficult for domestic agricultural machinery companies to ensure a high level of competitiveness of their products. This reflects the inconsistency of methods and techniques of enterprise management to the nature of internal and external economic processes, which necessitates the constant implementation of organizational change in these enterprises. Therefore, recognizing that change is an integral part of any enterprise, because the environment in which it operates is dynamic and changing, there is a problem of effective management, which requires the development and implementation of an appropriate mechanism for managing organizational change at the enterprise.

Scientific works of domestic and foreign scientists, are devoted to the research of theoretical and practical issues of organizational change management, including: O. Amosov, D. Anderson, L. Anderson, M. Albert, T. Baulina, N. Belyaeva, J. Gibson, L. Greiner, H. Rampersad, S. Roberts, P. Senge, G. Tarasyuk, M. Tushman, K. Freiling, F. Hedouri, V. Shapiro, M. Sheremet, G. Shirokova and others.

The purpose of this researcher is ensuring the economic efficiency of implementation organizational changes in the enterprise.

To ensure the effectiveness of the goals of organizational change they should be defined and presented in the form of a "goal tree". Goals for different areas of change such as: processes, culture, staff competencies, structure should be consistent with each other. On the other hand, the goals should be interrelated with the scale of changes that are assessed at the planning stage under the influence of external factors and internal reasons using the proposed methodological approach to determining the profile. The peculiarity of assessing the achievement of goals is the need to develop and justify a set of indicators with the desired values that can quantify the selected goals.

In substantiating the areas of implementation of organizational change, the approaches of leading researchers to determine aspects of change were generalized. Among these aspects were presented both the areas of the internal environment and the resulting features, which are used to assess the activities of the enterprise as a whole and the implementation of changes in particular. In addition, researchers emphasize changes in such aspects as: strategy, objectives and goals, management in general and staff in particular, including staff development, remuneration. All these components are tools, the skillful use of which ensures the successful implementation of organizational change. Thus, to ensure the effectiveness of organizational change, it is necessary to justify a set of appropriate tools.

M. Fullan and M. Miles define seven principles of successful change [1]: 1) change is a learning process characterized by uncertainty. Stress, difficulty and uncertainty are inherent in any successful change; 2) there are no precise projects on how to make changes. Rationally planned models do not work as expected in circumstances of complex social change. Making changes is necessary in order to learn to adapt to unforeseen situations; 3) you need to perceive the problems, not run away from them. Changes in the organizational system are a constant process of solving problems, and only in this way the organization can continue its work; 4) change requires resources, as efforts to change this situation require additional reinforcement; 5) changes in the organizational system cannot unfold by themselves, but require a single source of power from which they could be directed; 6) successful change is rather a systemic than a segmental process; 7) changes should be made on the spot, not from afar.

The effectiveness of organizational change depends in direct proportion to the compliance with the implementation stages of the change management process. In addition, for effective organizational change management, certain rules have been developed governing the activities of managers [2]: management should determine in what specific activities, to what extent and in what form it should be

directly involved, with the main criterion – the complexity of the actions and their importance to the organization; the need to coordinate methods and processes of change in the management of ordinary activities and management processes in the organization; the need to coordinate the processes of enterprise restructuring in different departments.

M. Beer believed that effective change management is possible by changing the roles of staff, rather than attitudes or emotional perceptions, which took the form of six steps to success change: mobilizing employees by diagnosing problems, developing a shared vision, helping to reach consensus on new vision and competence in order to comply with it, to spread an active position to all units of the organization without coercion "from the mountain", institutionalization of existing roles through formal policies of the system, monitoring and adjustment in response to problems [3-4]. The author emphasizes the key role of the human factor – the participation of staff in ensuring the implementation of change.

As part of our study, we emphasize that the competencies of staff need to be changed, which include knowledge, skills, abilities, experience, business qualities, general health, culture, behavioral characteristics – everything that can be assessed in relation to the employee and affects the results of his work [5, p. 60-65]. That is, the area or object of change is the staff, which is inseparable from their competencies, which must be influenced by personnel management to achieve the desired values of parameters that reflect all components. Thus, to ensure the effectiveness of organizational change in terms of the human factor, it is necessary to have a description of future competencies of staff in accordance with the new characteristics of the processes, both basic and supporting. This profile of future competencies will provide a justification for the essence of staff development. And in order to achieve the goals set for the processes of staff development, the system of incentives in the organization must be analyzed, which can be modified if necessary. This applies directly to the staff development system. If the need for training and retraining can be realized within the existing system, then the need for change is absent. If these needs exceed the available capacity, the personnel development system in the framework of personnel management should be adjusted. Based on this, we can say that the personnel management system, including development, personnel policy, social development of the team, is a tool to ensure the effectiveness of organizational change.

K. Carnall identifies the following areas of effective change management: effective transition management, organizational culture management and organizational policy management.

H. Shevchenko proposes the following conditions for the effectiveness of change: understanding change as a learning process with a high degree of uncertainty, defining the project of change as a non-standard situation with no rules, procedures, where creativity and initiative are the main components of successful change, identification of critical points and problem solving, providing changes with appropriate resources, the need to involve all stakeholders together with the initiative of senior management, systematic changes and familiarization of employees with the scope of their implementation [6, p. 103].

As we can see, most of these conditions are implemented within the project approach to the organization of changes. Instead, it is impossible to agree with the author about the unusual situation and the impossibility of developing rules and procedures for each draft change. Each organizational change is unique and inimitable in its own way, but these are the key features of the project, which allows us to argue about the need to develop a procedure for implementing organizational change within the project approach, mastering the basics of project management, which will simplify and accelerate at the enterprise. Instead, the importance of involving stakeholders in the implementation of organizational change is important and necessary, but requires the development of a procedure and basis for cooperation in building a management system for implementing organizational change.

One measure that can combine the use of staff development and goal-setting tools with indicators that can directly assess the achievement of defined goals is a performance management system. There are a number of comprehensive models that describe how performance can be managed.

There are many approaches to business performance management: Economic Value Add, Value-Based Management, Management by Objectives, European Foundation for Quality Business, Six Sigma, Balance Scorecard, the prism of efficiency and a universal system of performance indicators.

Most of them are focused on the current activities of the enterprise and their implementation in change management is very difficult and time consuming. Consider only the most appropriate.

E. Neely, K. Adams, M. Kennerly [7] in the developed "Efficiency Prism" highlighted the contribution and satisfaction of stakeholders, the key of which they considered investors, customers and intermediaries, workers, regulators and the community and suppliers; strategies that are needed to satisfy all stakeholders; processes required for the implementation of these strategies; opportunities to manage these processes. Particular attention in the framework of the proposed approach is the developed "success cards" and "failure cards" in the relationship with all stakeholders and a detailed methodological elaboration of the criteria for each stakeholder in terms of the above components of the model.

The BSC [8] is known to address areas such as finance, consumers, learning and development, and internal processes. Within each direction, ways of measurement, expectations and indicators are developed.

The universal performance indicator system, developed by H. L. Rampersad [9], includes the following five elements: personal and organizational system of balanced scores, general quality-based management, performance management and competence management. These elements should ensure the process of continuous improvement, development and learning. At the next level in the model, these elements are decomposed. Thus, the two systems of balanced scores are specified in terms of mission, vision, core values, key success factors, goals, performance indicators and their target values and actions for improvement. General management based on quality and competence management should be implemented on the basis of the Deming cycle, the development of professional competence and the Kolb training cycle.

In the framework of our study to build a management system for the effectiveness of change from the above approaches should use:

- building relationships with stakeholders based on the analysis of "benefits and costs" for each alternative project changes at the stage of their implementation after determining the scale of their implementation;

- development of a system of goals and balanced scores for the individual level of employees, for the group level of the team or unit involved in the implementation of change, for the overall organizational level, which combines change in all units;

- ensuring coordination between balanced systems of indicators of individual, group and organizational level with the interests of stakeholders.

Let's take a closer look at each of these components.

When an enterprise is faced with the need to make changes in accordance with the challenges of the external environment, the question is how to implement the planned changes. Alternatives should be developed, for each of which the benefits and costs of all stakeholders should be assessed. To do this, it is important to justify a set of criteria and indicators. Since the stakeholders that we propose to consider separately from the staff in the model are related to the external environment, the division of criteria by areas is not appropriate. It is enough to limit the main indicators, such as: total income of shareholders, sales of products for the last period, earnings per share, total income of shareholders, the level of liquidity, profitability. If investors are required to provide additional funding for the implementation of organizational changes, then upon their implementation they should be offered appropriate benefits. The analysis of "benefits and costs" involves the development of several alternatives for investors with different options for raising additional funds and, accordingly, different benefits.

Another important stakeholder is consumers and intermediaries. Even if it is under the influence of consumer needs that the idea of the future vision of existing products or the introduction of a fundamentally new one is formed, the final version of the implementation of changes requires the perception of consumers. Here, the analysis of "benefits and costs" is carried out in accordance with the study of product competitiveness, the number of customer complaints and claims about the warranty period, the number of returned defective products, the level of savings received by customers. The development of alternatives assumes that in each case it is necessary to calculate what additional costs the consumer or intermediary must incur in exchange for the additional benefits received with the

upgraded products. Most consumers who traditionally meet the demand for products will not buy more expensive products if they do not receive a corresponding increase in quality, comfort or cost savings for its use. For the engineering industry, these criteria should be expressed in reliability, durability, reserve of work before the first failure, efficiency in the use of resources. The role of intermediaries significantly depends on the position of the company in the market and in fact can be revised only in the case of significant changes in the supply chain. If the company sells more than 25% of its products through intermediaries, here to increase their level of interest in the sale of new products, should be reviewed the terms of products for sale in terms of discounts, payment terms, delivery, etc.

Regarding the construction of interaction with suppliers, the analysis of possible alternatives depends on the management analysis of the feasibility of implementing various options for change and dependence on individual suppliers. Large machine-building enterprises and agricultural enterprises in particular traditionally interact with similar enterprises in Ukraine and abroad. If it is necessary to make changes to the specifications of products and semi-finished products and in case of dependence on suppliers, the company must agree with these changes and get assurances about the implementation of updated needs. Criteria for analysis can be indicators of supplier satisfaction, terms and conditions of payment, compliance with the procurement plan, the number of changes in specifications.

Such stakeholders as regulators and communities, in contrast to the previous ones in terms of cost-benefit analysis, should be analyzed mainly not from a quantitative but from a qualitative point of view. In fact, the influence of regulatory bodies is due to existing legislation and the tax system. To the greatest extent, the company depends on obtaining the appropriate licenses and permits and the level of tax burden. In addition, public authorities are interested in providing jobs for enterprises. On the other hand, if it is necessary to build new divisions of the enterprise (especially for production purposes) in the relevant area, this should be agreed with local authorities. Therefore, the criteria here should be: the amount of taxes paid by the company, the implementation of socially responsible business, such as: employment of people with disabilities, investment in the formation of local infrastructure, the number of additional new jobs.

Credit institutions with which enterprises interact should be recognized as a separate stakeholder. In Ukraine, due to the high cost of credit resources, the impact of this counterparty on the activities of enterprises is particularly significant. As you know, they are always interested in obtaining loans with the appropriate amount of interest paid on time. When an enterprise raises the issue of obtaining additional credit on new terms, financial institutions should be interested in this. The criteria should be indicators of liquidity, solvency, profitability, availability of working capital, credit history. All this set of indicators can be used to determine the level of readiness of the enterprise as an information base for banking institutions in making appropriate decisions. In addition to the analysis, there should be risks of implementing organizational changes, which should be described in detail, assessed and presented in case of need for additional credit funds.

The last step in the implementation of this element of the management system for the efficiency of organizational change is the selection of the best alternative on the set of the above criteria, which reflect each stakeholder. Hierarchy analysis method can be used to solve this problem.

After substantiating the alternative, the next step is to develop a system of goals at the individual, group and organizational levels in terms of these four areas, and determine the indicators and their desired values by which the implementation or achievement of these goals can be measured. For each industrial enterprise, depending on the level of automation of its production process, these indicators should be developed individually at the stage of developing the concept of organizational change.

An example of a system of goals and indicators at all levels is given in Table 1.

To achieve harmony between these systems of goals and indicators, it is best to provide the opportunity to independently develop such indicators for each unit affected by organizational change.

The same should be offered for each individual member of the units. The company's management should develop such a system at the organizational level by holding direct meetings with department heads.



**Table 1. The system of goals and balanced scores (developed by [9; 10])**

Spheres	Purposes	Indexes	Desired values
Individual level			
Processes (technologies)	Increase productivity indicators	Level of labor intensity of production of unit of production	Reduction by 10%
		Ratio of manufactured products to spent man-hours	Increase by 20%
Organizational culture (communications)	Reduce the level of conflict in the team	Number of conflicts on the number of teams	Reduce by 50%
		Get on the personnel reserve list	During the current year
Spheres			
Purposes			
Indexes			
Desired values			
Organizational structure (hierarchy)	Increase the level of involvement in the team	Join the new project team	Within 6 months
		Develop and propose an alternative to the implementation of the planned organizational changes	One within three months
Key competencies of staff	Increasing the level of competence	Obtain a certificate confirming the level of qualification in the relevant field	1 during the year
		Suggest improvements to your current processes	4 throughout the year
Command level (unit level)			
Processes (technologies)	Improving the level of quality, safety and reliability	The number of defective products, complaints compared to other departments	50% lower than the average for the company
		The level of injuries at work in comparison with other departments	
Organizational culture (communications)	Improving the efficiency of teamwork	Coefficient of communication means	Increase by 20%
		Staff turnover rate	Decrease by 20%
Organizational structure (hierarchy)	Increase the level of efficiency of interaction with other departments	Coefficient of management costs	Reduce by three percent
		Value added of production for one production hour	Increase by 5%
Key competencies of staff	Increasing the level of staff development	Coefficient of staff development	Increase by 10%
		Share of trained employees	Increase by 20%
Organizational level			
Processes (technologies)	Improving the level of quality, safety and reliability	Coefficient of implementation of new technologies	Increase by 20%
		Indicator of introduction of new or improved products	Increase by 10%
Organizational culture (communications)	Increase employee loyalty	The level of absenteeism due to absenteeism and violation of labor discipline	Less than 1%
		Proportion of violators of labor discipline	Less than 1%
Organizational structure (hierarchy)	Increasing the level of correspondence between the nature of the enterprise and its structure	Norm of control	Not more and not less 7
		The ratio of the number of horizontal communications to vertical	50% to 50%
Processes (technologies)	Increasing the level of staff development	Coefficient of staff development	Increase by 10%
		Proportion of employees who have been trained	Increase by 20%
		Share of staff training costs of the company's total costs	Increase by 20%

In fact, the main intentions of the company should be brought to the units in terms of planned organizational changes in the process of these actions. It is expedient to provide structural subdivisions

with the freedom to develop their own system of goals and indicators simultaneously with the development. The next step is to coordinate organizational, group and individual systems within the unit through meetings and seminars. The last stage is the final approval of the organizational system of goals and indicators, taking into account the clarifications provided by units and individual members of the team.

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# INTERNATIONAL EXPERIENCE AND DEVELOPMENT PROSPECTS OF FORENSIC IN UKRAINE AS A METHOD OF INVESTIGATION OF INTERNAL FRAUD

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Internal fraud is one of the most important problems for the company and a rather dangerous phenomenon that has many adverse consequences (damage to business reputation and loss of profit).

To combat this phenomenon, Western companies use an effective type of control – forensics. It helps to identify potential financial and non-financial problems and aims to analyze both the internal and external environment of the company (corporate intelligence) – analysis of related parties, personal dynamics of the financial condition of the top manager [1].

In Ukraine, forensic investigations are conducted by companies from the "big four" and many other audit and consulting firms, but forensic is still more popular in theory than in practice. This word is not known at all to most small and medium-sized companies.

Ukrainian business admits that it faces fraud, but is afraid to order an independent investigation, not wanting the unhealthy situation at the company to become known to others.

In general, the development of the forensic system as an effective method of investigating internal fraud cases in Ukraine is constrained by the following factors:

1. Lack of standards governing this type of control and a single methodology established at the legislative level.

For example, in Australia, the process of regulating the activities of forensic specialists is carried out by three professional organizations: the Institute of Chartered Accountants of Australia and New Zealand (ICAAANZ); Certified Practicing Accountants of Australia (CPA Australia); Institute of Certified Public Accountants (IPA). These organizations are guided by the requirements set out in the Australian Code of Ethics for Professional Accountants, which sets out the basic requirements for the professional competence; obtaining and gathering evidence; quality control and other issues of professional activity in the provision of forensic services [2, p.10, 3, p.358].

When conducting forensics, American specialists follow the Statement on Auditing Standards No. 99 issued by the Auditing Standards Board of the American Institute of Certified Public Accountants (AICPA) in October 2002. The standard describes fraud characteristics and procedures for their detection [4].

Thus, the standardization of forensic activities greatly facilitates the work of the expert, as it provides for the unification of approaches to this type of control.

2. Lack of a unified system of training forensic specialists and a very narrow range of services in this area.

Today in Ukraine, the forensic service is provided mainly by auditors, but the specifics of conducting financial investigations imply that the auditor has specific knowledge that a practicing auditor may not have.

However, in many countries, including Australia, Canada, USA, Ireland, India forensic services are provided by certified forensic specialists.

Thus, in Canada, training of specialists in this field has been established within the joint work of the University of Toronto and the Alliance for Excellence in Investigative and Forensic Accounting

(IFA Alliance). These institutions have developed a special two-year training program "Diploma in Forensic Accounting (DIFA)", designed to provide a graduate professional accountant, or equivalent, with the skills, knowledge, insights and professional characteristics necessary to successfully respond effectively to:

(1) the challenges of investigating fraud, other aspects of white-collar crime, and other financial disputes, and

(2) the provision of reports, advice and evidence to clients, lawyers and courts for the resolution of situations relating to possible or pending civil or criminal legal proceedings [5, p.37].

In the United States, the program of the second cycle (master's degree) of the Florida Atlantic University includes 9 courses in the training of forensic specialists.

In the United States, in order to be a certified forensic specialist, a candidate must have:

- bachelor degree;
- professional experience of at least two years;
- submit documents for passing the exam to the Association of Certified Specialists in Crime Investigation.

Most forensic experts have certifications and the status of Certified Fraud Examiner (CFE) and CPA (Certified Public Accountant). To obtain a CFE certificate during the year a candidate must pass an exam in the following subjects:

- fraud in financial transactions;
- legal aspects of fraud;
- fraud investigation;
- criminology and ethics.

The National Association of Certified Valuation Analysts (NACVA) conducts certification under the Master Analysts in Financial Forensics (MAFF) program. To obtain a certificate, it is necessary to confirm knowledge in the following areas:

- assessment of economic damage;
- insolvency, bankruptcy and restructuring;
- assessment of business during litigation;
- violation of intellectual property rights and damage to business;
- financial investigations;
- risk management of fraud.

In Australia, the activities of forensic specialists working in government agencies are subject to mandatory licensing. Experts conducting external investigations to detect fraud (for example, the Australian Tax Office, ATO) are required to obtain a Certificate IV in Government (investigations), and for internal experts – certificate of specialist in fraud prevention (Certificate IV in Government (fraud control)) [6].

Australian higher education institutions offer prospective forensic professionals both stand-alone degree programs (eg, University of Melbourne, Queensland University of Technology, etc.) and separate fraud and financial investigation courses (eg, RMIT), University of South Australia, etc.) [7, p.198].

In order to develop this type of service in Ukraine, it is also necessary to take into account foreign experience in the process of training forensic specialists. Namely, it is necessary to start training forensic specialists by including specialized courses in the curricula of higher education institutions. Cooperation of Ukrainian professional organizations with foreign professional organizations should also be developed in order to provide specialists with the opportunity to obtain international certificates, as well as to involve audit, legal and consulting companies in the process of professional training in forensics.

In order to improve the methods of conducting forensics, we propose to use special indirect methods based on mathematical models, namely:

- 1) Benford's law testing method indicates unwarranted or suspicious duplication of data. The mathematical value of this method allows to find the limits of expected (normal) duplication, and duplication above the allowable limit is defined as abnormal or redundant.

Analysis of numerical data during forensics should reveal abnormal records, as well as the fact that they are likely to indicate wrongdoing. Further such records are studied in more detail. Forensic experts offer a concept of scoring, where the maximum score correlates with the most suspicious record. The technology of such analysis is based on Benford's law.

The fraud investigation technique, based on Benford's law, qualifies as a high-level review. It is designed to direct the work of a forensic specialist in the following areas: identification of fraud with a large number of repeated episodes, the search for systematic errors, processing ineffective data [8, p.400-403];

2) testing method based on the mathematical model of Benisch's M-score. This model, by calculating several components of financial ratios, allows you to determine whether the entity manipulates the income or not. The values of the coefficients are obtained on the basis of financial statements and, substituting them in the formula M-score, determine the degree of manipulation of income. The calculation of the model includes a number of indicators that are defined as "signals of manipulation".

This model has the following form:

$$\begin{aligned} \text{Accruals} = & \Delta \text{ Current Assets} - \Delta \text{ Cash and Marketable Securities} - (\Delta \text{ Short} \\ & \text{Term Debt} - \Delta \text{ Current Portion of the Long Term Debt} - \Delta \text{ Deferred Taxes} \\ & \text{and some other Legal Liabilities}) - \text{Depreciation Expenses} \end{aligned}$$

These indicators are determined by the corresponding fractions, which are calculated by Benish methods of mathematical statistics, and are added. Thus, Benisch's M-score takes the following form:

$$M = -4.84 + 0.92 * DSRI + 0.528 * GMI + 0.404 * AQI + 0.892 * SGI + 0.115 * DEPI - 0.172 * SGAI + 4.679 * TATA - 0.327 * LVGI$$

If the figure is greater than -2.22, it indicates the probability that the company is a manipulator of income [9, p.30].

Thus, the application of the methods of forensic investigations considered in the paper will increase the efficiency of financial investigations in Ukrainian companies.

Among the services provided by Ukrainian audit, legal and consulting companies, there is a forensic audit service. However, forensic auditing companies (Spencer & Kaufmann Law Firm, Kreston GCG, Deloitte Consulting, Otten Consulting, Credo Audit) provide a very narrow range of services in this direction.

Therefore, in order to develop forensics in the Ukrainian market, we offer companies to expand the content of services in this area. The main content of the offered forensic services is presented in Table 1.

### 3. Slow development of computer forensics.

Computer forensics involves computer technical examination using the latest technologies and preparation of expert opinion; collection of electronic evidence; search, analysis and storage of electronic data; recovery of deleted files and decryption of protected information.

Regulatory regulation in this area in Ukraine does not keep pace with the development of technology, which exacerbates the problem of cybercrime. According to the International Intellectual Property Alliance, Ukraine is recognized as a "pirate G1" in the world.

In Ukraine, businesses are wary of cybercrime: 16% of Ukrainian respondents not only expect cyber attacks on their organizations in the coming years, but are convinced that they will be most significant to them in terms of financial loss or other consequences. Despite this, most of them are not only insufficiently prepared for cyberattacks, but also do not fully understand the risks they may face [12].

More than a third of Ukrainian companies affected by cyberattacks have been affected by malware, and only one in three (31%) has a fully functioning cybersecurity program to protect against cyberattacks [12].

**Table 1. The proposed structure and content of forensic services**

Type of services	Content of the service
Financial investigations	Analysis of the company's current security systems. Evaluation of procedures and internal policies. Checking the efficiency of activities and assessment of financial losses by processes: production, supply, sales. Establishing the facts and causes of fraud. Search for stolen assets. Organization of management and control to prevent financial fraud and fraud
Building a system to combat fraud	Preparation of an action plan to combat fraud. Organization of the corporate hotline. Organization of the work of the economic security and internal control service.
Corporate intelligence	Collection and analysis of data on the reputation of business partners. Information support during financial investigations. Search for stolen assets. Information support in lawsuits and conflict situations. Search for new business opportunities
Expertise	Extrajudicial examination – preparation of information for taking administrative measures. Pre-trial examination – preparation of information for court proceedings. Forensic examination – judicial support in Ukraine and abroad; providing expert evidence
Ethics and Compliance	Advising on risk management in the field of corporate business. Analysis of corporate structure, international structuring. Analysis of related parties, including associates and affiliates. Adherence to corporate procedures, policies, standards. Development and implementation of anti-corruption and anti-corporate fraud procedures. Development of corporate standards and business ethics, as well as risk management regulations
Protection of intellectual property, fulfillment of contractual conditions	Investigation of situations with relationships that arise in the licensing of various forms of intellectual property rights. Comprehensive investigation of problems related to the fulfillment of contract conditions
Automation of anti-fraud decisions	Diagnosis of existing fraud risk management practices. Development and implementation of a targeted system of fraud control and management. Design and implementation of anti-fraud systems

Source: supplemented by the idea [10, p.262, 11, p.136]

In such cases it is extremely important to involve experts in computer forensics to implement the necessary technological solutions that will help companies quickly and efficiently analyze events and make the necessary management decisions in a timely manner.

Competent investigation of crimes, in particular illegal actions related to the use of high technology, is one of the key issues for any state, including Ukraine.

Thus, the development of the forensic system as an effective method of investigating internal fraud cases in Ukraine is constrained by a number of factors, including: the lack of standards governing this type of control and a single methodology enshrined in law; the lack of a unified system of training forensic specialists and a very narrow range of services in this area; slow development of a variety of forensics – computer forensics.

In order to develop this type of services in Ukraine it is necessary:

- take into account foreign experience in the process of training specialists in forensics;
- to expand the range of services in this direction;

- to improve the method of conducting forensics, namely: to apply special indirect methods based on mathematical models, such as: the method of data testing based on Benford's law, the method of testing based on the mathematical model M-score Beneish. The application of these methods will increase the efficiency of financial investigations in Ukrainian companies.

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# **SUBSTANTIATION OF THE METHODOICAL APPROACH TO FORMATION OF A PORTFOLIO OF PROJECTS OF STRATEGIC CHANGES AT THE ENTERPRISE**

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Project Management has recently become increasingly popular. There are a number of reasons for this. In management theory, this branch should be considered relatively young. The first mention of project management is related to the US space sector and dates back to 1953, and the position of "project manager" was mentioned in the magazine "Harvard Business Review" in 1959. From the late 60's to early 70's began to form the first institutes of project management, international associations, which was further developed and took the form of standards, which primarily combined such areas of knowledge as: time, cost, quality, requirements, resources and communications management. Subsequently, procurement and risk management was given, later – integration management, in 2013 – stakeholder management, and in the last issue of 2018, the emphasis was on adaptation to the project environment, which includes strategic change management, along with flexible development methodologies of products.

Project management was primarily seen as a methodology for managing results, which was due to the inability of classical management models in the mid-80's to provide the required level of dynamics. In addition, the high level of dynamics places new demands on the functioning of enterprises, change is seen as an integral part of its development and the need to use, project management due to its flexible methodology is often seen as change management.

Project management in the domestic scientific space emerged in the mid-80s of the twentieth century in the field of systems analysis and information technology, which led to leadership in systems description of processes, a high level of standardization of management practices, widespread use of mathematical models and more. Now this field of knowledge explores the phenomena and essence, connections and patterns in the processes of management of project, programs and portfolios.

The limited use of significant scientific achievements in the field of project management in economics is due to the fact that the formers are classified as technical. On the other hand, the interdisciplinary nature of the interaction of economic research and the project approach has significant potential for new scientific results, mainly in the economic sphere.

Implementation of partial changes allows to be limited exclusively to management of separate projects. Instead, our study emphasized that strategic change involves the reconfiguration of subsystems and processes, which requires comprehensive transformations in various areas of the subject area. This indicates a lack of use of project management, and requires the development of a methodology for managing project portfolio of strategic changes.

From the point of view of one of the most famous researchers in the field of project management in Ukraine S. D. Bushuyev, portfolio management should be understood as aggregate management of both projects and programs of the organization to optimize productivity, equalize portfolio risk parameters and harmonize projects in relation to the organization's strategy as well as their implementation within the budget [1, c. 25].

From a financial point of view, portfolio management is the understanding of centralized and systematic management of one or more portfolios, which include relevant prioritized, authorized (officially recognized), coordinated and controlled projects in order to achieve certain business goals [2].

The goals of project portfolio management are considered [3, p. 64]: their choice among many alternatives to achieve the goals of the enterprise; balance between short-term and long-term projects,



between risks and income from their implementation; proper provision of projects with resources together with the desired level of efficiency of their use; finding ways to improve the efficiency of the project portfolio; comparative assessment of projects and its interactions; ensuring a sustainable and effective project management mechanism; providing advice and guidance to managers at the appropriate levels to make adequate decisions.

Given that the implementation of strategic changes, the company aims to reconfigure the existing subsystems and key processes of value added, purpose of these changes must be detailed for each company, which is pre-agreed with the current strategy of the enterprise. The portfolio management of strategic change projects should be focused on the realization of their general goal, which serves the "global" project selection criteria.

Based on the above statements, for the effective implementation of strategic changes, it is advisable to combine the management of programs and portfolios, where the latter are traditionally considered at the aggregation level higher than programs.

Based on the above, the methodology of project portfolio management differs from project management. There are a number of approaches to project portfolio management. It is worth focusing on the most common.

Standard for Portfolio Management presents the best practices of portfolio management, including the features of program management, which emphasizes the need to establish links with the strategy of the enterprise, the ability to track the achievement of goals through integrated management. Also considered in this standard cooperation with national regions. Process groups within this standard consider equalization, monitoring and management. In addition, they consider the preliminary output of the strategic planning process in the form of a plan, and at their output there are component processes. The management algorithm provides for the current strategic plan to define and categorize goals, identify key performance indicators, identify opportunities, followed by a phase of identification, categorization, evaluation and selection, which are logically related to prioritization, portfolio balancing and approval, followed by implementation and reporting, followed by a review of the portfolio and reporting on it, based on the results of which the need to change the strategy is considered. The group of equalization processes is aimed at providing current information to achieve goals and evaluate the components of the portfolio. The group of monitoring and control processes ensures the implementation of actions in accordance with the metrics of progress [4].

Identifying portfolio components involves creating a list of projects, sub-portfolios, programs and initiatives. The compliance of the strategy is assessed. Grouping of projects involves their redistribution into 4 standards according to the characteristics of work processes, management structures, team intelligence and information technology. Project evaluation and selection involves the definition of criteria and indicators for each group of projects, which is carried out on the basis of quantitative analysis. Each group's projects have an appropriate set of criteria, and estimates can be based on systems of conditional metrics and weights. As a result, a list of recommended projects is formed. At the stage of determining priorities, projects are ranked: priorities within the group are placed on the group of the portfolio or on the whole portfolio as a whole. The criteria can be used: the level of profitability for the company, the significance for the portfolio and the degree of adaptation to the environment. At the stage of portfolio balancing, investments are distributed among its components depending on value creation and risks. The analysis is carried out in terms of groups of projects. To optimize them, projects are moved from one group to another. The accounting of resource provision must be carried out in accordance with the terms of needs. At the stage of portfolio authorization, its structure is approved and implementation begins. Given the many stakeholders of all projects, the search for common interests and the creation of a project community is carried out [5; 6].

Creating portfolio value plays one of the most important roles in substantiating its structure. The paper [5] presents the methodology of value-oriented portfolio management with the classification of portfolios by types of competing values of K. Cameron and R. Quinn and the spirals of development of the organization D. Beck and K. Cowen. To create new values, the portfolio must take into account the expectations of stakeholders, requires the identification of their values by evaluation, combining experience to obtain the planned value [6].

Another standard is P2M [7], developed by the Japan Engineering Development Association and the Japan Project Management Association. In this standard, the focus is on creating value for both projects and programs and portfolios. Accordingly, program and portfolio management requires additional action beyond action on projects, which requires both costs and additional benefits. The methodology explains the combination of programs and portfolios with business strategy.

In addition to these standards, there are a number of methods of portfolio management. But unlike standards, which cover all management processes in general, the methods are considered in most ways to justify the best set of projects in the portfolio. In addition to the methods of substantiating the composition of the project portfolio by criteria, there are other approaches to their development.

Summing up the generalization, it is necessary to make a number of key provisions on the approach to substantiating the portfolio of strategic change projects. Among the models and approaches, there is no unambiguous set of defining characteristics according to which the project portfolio should be formed. In fact, all models use a different set of criteria for selecting projects for the portfolio together with the mechanism of this selection. It is worth noting the difference between the "criterion" and the "parameter" of the project.

The parameters should be understood as the magnitude, the value of which allows to distinguish individual objects from each other. Instead, the criterion is a measure used to classify objects within a set. Such differentiation is critical to understanding the description of projects in the portfolio. The set of parameters allows you to create a preliminary description of all projects, some of which are used as criteria for selecting projects for the portfolio. This allows us to classify the considered features within the models as parameters and as criteria. All estimates that classify each project should be recognized as parameters. Individual parameters, according to the values of which projects will be selected in the portfolio, are the criteria. The criteria themselves should be classified into selection, restrictive and optimization criteria. The first group of criteria concerns those parameters whose value is described by binary numbers: in case of compliance the project is accepted and has value "1", in case of discrepancy it is rejected and receives value "0". Such criteria should include consistency with stakeholders. From the above generalization taking into account the interests of stakeholders is not presented in all models. Based on the developed concept of strategic change management, the need to take into account their interests is critical, which allows us to consider it as selective. Another criterion for selection should be the compliance with the overall goal. Due to the very high importance of this criterion, it should be considered both as a selection and as optimization criteria. In the stages of pre-selection of projects in the portfolio, those that do not meet the goal of strategic change should be abandoned at the earliest stages. In the future, depending on the level of compliance of each project with the strategic goal, a final portfolio of projects is formed.

Restrictive criteria, the total values of which establish the possibility of implementing a certain number of projects in the portfolio, include the amount of the budget and available resources. Unlike the previous selection criteria, these are not unambiguous and categorical. Strategic changes are long-term and flexible, that is why considering the availability of resources or the available budget is not entirely consistent with their content. On the other hand, the analysis can generate a very high number of projects, the implementation of which, even with allocated budgets can become an unbearable burden for the company. This indicates the need to determine the targeted allowable amount of the budget, which should be guided by prior approval of the portfolio. The relationship between resources and budget is to determine the composition of the required resources by groups: in the absence of resources of the required quality in the required amount, the budget can be used to obtain them. Human resource planning remains the most difficult issue. Involvement personnel to the projects of strategic changes implementation that do not correspond to the existing ones at the enterprise in terms of specialties or qualification level, as well as training for the staff of the enterprise requires separate coordination within the portfolio. The second critical resource is the existing equipment, which requires the analysis of capacity reserves or justification for the acquisition of new based on the objectives of the portfolio. In practice, this criterion is used in the financial dimension at the preliminary stage of substantiation of the portfolio structure. Time constraints can be used as selection criteria when the implementation of projects within the portfolio requires more time than the duration of the pessimistic scenario of entering the market for a new product, or in a situation where the duration of the project in

the relevant field is greater than the company's permission to implement it. This allows us to consider this criterion as variable selection. In any other situation, time is considered as a project parameter.

All other features of the model should be considered as optimization criteria. First of all, it concerns risks. This criterion together with the expected economic efficiency is most often used in all considered models.

This criterion includes the assessment of the degree of uncertainty and allows to take into account the sensitivity to the external environment. Its importance is justified by the fact that its use is used to assess the success of the project. Estimation of profitability can be carried out using the classical formulas for calculating the net present value of the theory of the value of money over time, or using the parameters of probable scenarios of project implementation. The analysis of the relationship of projects should be considered not as criteria but as a parameter, as within the portfolio the priority is to achieve the strategy of the enterprise, and in the context of strategic change management – the implementation of set of goals. Instead, interrelated projects that shape programs require separate research, because a program, unlike a portfolio, cannot exclude a project without critically harming its goals.

On the basis of substantiated key provisions on the selection of project criteria in the portfolio of strategic changes, we present the general sequence of the approach to its formation.

The first stage. Preparatory. As a result of the analysis of the level of environmental impact and assessment of the potential for strategic changes, projects for their implementation at the enterprise are developed, each of which is described by the following parameters: duration, amount of required resources by types (with mandatory human and technical), different scenarios (pessimistic, optimistic and most probable), description of the most significant risks of the project, determined goal of implementation and expected economic efficiency.

The second stage. Selection of alternatives according to selection criteria. Many projects are brought to the attention of all stakeholders in the implementation of strategic changes in the enterprise. The most appropriate method of determining the views of stakeholders and obtaining an overall picture should be considered the Delphi method, the content of which is an individual assessment of possible alternatives by all stakeholders. The main purpose of the evaluation is to determine the commitment or refusal of support from stakeholders. After the first stage of the analysis, when the projects that received the highest number of failures are identified, re-interaction with stakeholders is carried out with an adjusted portfolio of projects. The possible discrepancy of experts' opinions on many projects is solved by a step-by-step examination. In the presence of persistent conflicts – it is necessary to organize joint communication events to discuss the desired portfolio of projects. Given the specificity of individual stakeholders, communication, regarding the composition of the project portfolio, may be limited to owners, managers, investors and technical contractors, taking into account the specifics of the industry.

The third stage. Analytical. After the selection of projects, the key values of the criteria for evaluating all possible options of the portfolio are calculated. Based on the generalization, the set of criteria for evaluating projects of the strategic change portfolio should be presented as follows: the amount of investment, the required amount of resources (in man-hours), the expected profitability of the project, the level of risk and relevant objectives of strategic change. There is a variant of calculating the expected return and level of risk, which best allows to assess the probability of these two indicators in [8]. It is proposed to calculate the expected return as a weighted average of the level of profitability on the probability of obtaining it, and the level of risk is the standard deviation. The degree of achievement of the goals of strategic change can be assessed only by expert methods, for this purpose it is offered to carry out ranking of projects on measure of realization of the purposes of strategic changes where agreed according to experts it is offered to calculate with use of coefficient of concordance. Experts should involve all stakeholders, project implementation technicians, information technology specialists, and managers at all levels.

The fourth stage. Design. At this stage, the values of the portfolio are calculated. Based on the obtained set of projects, portfolios are built, each of which includes arbitrary interaction of selected projects. Taking into account the previously implemented stages, the portfolio options differ except for each of them by 1 or 2. As a result of the grouping, a generalized assessment of each portfolio is

performed on the basis of five selected indicators. To select the best project, it is advisable to use the method of taxonomic analysis proposed by V. Plyuta, the content of which is to calculate a conditional standard – in our study it is a conditional portfolio of projects – the values of which are the best among the whole set. After that, the distance of each of the actual portfolios to the reference is calculated, where based on the calculations, the best portfolio is determined as the one closest to the reference. The resulting portfolio is considered the best, and its composition is final before implementation.

Fifth stage. Completion. The resulting set of portfolio projects is analyzed for the relationship between them, the search for common goals, which will have a synergistic effect and thus strengthen the ability to achieve the goal of strategic change. The generated project profile is communicated to the stakeholders together with the communication plan for monitoring its implementation.

Thus, based on the generalization of the existing methodology of project portfolio management, which belongs to the field of technical sciences, a modern approach to the formation of a portfolio of projects is designed to implement strategic changes for the company, which differs in the sequence of stages portfolios using selection, restrictive and optimization criteria. The obtained results are on the border of economic and technical sciences and have a strong potential for cooperation for further development in order to ensure the sustainability of the operation to increase the competitiveness of domestic enterprises.

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# FEATURES OF MODELING OF ECONOMIC SYSTEMS IN CONDITIONS OF UNCERTAINTY

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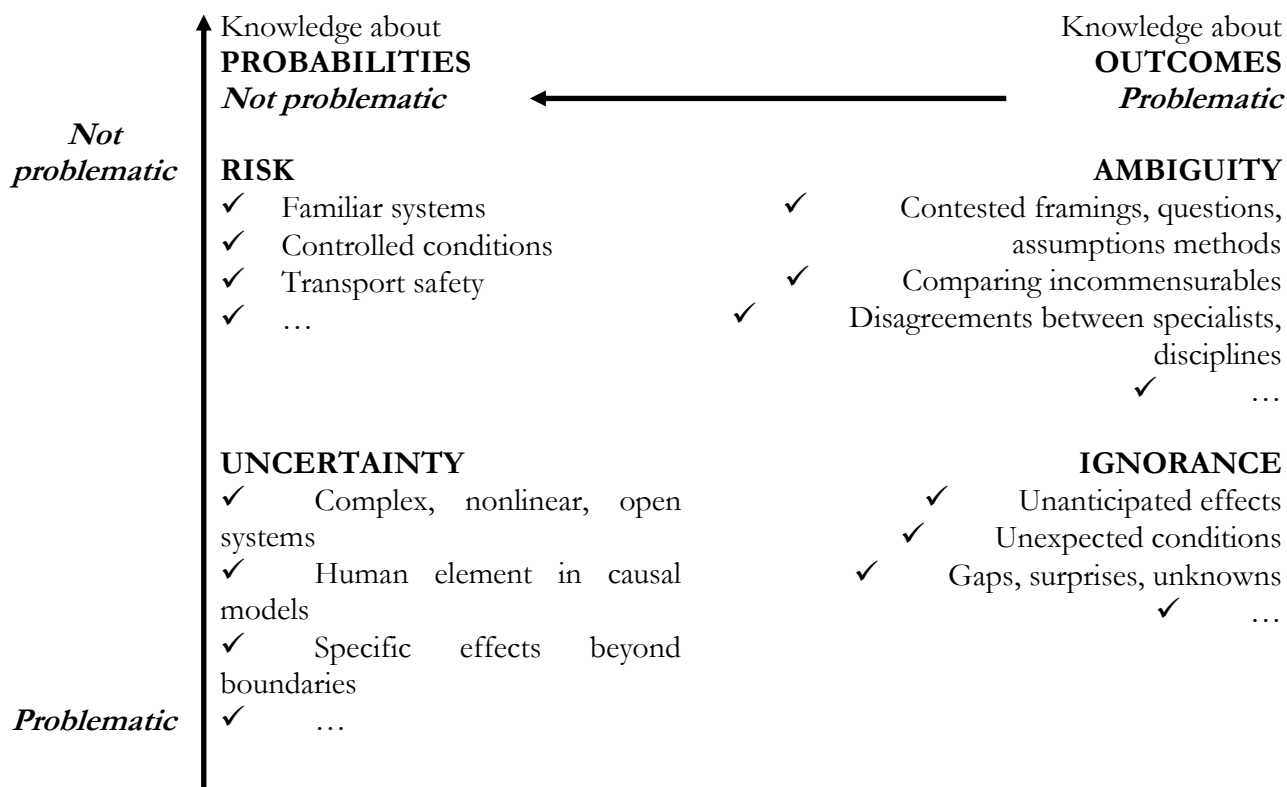
The current stage of development of economic systems is characterized by high uncertainty, which significantly complicates their management. In the process of managerial decisions making, the problem of predicting the behavior of the system and the external environment is arises. The results of the forecasts require constant adjustment, which allows us to adapt to changes in the environment and flexibly respond to their negative impact. Modeling economic systems makes it possible to carry out many forecasts for various scenarios, depending on the dynamic formation of various situations of significant complexity and leads to an improvement in their management. Economic systems of different levels are in difficult situations and have an indefinite character of development, which makes it impossible to use traditional methods of mathematical modeling to select strategies for their safe development. Therefore, it is necessary to determine modeling methods that allow for timely and informed decision-making aimed at reducing the level of uncertainty in the functioning of economic systems.

In the scientific literature there is a significant number of interpretations of the concept of "economic system", since the approaches of various researchers depend mainly on the level of abstraction they have adopted. In our opinion, the definition of "system" is sufficiently fully disclosed by a team of authors led by V. Bazylevych (2006), "an economic system is a set of interrelated and appropriately ordered elements of the economy that form a certain integrity, economic structure of society". Taking into account the purpose of the study, economic systems are considered by the authors as complex probabilistic dynamic systems in which the processes of production, distribution, exchange and consumption of material and intangible benefits take place. In practice, economic systems of various levels function and develop under conditions of uncertainty of all their main factors: future states of the economy, finance, market, prices for resources and energy carriers, investment volumes, demand for a new product, chances, as well as the future financial stability of organizational units included in the system. Uncertainty is "an integral attribute of reality, therefore, for an adequate description of reality, it is necessary that the conditions of uncertainty are included in the applied modeling and optimization methods" (Madera, 2017).

A. Kolomytseva (2013) identifies the following types of uncertainties corresponding to different levels of knowledge about the studied system:

- uncertainties of type I – uncertainties due to lack of knowledge about the features of constructing an effective system descriptor of the studied processes, which meets the requirements of the external environment;
- uncertainties of type II – uncertainties due to lack of necessary information for diagnosing the state of economy and the implementing of developed models and methods;
- uncertainties of type III – uncertainties associated with the untimely identification of the discrepancy between the main characteristics of the state of economy with their reference value, while the task of overcoming the consequences of these discrepancies or overcoming their negative impact becomes very urgent.

The greater the uncertainty in decision making, the greater the degree of risk. A. Stirling (2007) proposed a matrix characterizing the interdependence of uncertainty and risk (Fig. 1).



**Figure 1. Risk and uncertainty matrix [12]**

The matrix proposed by the researcher allows us to identify four types of situations in which economic and socio-economic systems function: risk, uncertainty, ambiguity and ignorance. The first option "risk" is relatively unproblematic for forecasting and modeling, can be quantified, which allows the use of statistical tools and methods.

Under uncertainty, we can characterize possible outcomes, but available information or analytical models do not provide sufficient basis for determining probabilities. In these conditions, they mainly use methods based on subjective judgments, expert assessments, etc., which do not give sufficiently substantiated results.

The third option "ambiguity" involves differences in assumptions, comparison of incompatible things, the main issues of trust and behavior, ethics and justice, and so on. Under these conditions, during the construction of models, the main problem arises not in the definition of probabilities, but with determining the directly possible scenarios for the development of events.

In a situation of ignorance, neither probability nor results can be determined. Ignorance differs from uncertainty in that the parameters are not only controversial but also at least partially unknown. This situation cannot be characterized as a risk, as the problem is not different opinions of experts or errors regarding probability, but ignorance of very possibilities.

Modeling of economic systems is the construction of a simplified image of an economic system for studying of its properties, forecasting, planning and calculations the consequences of management making decisions (Samsonova, 2018). The modeling is based on the principle of analogy and allows you to study the object under specific conditions, taking into account a one-sided point of view. An object that is difficult to study is studied not directly, but through consideration of its model (Vlasov&Shimko, 2005). The model of the economic system is a reproduction of the economic environment elements, the processes of their interaction and functioning, the reactions to changes in the environment.

Modeling of economic systems in increased uncertainty conditions of development should be carried out using scenario and simulation approaches, which are the most adequate for solving this problem.

Scenario modeling is "a tool for constructing not separate development trajectories, but a wide range of options for assessing the impact of various factors; is very effective in choosing the targets of

the strategy of economic system development and in assessing possible risks" (Hrytsenko&Bazhan, 2014). In the scenario approach, several scenarios of economic system development are considered, from which only one is selected, which transfers the system to a safe state. V.V. Kuznetsov (2004), D.A. Kononov, V.V. Kul'ba et al (1999) note that the application of a scenario approach is a fairly flexible tool for strategic planning.

The goal of modeling in the scenario approach is to build and implement a mathematical model of the economic system development and conduct experiments on its basis in order to reduce uncertainty by reflecting possible ways of development. In this case, the following steps are performed:

1. Determining the studied system structure, its input and output variables, control variables, controlled and uncontrolled parameters.
2. Formation the economic system states and determination of the main goals of its safe development of the corresponding scenario.
3. Formalization of the scenario model of the economic system safe development according to the selected criteria.
4. Choice of tool for implementing the scenario model.
5. Construction of scenario development options using the constructed model.
6. Analysis of alternative scenarios for the development of the system (Hrytsenko&Bazhan, 2014).

The use of a scenario approach involves the construction of models that explain the nature of phenomena and processes in the economic system; allow to carry out an assessment of a situation and the analysis of significant factors influence; determine the mechanism of interaction between the participants in the system and identify trends in its development; to produce directions of situation management; evaluate the results and consequences of management decisions; justify the choice of optimal strategies for the development of the economic system. It should be noted that typical scenarios need to be accumulated in order to develop all the most likely scenarios for the development of the situation in conditions of uncertainty (Bielaj, 2015). This will allow identifying all the typical situations for which it is necessary to develop state regulatory mechanisms.

Simulation is considered as an "experimental method for studying a real system according to its model, which combines the features of the experimental approach and the specific conditions of using computer technology" (Il'in, 2007). According to scientists [8, 10, 13, 15], this type of modeling is one of the most effective methods of studying economic systems. It is usually used in the following cases:

- in the management of complex business processes, when the simulation model of the economic system is used as a tool in the adaptive management cycle based on information technology;
- in experiments with discrete-continuous models of complex economic systems to track their dynamics in risky situations;
- in assist the decision-making process in order to study their alternatives and reproduce various scenarios for dissimilar input conditions.

S. Zhuravlev (2009) suggests the following steps in building a simulation model:

1. Formulation of the research goal.
2. Collection of information and data.
3. Development of a conceptual model.
4. Checking the conceptual model for the adequacy of the task and performing structural critical analysis.
5. Translating the conceptual model to simulation software acceptable form.
6. Verification of the obtained model.
7. Return to items 1 – 3 (depending on the detected error) in case of inadequacy of the obtained model.
8. Development, implementation and analysis of experiments.
9. Documentation and presentation of the obtained results.

A feature of economic systems simulation is the ability to reproduce them while maintaining the logical structure and behavioral properties. Among its advantages are: reflection of dynamic processes and behavioral aspects of the environment; the possibility of complex systems functioning, identification of trends and patterns of their development in terms of incomplete and inaccurate

information; implementation of the principles of object-oriented design and application of high-tech solutions in the construction of computer models, etc. (Lychkina, 2013).

Note that simulation has some disadvantages from the point of view of application in a particular situation. In addition, the development of information technology leads to the need for continuous improvement of its systems and the decisions that are made in them.

S. Parinov (2007) notes that the main purpose of simulation is to improve the functioning of economic systems both by correcting malfunctioning organizational mechanisms and by finding new approaches to the organization and management of processes. Simulation allows not only predicting the economic system behavior, but also to learn about the interaction of its components; solve problems of high complexity; simulate various processes with many levels and elements, taking into account the complexity of the relationships between them.

Thus, the economic system operates and develops in conditions of uncertainty, due to the exciting effects of the external environment. Modeling is an important tool to support decision-making in economic systems, since it allows you to explore a large number of alternatives and reproduce different development scenarios for each option. Scenario modeling makes it possible to develop a list of the most likely scenarios for the development of economic systems in conditions of uncertainty and is an important element of the strategic decision support system. Simulation allows you to study and predict elements of economic systems and their interaction in uncertain conditions with incomplete and inaccurate data.

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# THE POTENTIAL OF SPORTS TOURISM IN THE ECONOMIC DEVELOPMENT OF TERRITORIES

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Sports tourism is an independent and socially oriented sphere, a way of life for a significant part of society. Unlike other sports, sports tourism is a social sport. It is engaged in by layers of the population that do not have large profits; it does not require relatively large material costs. The process and the routes themselves take place in a natural environment, no expensive stadiums or special gyms are required.

In the context of the European process of decentralization and the development of local self-government in Ukraine, these factors determine the relevance of studying the role of sports tourism in the economic development of regions and territorial communities.

Some aspects of the economic significance of sports tourism are developed by N.V. Aksonova, I.B. Berezhna, N.O. Bondar, O.I.O. Malinovskaya, V.I. Matsola, N.I. Moiseeva, V.P. Rudenko, T.I. Tkachenko. Until the beginning of the XXI century. scientific works were devoted to the study of tourism in general, where the analysis of the species structure of tourism was generalized. In the course of such studies, general approaches to the definition of sports tourism as a complex phenomenon were not developed, the interpretation of sports tourism as a form of mass recreational activity based on the use of technologies of a specific kind of sport – "sports tourism", was largely preserved. And only in recent years, scientific interest in studying the specifics of certain types of tourism has begun to grow, focusing on their use as technologies for the development of tourism and territories. With regard to sports tourism, this stage, in fact, led to an even more fragmented approach, which was expressed in the consideration of active tourism and its individual types in the context of the sports technologies used. However, special works devoted to the study of the impact of sports tourism on the economic development of territories and territorial communities are practically absent.

However, today, despite the potentially great opportunities, sports tourism in Ukraine is underdeveloped. The difficulties encountered in the development of sports tourism, primarily related to economic problems of society, as well as the almost complete lack of state and public support for this sport, imperfection, and in some cases the lack of modern regulatory – legal, methodical and information base, which would take into account its realities, as well as internal organizational problems in the tourist – sports movement, which have accumulated in recent years.

The subject of research in this scientific work are the factors of sports tourism that affect the economic development of individual territories, regions and territorial communities in Ukraine.

As you know, sports tourism is a type of tourism that involves overcoming the route in an active way, ie without the use of motor vehicles, relying only on their own strength, realizing the skills and abilities of walking, skiing, rafting and boating, riding bicycle, etc. Sports tourism has the characteristic features of a kind of sport – competitive activity, as a result of which human capabilities are compared, sports titles and categories are assigned. Currently, in sports tourism there is a well-developed regulatory and legal framework related to the organization and conduct of sports trips, tourist competitions and other events. According to the level of accessibility, it belongs to the social, according to the form of the organization – to the amateur, according to physical activity – to the active, according to the composition of the participants – to the group.

Tourism as a special field of activity enjoys a reputation as a source of short-term income and a generator of longer-term investments – something that the economy of any region needs, so the importance of cultural tourism for the development of the territory can hardly be overestimated. The socio-cultural resources and opportunities for tourism development existing in the region, as well as the relations formed in the process of developing tourism activities, have not been studied sufficiently. The sphere of sports tourism should be considered as a base that creates the necessary conditions for improving the quality of life of people, organizing recreation and leisure. It is during the transitional period of the formation of market relations that it is necessary to find a place for this sphere in the regional economy. This is due to the great importance of the services of the branches of the social and domestic tourist infrastructure in the life of the population.

Sports tourism is not only a nationwide sport in Ukraine that reflects our national traditions. It contains not only a sports component, but also a special spiritual sphere, and the way of life of the tourists themselves. It is an effective means of spiritual and physical development of a person, fostering a respectful attitude towards nature, mutual understanding and mutual respect, since it is based on real acquaintance with life, history, culture, and customs. Sports tourism, according to its goals, can have a sports, cognitive, educational, research, environmental orientation and their combination, and also carries out a variety of sports, health-improving, recreational, cognitive, educational, economic and other functions. By the type of events, sports tourism realizes its goals in organizing and conducting travel, sports trips, competitions, rallies, expeditions, extreme sports tours, sports and tourism schools for the training of guides and instructors of sports tourism.

Hiking trips can provide essential information and knowledge on ecology and environmental protection. Raising people's love for their homeland is inextricably linked with a complex of educational and organizational environmental protection measures. It is necessary to pay attention to two main aspects of nature conservation in tourism activities. The first of them is educational work, which includes conversations about nature conservation, methods of organizing sports trips, on the one hand, and the practical implementation of environmental measures when organizing halts and overnight stays, on the other. The second aspect is a set of organizational and technical measures to establish the material base of environmental protection work (marking and equipment of weekend hiking routes and training routes for multi-day hiking; equipment improvement). Sports tourism is not only a nationwide sport, it is a social movement that unites sports, spirituality, and patriotism. Sports tourism has a pronounced military applied value. The social nature of relations in tourism requires collectivism, mutual assistance, and self-sacrifice from the participants in the name of a common goal.

Therefore, speaking about sports tourism, we are talking about fostering not only courage, but also national civic consciousness. Unlike many other sports, sports tourism does not require large material expenditures from the state, because, first, it develops in the existing environment and does not require significant investment for tourism activities; secondly, the provision of these measures is largely carried out by the forces and means of the tourists themselves; thirdly, a public system of training and retraining of tourist staff has already been formed and is operating, which can continue to function effectively with minimal state support. Developing on the border of sports and leisure, in the natural environment, sports tourism, through the promotion of a fairly "cheap" but effective recreation, promotes the development of domestic tourism. This, in conditions of low material incomes of the majority of the population of Ukraine, gives it a social priority [3, 6].

During the hikes, participants can also acquire new knowledge and skills in photographing and conducting route observations (detailed collection and processing of information about the hike, systematic meteorological observations, landscape photography). The acquisition of the skills of route observation, first for educational purposes, and then in the order of educational and research work, in the future, turns out to be an effective form of preparing tourists to perform serious tasks of scientific and public organizations and institutions. A well-written hike report helps and promotes tourism and a specific tourism product.

Today, sports tourism has become one of the most representative sectors of the world economy. This is evidenced by data from the World Tourism Organization (UNWTO): in 2019, almost 880 million people traveled worldwide. According to forecasts, in 2025 the number of tourists compared to 2019 will increase by 4% (131 million people), and in 2030 will exceed 1.6 billion people.

Currently, millions of people travel across countries and regions in order to take direct part in sports and entertainment events directly related to sports. Such significant migration is of great economic importance for the economy of the host country (or region).

First of all, positive changes affect labor markets. In particular, new jobs are being created in many sectors of the economy, the infrastructure of the tourist complex, the quality of customer service, the region's balance of payments and many other micro- and macroeconomic indicators are improving.

Let us consider in more detail the mechanisms of the impact of sports tourism on the economy of a country or region that regularly hold certain sports events.

**Transport system.** Obviously, the masses of fans, athletes and coaches need to somehow move to the venue. The transport system performs the function of delivering people to their destination. Thus, fans, athletes, coaches, technical personnel, sports journalists and commentators for a certain period of time become passengers on sea, river, air, rail and road transport. By satisfying the needs of passengers in transportation, the transport system, in return, makes a profit from ticket sales. Transport companies pay taxes from the profits earned, which replenish local budgets and enable the authorities to improve the welfare of the population living in the region.

In addition, creating a demand for transportation, sports tourism forms the basis for creating new jobs in transport – new routes are being created, traffic flows are increasing, new railway stations are being built. At the same time, an increase in demand for labor leads to an increase in wages in this industry.

**Hotel business.** Sportsmen and fans who have arrived at the venue of the competition need to stay somewhere for temporary accommodation. Services for the provision of temporary housing are provided by a hotel complex, which includes hotels with a different range of services and quality of service, motels, campings and tourist centers. The demand presented by fans and athletes for the services of the hotel complex ultimately transforms into new jobs, brings the host region cash and foreign exchange earnings, since tourist fans, as a rule, combine attending sports events with recreation, excursions, shopping and cultural leisure. Naturally, they spend money on all these events, which remains in the region.

**Souvenir and excursion business.** Sports lovers arriving at the competition venues want to buy some souvenirs to remember the trip, the host city, sports club, team, a particular tournament, sports facility, player or coach, sports industry enterprise. These requests are satisfied by the souvenir and excursion business. Collecting badges, stamps, logos, autographs of athletes, mascots of competitions, elements of sportswear of celebrities, small copies of cups, etc. can be distinguished as a separate direction.

**Athletic facilities.** Holding modern major competitions (championships, cup matches, sports days, Olympiads) is unthinkable without appropriately designed and built sports facilities – stadiums, swimming pools, cycle tracks, racetracks, ski jumps, gyms and other components of the sports infrastructure. The newest sports facilities of this type are usually technically complex conglomerates. Their production requires a lot of intellectual labor and capital. This circumstance directly affects the market value of sports facilities – the price of modern sports complexes and facilities is tens of millions of dollars, and the cost of large facilities can reach hundreds of millions and even billions of dollars.

Of course, financial investments in modern sports facilities are not easy and expensive, and therefore all the nuances of projects in this area are carefully prepared and calculated. However, the benefits of such investments are usually many times the costs. Moreover, the benefits are twofold. Firstly, investments made in sports facilities bring direct profit and pay off within the next 4-5 years. Secondly, they are of an indirect nature, that is, in the intervals between major competitions, the constructed sports facilities are used by local athletes and athletes, which strengthens their moral and physical health and leads, ultimately, to an increase in labor productivity and an increase in the well-being of citizens of a given territory.

In addition to the spheres of the economy noted above, sports tourism also has a beneficial effect on other sectors of the economic complex. In particular, the demand from tourists for souvenirs, food, excursions, entertainment leads to a significant development of trade and entrepreneurship in the service sector, in the settlement and banking sector, in the advertising business and in public catering. Obviously, all the demand is reflected in the creation of new jobs and an increase in the level of wages.

Statistics show that sports tourism has recently shown very high growth rates in world tourism. Moreover, at a time when many traditional tourism activities are in decline, sports tourism continues to thrive with steady growth. Leading analysts predict record growth in sports tourism revenues, while in some countries, sports provide up to 25% of all tourism receipts. The World Tourism Organization has recognized sports tourism in general and predicts that winter and water sports will become the most important segments of the tourism market. Thus, sports tourism is regarded as a factor in the sustainable development of a tourist destination [2].

The growing relationship between sports and tourism has led to an intensification of the search for opportunities to combine their potential in stimulating the socio-economic development of individual territories. Sports tourism, even without taking into account the social component of its development, can become a leading component of increasing the efficiency of destinations in new promising markets by modernizing the tourist offer, ensuring a high degree of tourist satisfaction, and thereby making a significant contribution to the socio-economic development of territories. This is of particular relevance in the context of increasing attention to the development of inbound and domestic tourism.

The tourist destination is a decisive element of the tourist system. It can be described as a center (territory) with all kinds of amenities, facilities and services to meet all kinds of tourist needs. In other words, a tourist destination includes the most important and decisive elements of tourism that tourists need. The region of the tourist destination is one of the most important in the tourist system, since the tourist destinations themselves and their image attract tourists, motivate the visit, thus activating the entire tourist system.

Sports tourism is definitely an integral part of a tourist destination. The territory of our country, its natural resources, landscape – all these components can turn Ukraine into one of the leading sports destinations in the world. However, the development of sports tourism is not sufficiently provided with relevant statistical, empirical and theoretical studies.

The inclusion of the region in the tourist markets requires not only material and labor resources, but also a clear understanding of the principles of business strategy, the nature and characteristics of the formation of a network of tourist facilities, the definition of sports tourism as a factor in preserving the environment, and the revitalization of the regional economy. This determines the relevance of supplementing the economic program of the local government with a thorough study of options for the development of the tourist structure.

The most important socio-economic and cultural consequences when considering sports tourism as an important object of cultural policy in the region and the correct organization of tourism activities will be:

- health improvement of the population, transition from spiritual impoverishment to the stage of active cognition;
- raising the prestige of the region, intensifying contacts, including international ones;
- preventing further environmental degradation;
- receiving independent from the center sources of financial receipts to the local budget;
- creation of new jobs.

Thus, the main motive for doing sports tourism is: developing and increasing the level of knowledge, skills, skills to overcome natural obstacles of various forms of natural relief; the main result of the lessons is sports improvement in the broadest sense of the word, including physical and spiritual improvement. Understanding the purpose of amateur and sports tourism from a social point of view has been developed for decades and is currently associated with: with an effective means of life support for the population; with aesthetic and moral-strong-willed education; with knowledge of history and modernity, cultures and customs of the local population; with respect for nature and respect for national traditions. The study of the prerequisites for the development of domestic sports tourism in our country requires taking into account the important socio-economic features of the current stage of its development, which determine the relatively low potential of tourist mobility of the population.

The following factors can be attributed to the prerequisites for the priority development of domestic sports tourism:

- sports tourism is health tourism in nature;

- democracy (general availability) of a significant part of sports tourism, primarily associated with active route hiking forms that have a long tradition in Ukraine;
- resources for sports (active) tourism, especially in its recreational form, are everywhere in our country;
- the development of sports (active) tourism meets the solvent needs of the majority of the Ukrainian population, the ordinary level of development (infrastructure, marketing, logistics, etc.) of diverse and rich tourist resources of most territories;
- a high degree of compatibility of sports tourism in all its diversity with other types of tourist activities popular among the Ukrainian population, first of all, cultural, cognitive, nature-oriented, rural, and recreational on the basis of joint use of the resources available in the destination;
- routes of sports tourism (water, hiking, motorcycle tourism, etc.) allows to involve in tourism products numerous and diverse cultural, historical and natural resources, which today are outside the scope of tourist attention, including domestic tourism. This entails a second set of socio-economic consequences associated with the socio-economic development of old and new tourist destinations;
- possibilities of reorientation of a part of the high-income population of the country, which traditionally uses outbound tourism.

Taking into account the specificity and variety of goals to be solved in the development of sports tourism, the effectiveness of the concept implementation will largely depend on the optimal combination of state, public and private principles and interests, possibly realized in the form of mixed co-founding.

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