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2. THE DEVELOPMENT OF TERRITORIAL ADMINISTRATION: CLUSTERS, REGIONS, CROSS-BORDER COOPERATION

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INSTITUTIONAL SUPPORT FOR THE CROSS-BORDER COOPERATION

Summary

The article is devoted to the issue of cross-border cooperation of border regions of Ukraine and increase in its activity based on the definition of the institutional and economic foundations, which would enhance the interregional integration of the country. Theoretical foundations of the cross-border cooperation analysis, its essence, institutional and economic aspects, and European experience of cross-border cooperation of border areas are analysed. The institutional and legal features of cross-border cooperation, the current state of cross-border cooperation of border regions of Ukraine, effectiveness of institutional and economic tools concerning the competitiveness of border regions in the cross-border cooperation are analysed. The directions of increased efficiency of cross-border cooperation of Ukrainian border regions are substantiated: institutional and information; institutional and investment; institutional and innovation.

Introduction

The modern development of Ukraine as civil society and competitive economy is impossible without an efficient and sustainable development of its each region. Only a balanced state regional policy based on an optimal system of measures taken by state and local authorities shall solve the issue of activation of the interregional economic ties and establishment of the effective cooperation in «centre-regions» vertical structure, increased competitiveness of regions, including border ones, and quality of life. An effective mechanism for the increase in the competitiveness of economies of border regions is the use of cross-border cooperation. Such cooperation shall necessarily be accompanied by a further deepening of the internal regional integration, formation of the effective network of industrial and trade cooperation and its informational support.

The practice shows that there are objective prerequisites for updating the main tasks of cross-border cooperation consisting in the need to increase the efficiency of the use of cross-border cooperation possibilities for the socio-economic development of border regions of Ukraine. Addressing of the regional cross-border problems cannot be achieved by fragmentary steps. The aim of the state policy in cross-border cooperation is to create favourable conditions for the effective and mutually beneficial cooperation of subjects and participants of the cross-border cooperation, improve the socio-economic development of Ukraine and living standards. It can be achieved only with the introduction of an integrated and efficient regional policy of the cross-border cooperation, within which the appropriate legal, institutional, financial instruments and mechanisms for its implementation shall be created.

Given the fact that Ukraine is a direct neighbour of the European Union, updating of the strategy of cross-border cooperation development based on European principles is of key importance. In Ukraine, the development of cross-border cooperation is hampered by the lack of a comprehensive approach to the organization of the cooperation, based on the balance of national and regional interests, and the legal and economic institutions. A wide range of approaches to the theoretical substantiation of the border cooperation, lack of fundamental theoretical generalizations stipulates the appropriateness of search and own approach developed by the candidate for a degree. Assessing the significance and the high scientific level of the accumulated information on identifying the key issues of development and efficient operation of cross-border cooperation, the lack of availability of integrated researches on development of the institutional and economic foundations of cross-border cooperation for the maintenance of the socio-economic development of border regions of Ukraine should be pointed out.

The purpose of the article is to develop theoretical and applied foundations of the institutional and economic and organizational support for the cross-border cooperation of Ukrainian regions in terms of the European integration.

Part 1. Theoretical foundations of the institutional and economic support for the cross-border cooperation development

Under modern conditions of the expansion of globalization processes, the role of cross-border cooperation (CBC) of the regions intensifies and new possibilities for enhancing the business activities in provincial areas and increasing their competitiveness open up. At the end of the last century, EU regional policy has moved to a new paradigm – from application of the mechanisms for the elimination of disparities of regional development by interregional reallocation of resources to the mobilization of the natural-resource potential of the territories and application of the principle of subsidiarity. This approach was used by neighbouring border regions of Europe, which have established mutual contacts between public regional authorities, local authorities, public organizations, business entities of the territories, combining the efforts to solve common problems and from cooperation under certain cross-border transactions have moved to cooperation within Euroregions. Germany, Poland, Czech Republic and other countries have established Euroregions around the perimeter of their borders, which was stipulated, in particular, by deepening the European integration process and improving the financing mechanisms for regional development in the EU [4, p. 204].

The cross-border cooperation, including border cooperation, has intensified in the 50s of last century when representatives of many border regions began to meet for the discussion of a possibility of elimination of border barriers and further development of cooperation in various spheres of business activity. The priority tasks were related to: improvement of the life of population in the border areas, peaceful coexistence and stability, joint use of natural resources, environmental safety and preservation of ecosystems and meeting the basic principle of international cooperation – formation and expansion of the mutual relationships and contractual relations of the business entities facilitating the joint efforts in solving the topical issues on both sides of the border [2, p. 79].

Cross-border cooperation is a complex system of foreign economic relations of business entities and governments of all hierarchical levels in the border areas aimed at common addressing of social and economic problems [4, p. 64].

Cross-border cooperation is a part of the general system of regional economy and, therefore, has inherent theoretical and methodological foundations. At the same time, the cross-border problems consider the causal relationship, while cross-border aspects of the relationship are becoming increasingly important. Therefore, the role of systemic cross-border approach is growing in proportion to the realities: development of cross-border trade; the problem of movement of labour between the border regions of neighbouring countries; problems of development of the border transport, information, investment, innovation infrastructures, and so on.

In the modern conditions, the cross-border cooperation is an integral system of interconnected and interacting subsystems and components. This is a specific form of regional integration at the border area level, a form of the implementation of international division of labour within the regions of two or more countries, which pursue above all the nationwide, macro-economic, scientific-technical and social purposes, Fig. 1.

At the microlevel, the cross-border cooperation can be considered as family and socio-humanitarian relations and border trade. At the macrolevel, it is the foreign trade, cooperation in terms of industrial cooperation and activities in the form of joint projects and joint ventures. Mesolevel of the cross-border cooperation is associated with the effective operation of transnational corporations. And the highest level of cooperation includes the joint use of infrastructure facilities in the region and common strategy for the development of the cross-border region.

Therefore, the task of a detailed study of existing opportunities and ways of their sound management rises.

From year to year, benefits of the cross-border cooperation take on greater and greater importance for the economy of border regions, including business entities.

In particular, the following tasks of the cross-border cooperation may be specified [1, p. 105-106].

First, it is the measures aimed at saving the energy resources, implementation of the energy saving technologies, and use of new energy sources. Solving of these problems by means of border areas can be represented, for example, by the installation of joint hydropower plants on border rivers.

Secondly, it is necessary to pay attention to the problem related to the development of international specialization and cooperation of production. Its solving is possible by the conclusion of multilateral and bilateral agreements by business entities. The supplies of specialized products between different sectors of the economy will increase, long-term cooperative relationships between stakeholders will be established, and the system of interaction as a part of the combined technological processes will be developed due to this. Such a development of international cooperation is directly related to the use of human resources in the border regions.

Thirdly, it is expected to solve the food problem and expansion of production of consumer goods through cross-border cooperation. This area of border cooperation of the regions can develop at more intensive rate because it is implemented at the microlevel, i.e. at the level of subjects without certain state restrictions and regulation.

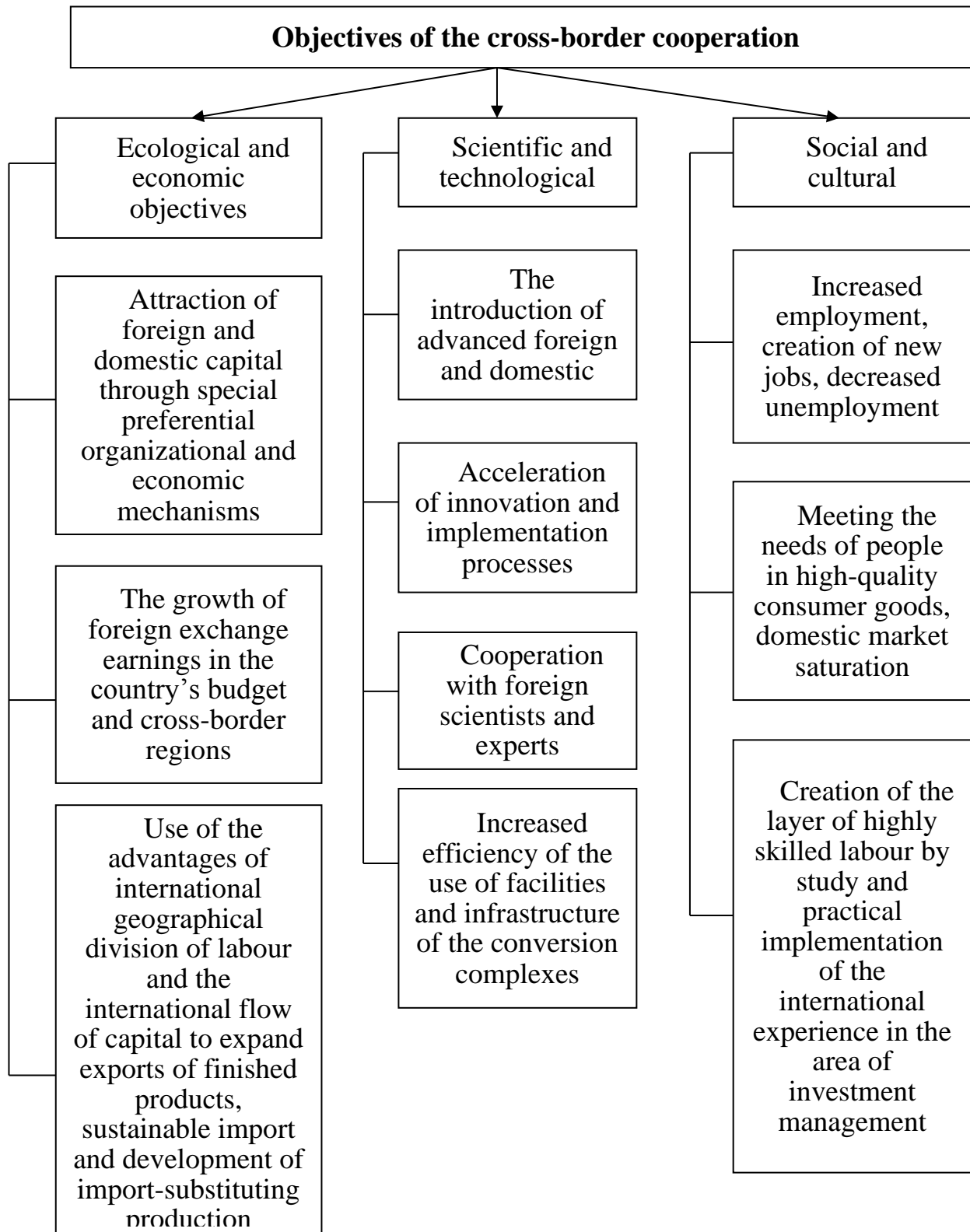


Fig. 1. Classification of the objectives of cross-border cooperation and directions of their implementation

Fourthly, a special attention should be paid to the solving of the problem of infrastructure support for the cross-border cooperation, in particular, the creation of large distribution centres in the border regions. The border regions are the centre of international cooperation in the area of international cargo transportation links, therefore, the solving of the problem of further development of the transport network

can be implemented by building of large distribution and warehousing centres, wherein not only storage but also partial processing of raw materials and distribution of products would be carried out.

Thus, the main purpose of cross-border cooperation is to eliminate economic, social, legal, and administrative barriers caused by national borders, smoothing of the disparities of social and economic development level of border regions. Cross-border cooperation between the territorial communities or authorities, which are under the jurisdiction of neighbouring countries, is aimed at comprehensive development of the border regions by expanding the trade and economic, cooperation-production, scientific and technical ties of the border administrative-territorial regions, implementation of joint environmental protection programs of the business entities, prevention of natural and man-made disasters, development of border infrastructure and deepening of the contacts in the humanitarian field at the interregional level [6, p. 48]. To that end, one could argue that the strategic objective of cross-border cooperation is a policy of strengthening the state as a whole, which is implemented by the efficient functioning of business entities, harmonized development of border regions and promotion of their active participation in the international integration processes.

Based on the main provisions of cross-border cooperation, its main problem in Ukraine is immaturity of the system of institutions (bodies, institutions, functions, principles) capable of promotion of the interests of all subjects of cross-border cooperation by interaction and co-ordinately.

One of the main strategic objectives of regional policy of Ukraine should be development of the cross-border cooperation as an effective mechanism for increasing the international competitiveness of border regions of Ukraine, solving the regional problems in the context of intensified international cooperation in the field of regional policy and adapting the national legislation to regulations, rules, and requirements of the EU.

The decisive task of the state is to create favourable institutional and organizational prerequisites for implementing the strategy of the European integration, the establishment of effective socially oriented institutional innovative development model in Ukraine based on European principles and standards.

Part 2. Euroregions as an institutional and organizational form of the cross-border cooperation

The most effective innovative form of the border and cross-border cooperation development is Euroregions, particularly in areas with a common border. This form of cooperation is carried out in particular in the course of implementation of the joint investment project and development programs by the business entities by the conclusion of bilateral or multilateral agreements in the field of cross-border cooperation in order to joint efforts of business entities of the adjacent areas of neighbouring countries.

Euroregion is the organizational statutory form of cross-border regional cooperation between territorial communities and/or public authorities of the border regions of several states with a common border. The formation of the Euroregion is a tool for activating the cross-border dialogue of neighbouring states, the form to find effective ways of cooperation of the self-governing units on opposite sides of the border [3].

The legal basis of the development of Euroregions is defined in the European Outline Convention on Transfrontier Cooperation of territorial units and their

government bodies (Madrid, 1980). Ukraine joined the Convention in 1993 [3]. Cross-border cooperation is also regulated by European Charter of Local Self-Government, 1985 (ratified by the Verkhovna Rada of Ukraine in 1997).

In the pan-European system of priorities, the European region is seen as a tool of integration of the states through the integration of regions. Their operation is aimed at accelerating the socio-economic development and formation of their export specialization, infrastructure preparation for deepening the cooperation with the European Union, development of the system of interregional relations in tourism, recreation, and environmental protection. European regions make it possible to solve the problems of national minorities, may be the tool for settlement of the territorial claims. The cross-border cooperation involves more than 30 states, which have formed over 70 European regions.

In the Europe, the European regions are created for greater rapprochement and understanding between the border regions of two or more states. But despite the close interaction between all participants in cross-border formation, the emergence of European regions does not threaten the sovereignty of national states because the foreign policy is entirely in the state jurisdiction. Creation of each European region at the local, cross-border level requires necessarily the consent of the local or central government. European regions operate according to their own regulations, which, in turn, can not contradict the legislation of the country where they are located. Cross-border assistance is supported by the programs of the assistance of the European Union, such as INTERREG II, as well CROSS-BORDER (as part of PHARE program) [7].

The main features, which characterize the European region, include [5, p. 133]:

- geographical (European region is an area, which has a specific geographic location);
- political (part of this territory is under the jurisdiction of sovereign states that share a border);
- administrative (it is formed by the border regions of the states that share a border);
- functional (European region is a form of cross-border cooperation) [6].

Ukraine participates in the creation of European regions since 1993, when the European region «Carpathians» was formed, which includes the northern part of Romania, several areas of Hungary, a part of eastern Slovakia, a part of the Subcarpathian Voivodeship of Poland, Lviv region, Transcarpathian Region, Ivano-Frankivsk and Chernivtsi regions of Ukraine. Today, 10 European regions are created in Ukraine («Bug», «Carpathian», «Upper Prut», «Dniester», «Lower Danube», «Black Sea», «Donbas», «Slobozhanshchina», «Yaroslavna», «Dnipro»). Among 10, almost all 8 European regions operate (except for Euroregions «Upper Prut» and «Black Sea»). But the Euroregions, except for «Carpathian Euroregion», operate as structural units of regional state administrations.

Ukraine considers the institution of the Euroregions as a tool for the spatial development and factor of European integration process. One of the main objectives of cooperation within the European regions for our country is to promote the development of integration processes in the cultural, educational, economic, communications, and other areas, and address the socio-economic problems of the border area by ensuring the free movement of goods, capital, and people across the border.

Effectiveness of the European regions is stipulated by the organizational and economic mechanism, which primarily is aimed at addressing the following problems

of interregional relations: strengthening of cooperation and trust; joint use of energy resources; development of forwarding and border infrastructure; stimulation of the structural changes in the economy by attraction of foreign investments; activation of the business activity with foreign investors to increase exports of goods and services; increase in the supply of high-quality products and services to the domestic market; intensification of scientific and technological exchange, attraction and implementation of new technologies; drawing of progressive organizational and management experience, market methods of management; development of joint business and modern information infrastructure; effective joint use of natural and human resources; tourism development; design of common programs for social and economic development of border regions and the country as a whole, improvement of the living standards.

Modern economic development of border regions of Ukraine proves that along with the legal and economic aspects hindering the development of European regions, there are organizational ones: significant disparities of the territorial structure of industry and imperfect institutional legal framework of regional development of Ukraine, lack of implementation of the principles of EU regional policy on equalization of the socio-economic development of regions; inadequacy of planning and effective use of existing and potential competitive advantages as well as limited financial resources of the border regions to implement innovative investment projects; underestimation of the potential of cross-border cooperation, European regions; high dependence on decisions of the central government; lack of definition of the European regions in the system of territorial administration; insufficient level of awareness of the local administrations on tools for the promotion of the border regions' development, provision of the technical financial assistance from the EU; inadequate border management and underdevelopment of the border infrastructure; high wear and poor quality of the resource potential, mass labour migration; high levels of customs tariffs hindering the development of trade relations between the member countries of the European regions and so on.

The problem of efficiency of the institutional and economic instruments for maintenance of the European regions of border areas of Ukraine lies through the lens of incomplete formation of the model of cross-border cooperation institutional and economic development incentives, which should be implemented in the following areas: informational support of members of cross-border cooperation; formation of effective investment activity; cross-border innovation infrastructure development.

The system of institutions should include jointly agreed structures both of supranational, national, and regional levels ensuring the creation of a legislative and regulatory framework and performing the supervisory, regulatory and advisory functions.

Part 3. Directions for the improvement of the effectiveness of the cross-border cooperation development in Ukrainian regions

The integration of Ukraine into the European economy management system requires the study of experience and direct study of the European integration process, among which the important role is played by regional integration – cross-border cooperation. This process takes place against the background of a significant pace of informational support, and for Ukraine – also under the conditions of continuous administrative reform, restructuring of national and regional management.

The base model of institutional and economic support and effective cross-border cooperation development shall necessarily include the following strongly linked

components: institutional and informational, institutional and investment, and institutional and innovative support. Formation of the institutional and informational support is the free movement of information between governments, business entities and population in order to improve the level of state management of the social-economic processes, including regional integration processes. The role of informational support is promotion of the information exchange between subjects of the cross-border cooperation in order to enhance all forms of this type of cooperation (cross-border trade, industrial cooperation, joint use of the climatic-natural resources, transportation infrastructure development, innovation and investment activity, etc.) and effective implementation of joint projects and programs.

Cross-border exchange of information is a prerequisite for cross-border relations. Effective organization of information exchange takes on greater and greater importance as a condition for the successful practice of people in any field. That is why perhaps the major methodological approach to cross-border cooperation is mutual awareness and, if necessary, coordination of the development plans of neighbouring border areas. For example, the capacity of customs entry points, schedules of their activation, etc. are coordinated. Mutual knowledge is necessary for the implementation of large-scale investment projects. This will reduce the possibility of conflicts at the borders. In addition, it is necessary to take into account that any integration ties are impossible without highly organized informatics system.

Increase in the competitiveness of border regions of Ukraine in cross-border cooperation should provide for: improvement of the information support for the development of cross-border cooperation of the border areas (collection and exchange of information on economic, scientific and cultural potential of Ukrainian and foreign neighbouring border areas; issue of the information directories, exchange of trade and business information about the companies, entities, firms and commercial centres located in the cross-border area; development of the automated information systems, software for the maintenance and updating of databases on the current state of border areas on the basis of common formats of data and formats of exchange of such data between the Ukrainian and foreign parties; comprehensive exchange of information materials, methodological literature, transfer of experience and training of personnel for work in structures involved in the international relations).

One of the important functions of information support of the cross-border cooperation is the development of dissemination of the information on companies and their proposed goods and services. Although at first glance this function is purely technical, the success of its implementation depends on the full and correct understanding of the role of information in ensuring the efficient market interaction.

In the course of the cross-border information environment, there is a need to create the institutional structures that would integrate all the information and educational resources, stimulate the information inter-linkages of the participants of cross-border cooperation in the region, carry out the information exchange between the administrative, informational, advisory, educational-and-cultural and other structures.

Improvements to the efficiency of information support of business requires a system integration of information technologies of the business, creation of a single information space for business cooperation, which is a set of business information databases and data banks, technologies for their maintenance and use, telecommunication systems and networks that operate on the basis of common principles and common rules promoting the development of the businesses and socio-

economic systems. This, in turn, will promote the development of new promising forms of cross-border cooperation, such as [5, p. 79]:

- Cross-border partnerships;
- Cross-border industrial zones/parks;
- Cross-border clusters;
- Cross-border innovation projects;
- European grouping of the territorial cooperation;
- European regional cooperation union;
- Centres (complexes) of cross-border trade.

In other words, the creation of the single market as part of the cross-border cooperation requires free circulation of information – institutional informational support of the cross-border cooperation.

Summarizing the above, it is fair to say that the functions of information support of the cross-border cooperation are:

- promotion of the information infrastructure development, especially border and cross-border areas, which involves the creation of legal, economic and technical conditions for the efficient information exchange between the subjects and participants of the cross-border cooperation;
- informing the business community and population about the issues of cross-border cooperation and feedback.

The problems of border regions on the formation of the investment process are closely associated with investments in the real economy. Therefore, there is need to adjust not only market reforms but also regional policy in the country, particularly investment one.

According to the international experience, the domestic and foreign investments can ensure the scale and pace of restructuring through the development of a market relations, and hence more organic integration of the regional national markets into the international markets, enable to introduce new technologies and international management experience, promote the measures of macroeconomic stabilization, enable to solve some social problems of the transformation period of border areas. The corresponding system of organizational and institutional mechanisms contributes the investment activities as a part of the cross-border cooperation – attraction of the local and foreign investments in priority sectors of the economy of border regions by improving the regulatory framework, provision of benefits and guarantees for the most efficient investment projects.

Investment policy (Fig. 2) of the cross-border unions is a set of measures for regulation and promotion of the investment process in order to ensure the sustainable socio-economic development of border areas, which are the members of the cross-border union [6, p. 46]. As the system of actions for the investment attraction into the economy of the region, it is implemented in practice through a consistent solution of specific both strategic and tactical problems.

The investment policy of cross-border unions in Ukraine should be carried out by regulating the relations of investment activities through regulatory acts, regular control of the use of investments.

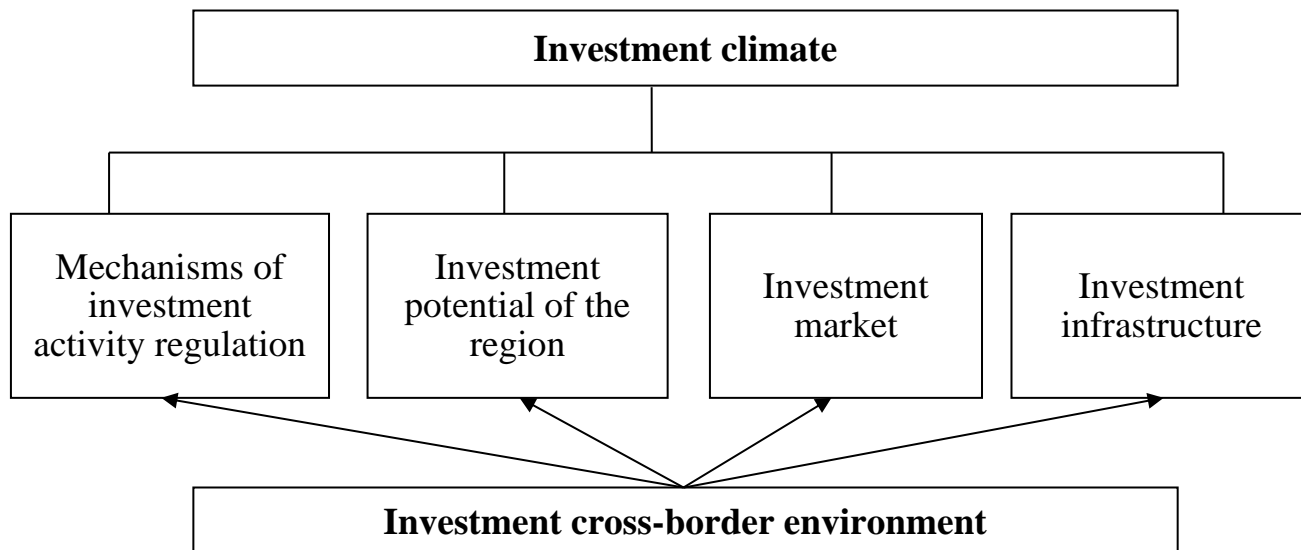


Fig. 2. Investment policy of cross-border unions

The issue of creation of the cross-border cooperation institutional innovation infrastructure model is important, wherein the partnership of local and regional authorities, business organizations, and other businesses on both sides of the border can take place. The structural elements of this model include: innovative business incubators, centres promoting the foreign investment, science parks, centres of economic information, investment forums, fairs of the European region, etc. The proposed organizational innovation institutions may be capable of innovations and the main objective of which is to promote the effective and promising development of all forms of cross-border cooperation and enhance the international competitiveness of the border areas of Ukraine.

Creation of and support for the institutional innovation system of cross-border cooperation in the region will contribute to the efficient use of the potential of border regions participating in cross-border cooperation, increase in their competitiveness and expansion of the scope and development of the forms of such a cooperation. The institutional innovation system of cross-border cooperation development in the region is provided in three main blocks: 1 – regional governments and local authorities; 2 – central executive authorities on regional policy and foreign economic activity; 3 – non-governmental institutions.

It is established that the main element of the mechanism for support and promotion of the cross-border cooperation should be the formation of the effective model of institutional and economic support and promotion of the cross-border cooperation systems and creation of favourable investment environment and innovation infrastructure for the implementation of the competitive advantages of the border area of Ukraine.

Analysis of theoretical and methodological approaches, the current state of institutional and economic support of the cross-border cooperation and substantiation of the ways of increasing its effective development enabled to determine the optimal system of such a type of cooperation in accordance with the modern features of national regional policy formation. The proposed model of institutional support of the cross-border cooperation can be structured according to the following principles:

1. The functional purpose of the subsystem.
2. Sphere of influence (meso, macro, micro-levels) and ownership forms of the subsystems.

3. Functional role of the subsystem in cross-border cooperation (creation of the conditions, resourcing of the cooperation or practical use of the economic activity results).

4. Maintenance of cross-border cooperation process.

Having analysed the current trends of the cross-border cooperation of border areas of Ukraine in terms of the shortage of financial resources and low activity of entrepreneurship, one can conclude that in order to stimulate the structural changes in the economy of border regions, intensify the joint business with foreign partners for increased exports of goods and services, it is necessary to introduce the system of the tax and non-tax factors to create a favourable investment environment in the frame of this type of cooperation.

The issue of creation of the cross-border cooperation institutional innovation infrastructure model is important, wherein the partnership of local and regional authorities, business organizations, and other businesses on both sides of the border can take place. This model includes a network of research laboratories, production facilities, elements of the social infrastructure necessary for concentration and effective use of intellectual and competitive potential of border regions of Ukraine, development, and implementation of high-tech, innovative products and programs.

Reasonable basic model of the institutional innovation infrastructure of cross-border cooperation is aimed at the formation of the innovative environment of the border regions by creation of the consolidating model of innovation process regulation, combination of the efforts and resources of state authorities, local government, educational and research institutions, business, community, and international organizations in transfer of Ukraine to the innovative path of development. Model of the cross-border cooperation institutional innovation is based on the principle of complete innovation cycle: fundamental research – competitive idea – engineering design – production – commercialization/implementation of high-tech products and intellectual solutions, accessible and understandable for the participation of any business entity – both legal entity, and individual. This will ensure the strengthening of the international competitive positions of the regional products.

Conclusion

Conducted scientific research helps to define the cross-border cooperation as a complex system of foreign economic relations of business entities and government authorities of all hierarchical levels in the border areas aimed at joint addressing of the social and economic problems. It is a special form of the foreign economic activities carried out at the regional level and providing for: the presence of the border, the need for its improvement, joint use of the natural resources, addressing the ecological safety problems, the enhanced cooperation of the population of neighbouring countries, extensive infrastructure, etc. The main tasks to be addressed by the cross-border cooperation in order to ensure the international competitiveness of border regions of Ukraine are classified into: economic, scientific-technical, and social.

It should be emphasized that in addition to own development strategies, the cross-border regions plan their development taking into account the national and international strategic interests. And these strategies are not always mutually exclusive.

The participation of border regions of the state in cross-border cooperation must be based on the legal and institutional basis able to provide the cross-border and local

authorities with the corresponding list of powers on the establishment of the direct relations. All this stipulates the existence of well-defined regional policy of the state, which should define the basic principles of mutual relations between the state and regions, the main areas of regional development, establish the general legal framework that would enable the regional and local and self-government authorities to seek effectively the ways to ensure sustainable socio-economic growth, thereby laying the foundation for the sustainable development.

The institutional environment of cross-border cooperation shall ensure its effective operation at four interactive hierarchical levels: first level – business entities of different forms of ownership; second level – territorial executive authorities (local governments, public authorities); third level – national level (central government authorities); fourth level – international level (world and European organizations).

Analysis of the problems and difficulties arising in an attempt to implement the cross-border cooperation demonstrated that the main problem of all European regions is to combine the interests of all participants. This also pertains to: lack of a clear vision and strategy of the Ukrainian government and the governments of some neighbouring states concerning the reforms and general direction of the economic development; high dues which virtually nullify the bilateral relations; extremely high prices for carriages; prohibitive nature of the legislation, violation of laws and variability of the tax and economic legislation; lack of direct exchange and rapid access to the currency of the neighbours; existence of the shadow economy; lack of real competition and so on.

Thus, the following should be taken into account in the formation and subsequent operation of cross-border unions: first, the selection of the region territory in terms of its optimal size, geo-economic and geopolitical location; secondly, the effectiveness of subregional cooperation in relation to Ukraine will largely depend on how effectively the concept of a new regional policy enshrined in the relevant legislation will be implemented. Its essence is effective decentralization of power and adequate distribution of authorities and financial-economic basis in terms of socio-economic viability; thirdly, one of the prerequisites for effective cooperation is the gradual formation of the socio-economic environment for the active involvement of market structures into such a process. Further cooperation processes, particularly concerning the economy, should be implemented primarily through the market structures.

References:

1. Bukovetsky M. Border cooperation between the countries of Central Europe / M. Bukovetsky // Building of new Europe: border cooperation in Central Europe; Edited by Dr. V. Gudak. – Uzhgorod, Transcarpathia, 2006. – P. 105-111.
2. Busygina I.M. The present and the future of the «Europe of Regions» (problems of European regionalism) / I.M. Busygina // World Economy and International Relations. – 2005. – No. 9. – P. 78-86.
3. European Outline Convention on Transfrontier Cooperation of various organizations and bodies of local authorities (Madrid, May 21, 1980). Text in Ukrainian / Council of Europe. – Department of books and documents. – Strasbourg, 1980.
4. Lendyel M.A. Region in the border cooperation system: monograph / M.A. Lendyel, P.Yu. Studenyak. – Uzhgorod, Carpathian region, 2009. – P. 472.
5. Mikula N.A., Tolkovanov V.V. Cross-border cooperation. – Kyiv., Publishing house «KRAMAR» – 2011. – P. 259.
6. Shpel G. Classification of regional economic policy concepts // Local authorities and market economy. Lessons of the West European experience / G. Shpel. – St. Petersburg: Institute EUROGRAD. – 2006. – P. 46-54.
7. Cross-Border Cooperation Programme „Poland – Belarus – Ukraine 2007-2013» [Electronic source] – Available at: <http://www.cpe.gov.pl/pliki/127-pl-by-ua-eng-5b1-5d.pdf>.

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CLUSTERIZATION AS THE INNOVATIVE COMPONENT OF INCREASING COMPETITIVENESS IN THE PRODUCTION OF SUNFLOWER SEEDS

Summary

The issue of increasing competitiveness in the production of sunflower seeds on the basis of clusterization as the innovative component is studied. The problems, which complicate the spread of innovations and application of progressive technologies at the production of sunflower seeds and agricultural production, are determined. Innovative factors, which influence the competitiveness in the production of sunflower seeds, are determined. The application of clusters with the purpose of increasing competitiveness and concentration of production in sunflower seeds is grounded; those clusters are considered as efficient factors of innovative development of enterprises from different fields and territorial formations. World experience of clusterization is analysed and the main industrial directions of clusterization of enterprises in many countries of the world are provided. The main advantages and disadvantages in clusterization of agricultural production are determined.

Introduction

Under conditions of agricultural development, growing of sunflower seeds implies the search for new factors and reserves towards an increase in the competitiveness of production for this type of produce. Agricultural produce, including sunflower seeds, belongs to raw resources, which are standardized in detail; therefore, the possibility to sell them in the global market possesses special features.

An analysis of scientific researches states that the most successful recovery of agriculture from the critical condition and increase in competitiveness of production of agriculture under the conditions of globalization can be found in the development of the innovative base. Implementation of the innovative policy during the production of sunflower grains enables agricultural enterprises to compete not only at the domestic level but also in the international markets. Modern innovative policy on the production of sunflower seeds represents a combination of scientific-technical, manufacturing, managerial, financial, and other measures aimed at the production and promotion of the enhanced production in the market.

One of the main approaches for realizing the potential and increase in competitiveness of agriculture at the regional level according to the international experience is the creation of clusters, within which an integration of production processes with scientific-innovative activity takes place.

Clusters are viewed as the efficient forms of organizing interaction between enterprises of different fields, unions, scientific establishments with the purpose of increasing competitiveness of enterprises and regions. Foreign and small domestic

experiences state that the clusterization of economy grounds and makes a decisive influence on the processes of intensification of competitiveness and boosts innovative activity.

Part. 1. An innovative component of increasing competitiveness of sunflower seeds

Nowadays the issue of increasing profitability and competitiveness of producing sunflower seeds on the basis of development in innovative processes in the field remains quite relevant. Innovative activity is one of the essential resources for accelerating paces and enhancement in the quality of economic growth, strengthening of competitive positions of enterprises. Producers of sunflower seeds, which managed to be the first to implement innovations, will have the possibility to decrease the production costs and consequently the price of the produced goods, which promotes the strengthening of their positions under global competitiveness and increases their survival in the modern market.

Advantages of innovations, which stimulate agricultural producers to implement them with the purpose of increasing competitiveness, are the following:

- application of more efficient ways of manufacturing;
- widening scales of activity and company's entrance into new markets;
- prompt response to requirements of consumers;
- possibility to produce goods with higher quality [4].

Nowadays the spread of innovations and application of progressive technologies during the production of sunflower seeds and agricultural produce are complicated due to the following problems:

1. Realization of innovative activity requires significant investment.

Unfavourable investment situation for agriculture has been grounded by low profitability of most agricultural producers, who do not possess own resources, cannot use credits. Among the main «innovative» directions of investing money is the purchase of new agricultural equipment. Only 1-3% of agricultural enterprises invest money in other innovations such as mechanization and automation of work, implementation of new technologies, energy-saving, an increase in labour safety and educational processes.

2. Insufficient government support and lack of financial assistance to most agricultural producers.

Based on the experience of the developed countries, it is worth paying attention to the high innovative activity of economy, which is provided by the significant importance of the country in the scientific-technical market, national priorities and active influence of the country on the process of innovative development through the system of economic stimulation [8].

In Ukraine, government financing of agrarian science does not exceed 50% of the needed amount. Through insolvency, only 10-15% of agricultural producers apply highly efficient resource-saving technologies. A sharp decrease in the efficiency of production and lack of financial resources cause the delay in the innovative development of agriculture – most scientific achievements remain not implemented into practice. In the agrarian sector, there is unfavourable macroeconomic situation including the scientific-technical sphere of the industry, which in combination with extremely low investment possibilities of agricultural producers significantly limit the conditions for activating the innovative activity in agriculture.

3. Low level in the application of the innovative potential.

In Ukraine, annually only 1-2% of innovative developments are implemented. For the comparison, in the USA this index reaches 70%. According to the research carried out by Forbes magazine, in 2015 Japan took the 4th position in the rating by the level of implementing innovations, the USA – 5th, Germany – 6th, France – 19th, Russia – 63rd [2]. Innovative potential of the agriculture in Ukraine is used only for 4-5%, while in the USA it is used for 50%.

4. The limited interest of most Ukrainian agricultural producers to domestic and foreign scientific-technical developments at the simultaneous increase in import of food, agricultural machinery, equipment, means of protection and so on.

In the past two decades, the scientific-technical level of agricultural production has lagged behind the world level for two-three technological generations. Naturally, in the agriculture, there are also subfields, which have stepped in the way of innovations, which managed to achieve the world level in development but their competitiveness in the global market is insufficient and Ukraine as before has to import similar produce in big amounts.

5. An insignificant part of agricultural producers has a low level of profitability which causes unfavourable investment situation for agriculture.

Critical conditions of most agricultural producers do not make possible to create extended or simple renovations. They also cannot use those economic stimuli which the government provides for them due to the low profitability.

Summarizing the mentioned above, it is necessary to note that many factors influence the implementation of innovations at the production of sunflower seeds, one part of those factors promotes the innovative development of the enterprise and increase in competitiveness while the other part, on the contrary, withholds this development. In order to carry out efficient management over innovative activity, it is necessary to constantly analyse and search for leverages on those factors. Most scientists-economists define four groups of factors, which influence the innovative development of an enterprise:

- 1) economical, technological (technical-economical, economical-technological);
- 2) organizational-administrative;
- 3) political, legal (juridical, political-legal);
- 4) social-psychological (social-psychological and cultural).

In our opinion, the increase in competitiveness of producing sunflower seeds considering innovative component mainly depends on the following factors: ecological-economic and technological; institutional factors which to a bigger extent stimulate the innovative development of an enterprise, significantly impact the development of the innovative system (Fig. 1).

The most economical way of increasing amounts of producing sunflower seeds, its cheapening, and creation of conditions for more rationalistic application of soil-climatic resources and implementation of chemicalization achievements and complex mechanization, is maximal ecologization in the production of this type of produce and application of the biological potential of a new species of sunflower hybrid. The increase in the genetic potential of sunflower can be realized through the provision of ecologization for producing new species and hybrids of crops and enhancement to qualitative characteristics of the existing and improvement of the system of sunflower growing with keeping to principles of species substitution, ecological component, species renewal and species substitution. The input of new species and hybrids into the crop yield increase of main agricultural crops is the efficient index of the innovative process and can reach up to 70% of the total growth size.

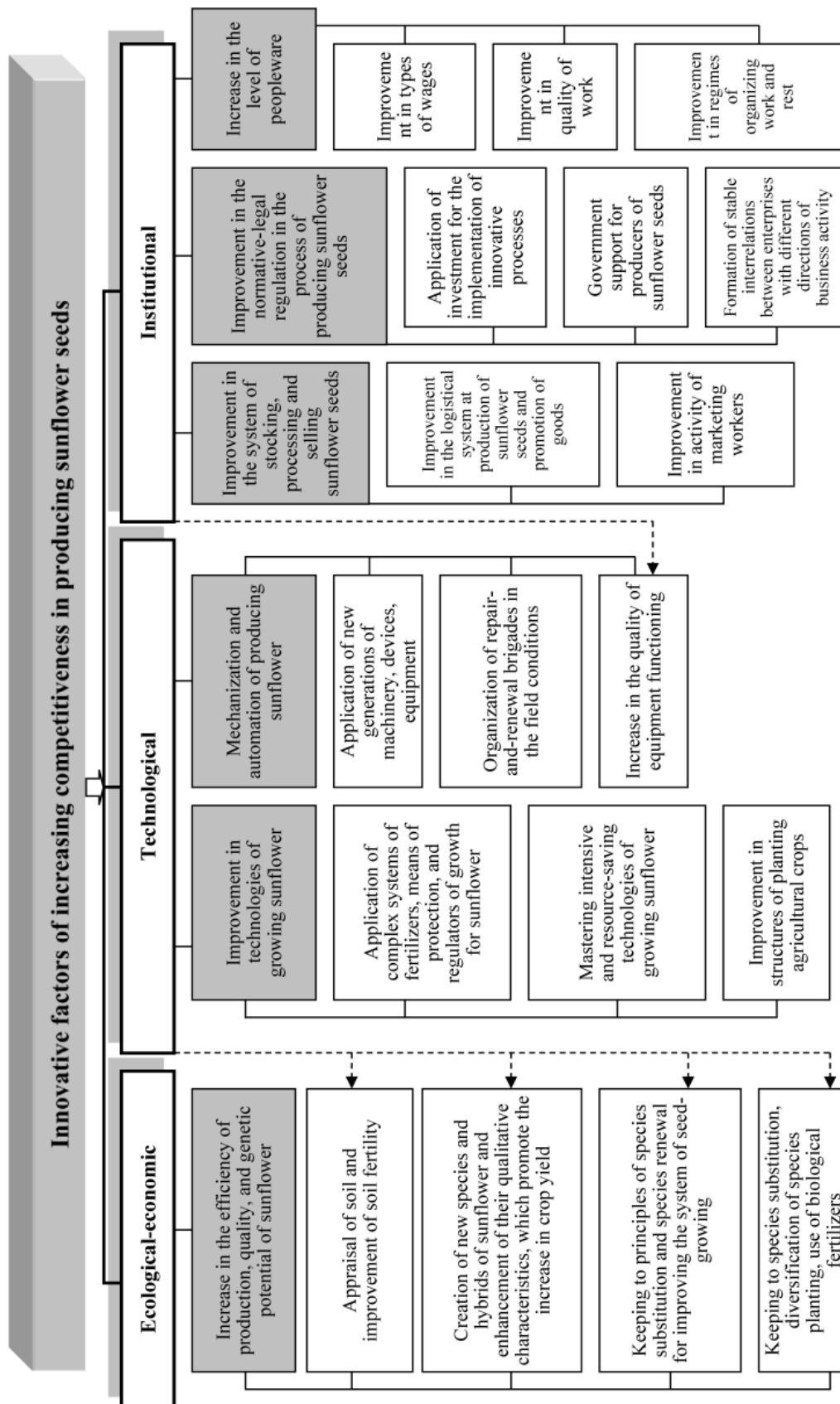


Fig. 1. Innovative factors of increasing competitiveness in the production of sunflower seeds

Source: developed by the author

The technological factor is reasonably considered as another important direction of the innovative development in the production of sunflower seeds and increase in its competitiveness under conditions of globalization. This factor is connected with the application of intensive and resource-saving technologies of processing sunflower, stocking, transportation and processing of produce, automation, mechanization, computerization, and robotization on the basis of creating and implementing new generations of machinery, equipment, and devices [11].

This factor should include the most economically justified growth of sunflower by resource-saving adaptive technology, which contains a set of technological actions, which provide a high level of crop yield as if with intensive technology but with minimal expenses of labour and material-financial expenses per unit of produce. The expediency of implementing the mentioned technology is explained by the fact that under modern conditions, not all agricultural enterprises due to economic reasons have the possibility to apply intensive technologies. Resource-enrichment technology of producing sunflower seeds, unlike others, gives the right to use the actions minimally, which makes possible to provide the protection of the environment, ecological stability, and safety. The adaptive resource-saving technology of growing the present crop is economically reasonable since the production of sunflower oil by the present technology makes possible to receive profitability of about 100% with insignificant production costs per 1 ha.

The application of highly efficient machinery, optimization of technical provision, increase in quality of functioning of transportation, connection, and water supply makes possible to keep technologies of growing sunflower, as well as to maximally realize the biological potential of the crop, which in turn leads to the increase in profitability, more rational application of resources, decrease in production costs per one unit, and increase in competitiveness both in the domestic and international markets.

The following step in the innovative development of producing sunflower seeds is the institutional factor. An analysis of the world experience confirms that to provide economic growth under modern conditions, it is necessary to apply corresponding institutional environment and mechanisms, which promote the quick implementation of new technologies in production. Concepts of institutional content imply the mediation between innovations and institutional environment. The term of the institutional environment includes a combination of decisive social, political, legal, and economic rules, which determine the limits of the human behaviour and create the basis for production, exchange, and distribution. Under institutional environment of the innovative development we should consider a certain well-ordered set of instruments (formal and informal regulations and rules), which create the matrix for economic behaviour or the mechanism, which is the combination of actions of some people directed to the behaviour of the others, making the latter keep to a certain type of behaviour and possess, as the result, a relatively strong social structure or organization [13].

This factor includes not only the development of structures of innovative provision and state regulation of the innovative activity but also the improvement in the system of stocking, processing, and selling sunflower seeds, enhancement of the level and quality of life of workers.

Part 2. Clusterization as a method of increasing the competitiveness of sunflower seeds

It is worth noting that for today a significant role in the increase of competitiveness of agriculture belongs to cluster formations. Clusters are viewed as the efficient factors of the innovative development of enterprises of different fields and territorial formations, unions, scientific establishments with the purpose of increasing competitiveness and concentration of production.

Clusters are specific scientific combinations of scientific production and commercial structures, which are based on usage of advantages of cooperative interaction, help the formation and efficient use of competitive advantages of separate enterprises, territories, fields, national economies under conditions of global economic processes and strengthening of the world competitive confrontation [10].

The application of the cluster approach at increased competitiveness of production implies the formation of clusters on certain territories from enterprises, which perform different functions but united under the same technological process, to the finished produce which is the result of that process, the produce is created using efforts of all participants of the process starting with those who dealt with scientific development and hiring staff, ending up with technicians, packers, and the chain of distribution. The advantage and novelty of the cluster approach are in the fact that it adds high essence to the microscopic component as well as territorial and social aspects of economic development, and suggests efficient tools for stimulating the regional development.

According to the foreign practice, clusters are some of the active and actual instruments of developing small and middle enterprises and in the past two decades, the process of their formation took place quite actively. A high level of clusterization is typical for such European countries as Austria, Great Britain, Greece, Denmark, Ireland, Spain, Italy, Germany, Holland, Norway Portugal, France, Finland, and Sweden. The world experience of clusterization in 2016 is shown in Figure 2.

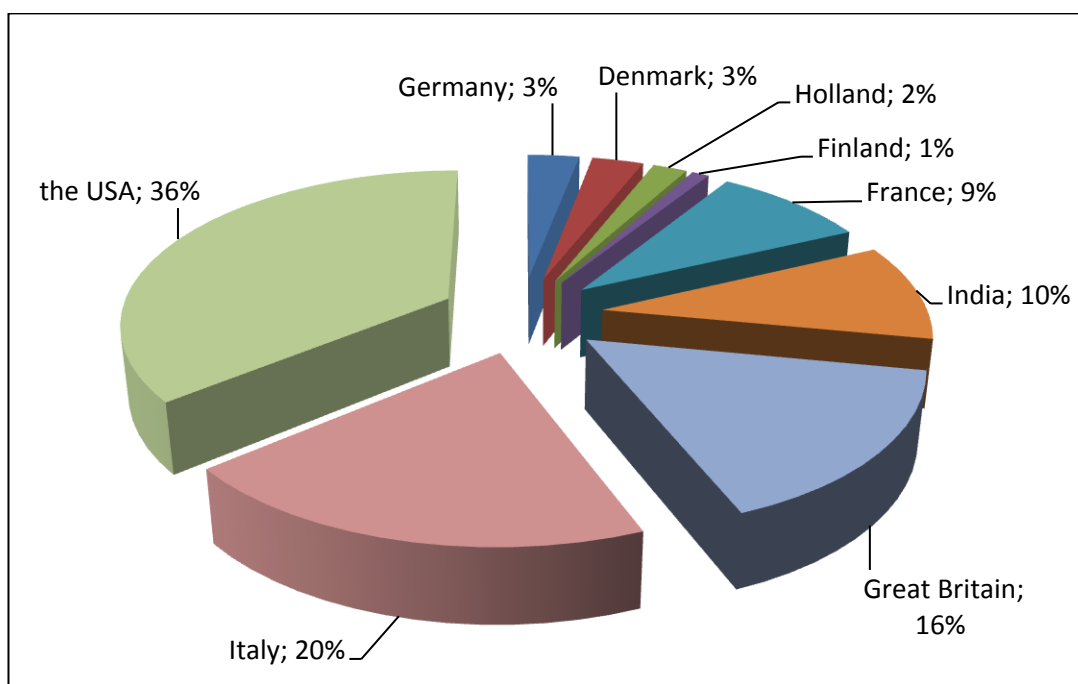


Fig. 2. World experience of clusterization in 2016

Source: developed by the author based on data [7]

According to the statistical data, nowadays clusterization is used in approximately 50% economies of the developed world.

In the USA, over a half of enterprises work within clusters, and the share of GDP produced in them exceeds 60%. In the EU, there are over 2 thousand clusters, in which 38% of the workforce is employed. Danish, Finnish, Norwegian, and Swedish industries are completely occupied by clusterization. The process of cluster formation takes place actively in South-East Asia and China, particularly in Singapore (in the field of oil chemistry), in Japan (manufacturing cars), and in other countries. In China, nowadays there are over 60 especial cluster zones, in which over 30 thousand companies work. The increase in competitiveness with the help of cluster initiatives is a basic element in strategies of development in most countries [14].

In the past decade, most clusters were created with the purpose of increasing competitiveness of separate regions and territories and they were specialized on the production of consumer goods. Nowadays innovative focus of clusters gradually increases and it is the essential characteristic, which defines competitiveness of cluster formations.

The main industrial directions of clusterization of enterprises are provided in Table 1.

The European Union views the cluster policy in the form of the key instrument of providing competitiveness of industries in the region, intensification of their economic development and innovative potential.

On the whole, agricultural clusters are of great importance for increasing competitiveness of production, and development of the economy of the country and regions.

Table 1

Industrial directions of clusterization of enterprises in the countries of the world

Country	Industrial direction
Switzerland, Finland	Electronic technologies and connection, informatics
Holland, France, Germany, Great Britain, Norway	Biotechnologies and bioresources
Denmark, Sweden, France, Italy, Germany	Pharmaceutics and cosmetics
Finland, Belgium, France, Italy, Holland	Agriculture and food production
Switzerland, Germany, Belgium	Oil complex and chemistry
Holland, Italy, Germany, Norway, Ireland, Switzerland	Machine building, electronics
Sweden, Denmark, Switzerland, Holland	Health care
Holland, Norway, Ireland, Denmark, Finland, Belgium	Communication and transportation
Norway, Finland	Energetics
Finland, Belgium, Holland	Building and development
Switzerland, Austria, Italy, Sweden, Denmark, Finland	Light industry
Finland	Lumber-paper complex

Source: done by the author based on data [1; 15]

Agricultural cluster in our opinion is a system, which creates a territorial-industrial union of neighbouring producers and processors of agricultural produce, which makes possible to use their resource potential rationally, increase amounts of production competitiveness of finished goods, act on the basis of competition and cooperation among themselves as well as promote the steady and innovative development of agricultural production and rural territories.

1. The most visible and successful agricultural clusters in the world are the cluster of winemakers in Chile and the cluster of flower-growers in Ecuador. The application of the cluster model in Chile enabled winemakers to increase export three times. Nowadays the wine cluster in Chile unites 100 winemakers who export 60% of the produce made in the country. Moreover, Chilean wine moved into the ultra-premium segment and has many international awards and all that is possible due to the application of the cluster approach. They united efforts of farmers, universities and authorities, invited experts from France who helped them to create necessary species of grapes and taught special features of producing elite wine.

2. The flower cluster in Ecuador also has an interesting story. This country had a huge amount of not used agricultural area. It was decided that the area should be used for growing flowers for this very segment possesses the highest profitability. Based in 1984, the cluster attracted foreign investors as well as experts from Holland who brought technologies, young plants, and seeds. As a result for today the cluster unites 1398 participants, Ecuador takes the 3rd place in the world in the export of flowers [6].

3. As for Ukraine, the need for creation of clusters is recognized at the government level by passing a set of legal regulations and clusters are being developed in Ivano-Frankivsk, Volyn, Rivne, Poltava, Sumy, Kharkiv, and other regions.

At present in Ukraine, there are about 25 acting and 50 potential clusters. Functioning of such a small number of clusters is insufficient for carrying out efficient industrial and innovative policy. The best regions in Ukraine where the process of cluster formation takes place are firstly Kherson, Poltava and Odesa regions.

4. Agricultural clusters in Ukraine has started to be developed relatively recently but there are examples of application of this model: in Khmelnytskyi region, a cluster of green tourism «Oberih» was created, it includes 10 agrarian villages; in Poltava region, the project of the cluster among producers of ecological produce has been realized; in Chernivtsi region, Ukrainian-Romanian «First Agrarian Cluster» was created on growing fruit-berry produce and development of gardening; in the city of Rivne in 2009 – regional agricultural industrial cluster «Agroinnovations» was created, in the same city, there is another cluster «Natural Milk», founders of which were 7 agricultural enterprises in Rivne, Ternopil, Lviv regions; in Vinnytsia in 2011, a processing food cluster was created. Such a form of organization has proven to be useful in many countries and it gradually enters our market [9].

International and not big for now domestic experience makes it possible to determine a set of advantages and disadvantages for clusterization of agricultural production (Fig. 2).

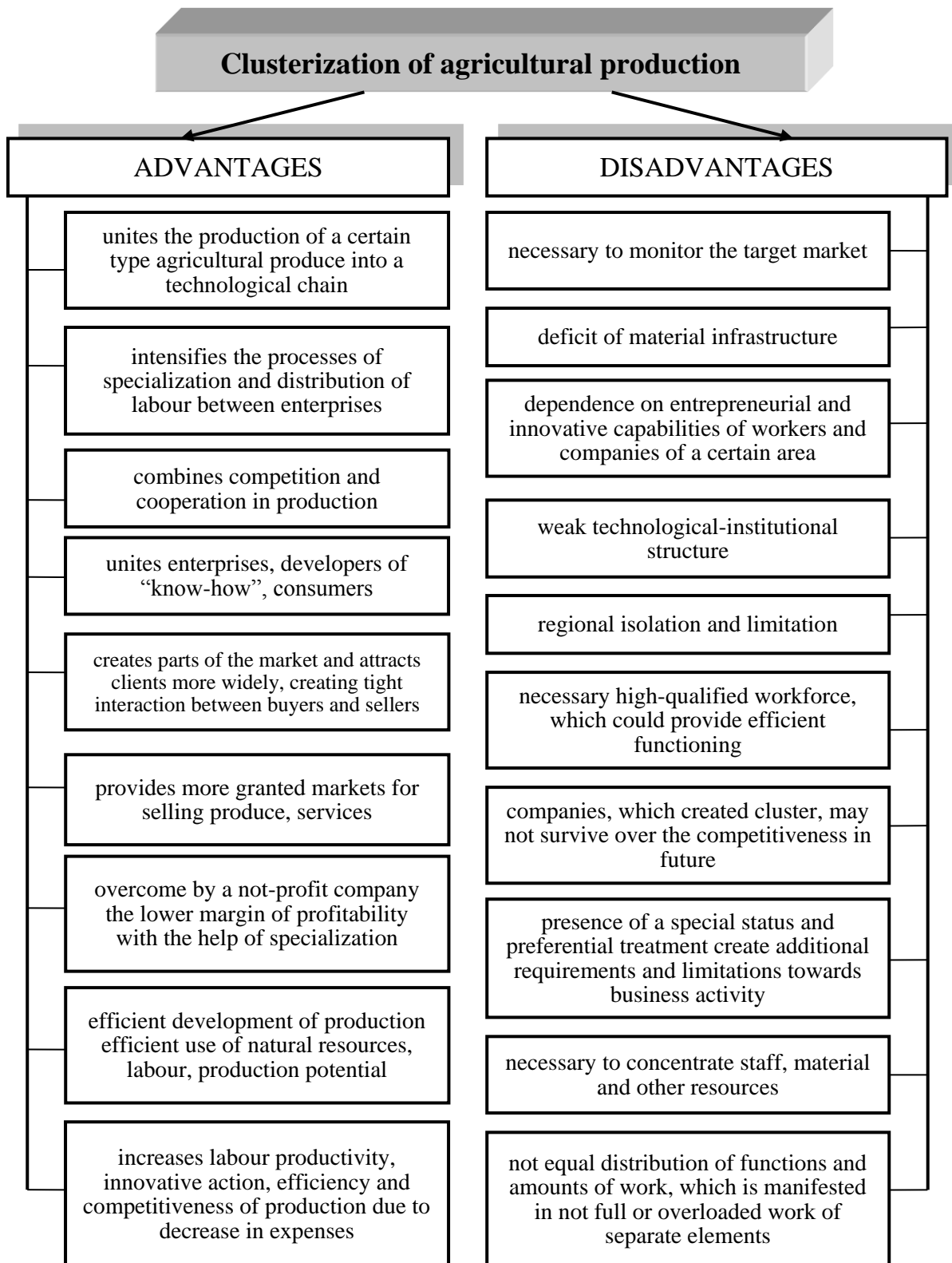


Fig. 2. Clusterization of agricultural production

Source: developed by the author based on data [3; 5; 12]

Agricultural clusters make possible to: integrate the production of a certain type of agricultural produce into one technological chain; intensify the processes of specialization and distribution of work between enterprises; combine cooperation and competition in the process of production; unite enterprises, developers of «know-how», consumers; provide them with the subjects of spread and strengthening of

interrelation in this segment of the market, keep the share of the market and more widely, attract clients creating a tight interaction between buyers and sellers; provide more granted markets for selling the produce, services; for non-profitable enterprises, overcome the lower margin of profitability with the help of specialization, which provides the increase in labour productivity and decrease in self-price of produce; more effectively develop the production and decrease the price per unit of technical service and produce, which is made on the basis of joint activity; increase innovativeness of production, boost paces of implementing innovations (scientific-technical and organizational-economical) in production; more efficiently use local natural resources, labour, production potential; increase labour productivity; increase efficiency of production at the expense of decreasing costs, and so on [5; 12].

It is worth noting that application of the cluster approach in the production of sunflower seeds will enable agrarian enterprises to receive an advantage over more isolated competitors. This approach provides an access to the bigger number of suppliers and services, adapted to the needs of customers, to the research and high-quality workforce, to the inevitable transition of knowledge and skills, which take place at the meeting and during business discussions. Through legal and political instability, enterprises in the form of clusters are easier to cooperate with foreign investors. Cluster agrarian enterprises are more competitive since they have the possibility to:

- produce big amounts of produce;
- create stable competitive advantages compared to independent enterprises;
- carry out efficient marketing policy;
- higher high-quality staff;
- apply progressive standards of quality to produce ecologically clean and high-quality produce;
- determine efficient specialization of enterprises according to the region, scales of activity and features of functioning for every single agricultural enterprise;
- implement innovations;
- carry out minimization and distribution of risks achieved as a result of cooperation and synergy;
- increase the steadiness of certain enterprises and the chain in general;
- establish long-term connections, including connections between producers and consumers;
- expand the markets for selling produce.

Despite a large number of advantages, clusterization of agricultural enterprises has a set of disadvantages, namely: the need to monitor the target market, which is the necessary condition for providing further successful development of business; deficit of material infrastructure, which slows down capital investment. The length of existence of cluster formations is dependent on entrepreneurial and innovative capability of workers and companies from a certain location, processes of development and commercialization of new ideas require corresponding resources and capital; weak technological institutional structure – cluster formations are dependent on regional establishments considering many things, which they are not able to do themselves or receive from other enterprises; regional isolation and limitation, which complicates the process of achieving competitive positions at the market; need for high-quality workforce, which could provide efficient functioning; companies, which created the cluster, in future cannot withstand the competition; presence of the special status and preferred treatment ground additional requirements and limitations towards carrying out economic activity by those unions; necessity for

zones of concentration of staff, material, and other resources limit the possibilities of developing such limitations in any economical active regions [3].

For today, the main problem of creating clusters is the fact that potential participants of a cluster produce almost the same goods and compete with each other. Their uniting motivation could be the fluctuation of the market expectations, significant trade extra charges of competitors. In our opinion, the facts, which complicate the development of agrarian clusters in Ukraine, are the following:

1. The imperfection of the legal base, which causes the absence of the support for cluster initiatives from the side of the government.

2. The absence of trust between companies, the reluctance of companies to disclose and share own information due to the possibility of being dependent on strong partners.

3. The weakness of acting agrarian clusters due to the low level of competitiveness in the market.

4. Upon entering the cluster, there is a real threat for the enterprise to lose state privileges and subsidies.

5. A detachment of education and science from agrarian production.

6. Shortage of foreign investment and venture capital since Ukraine has an unstable legislation policy and there is a high risk to lose money of foreign investors.

7. The absence of one unified database about existing and potential clusters as well as the overall picture on functioning and results of activity of the existing agrarian criteria of the country.

In Ukraine, there is practically no support for the cluster model of the region with the corresponding financing, which, on the one hand, discredits the competence of local governments and, on the other hand, repels from creating clusters.

For the efficient development of clusterization in Ukraine hence for the clusterization of enterprises-producers of sunflower seeds, it is necessary to create the appropriate state support. Nowadays the agricultural field in Ukraine, which deals with the production of sunflower seeds, requires the implementation of the new model of development, which with small financial investment could promote the increase in competitiveness of sunflower seed production and restoration of the agrarian sector. In particular clusters could become such a model hence their creation does not require significant financing but first of all, it is based on organizational movements.

Conclusion

Thus, the application of innovations is a mandatory element of contemporary production of sunflower seeds. This process must provide a constant application of more contemporary technologies of production and processing of this type of goods, new species and hybrids of the crop, progressive models of socio-economic development. The directions of developing sunflower production considered by us could provide not only a certain production level but also the acceleration of the scientific-technical progress which in turn is accompanied by strict and extended production, stability of receiving income for agricultural producers from selling sunflower seeds and increase in competitiveness of production both in the domestic and international markets.

Under contemporary economic conditions, the main component of the agrarian policy should be the innovative concept with the main direction to realize priority projects of development on the basis of the cluster model of manufacturing. The application of this particular cluster approach is in the increase of production

competitiveness for sunflower seeds but, unlike other innovative models of economic development, it requires minimal costs and at the same time provides significant positive effect and can be the stimulus for the development of not only agricultural enterprises but also of rural territories. Formation of the innovative agricultural clusters implies the increase in the innovation level of activity of agricultural enterprises, provision of efficient informational exchange of participants, the creation of the system of preparing specialized staff for granting the needs of the agricultural industrial sector as well as promotes the increase in competitiveness of producing agricultural produce including sunflower seeds.

References:

1. Bezrukih, D.V. Zarubezhnyj opyt klasterizacii v razvitii jekonomiki innovacij [Jelektronnyj resurs] / D.V. Bezrukih, A.F. Krjukov // Vestnik Krasnojarskogo gosudarstvennogo agrarnogo universiteta. – 2013. – № 9 – S. 14–23. – Rezhim dostupa: <http://cyberleninka.ru/article/n/zarubezhnyy-opyt-klasterizatsii-v-razvitii-ekonomiki-innovatsiy>
2. Best Countries For Business – [Electronic resource]. – Mode of access: <http://www.forbes.com/best-countries-for-business/list/>.
3. Farat O.V. Perevahy ta nedoliky innovatsijnykh klasteriv u porivnianni z inshymy innovatsijnymy strukturamy / O.V. Farat // Naukovyj visnyk Khersons'koho derzhavnoho universytetu. Seriya «Ekonomichni nauky». – Vypusk 6. Chastyna.3. – 2014. – S. 200-205.
4. Ginzburg A.I. Jekonomicheskij analiz : ucheb. posobie / A.I. Ginzburg. – Sankt-Peterburg: Piter, 2011. – 315 s.
5. Ketels C. Cluster Initiatives in Developing and Transition Economies / C. Ketels, G. Lindqvist, O. Solvell. – Stockholm: Center for Strategy and Competitiveness, 2006. – 38 p.
6. Ketels C. The Development of the Cluster Concept – Present Experiences and Further Developments / C. Ketels // Paper prepared for NRW conference on clusters, Duisburg, Germany, 5 Dec 2003 – Harvard: Business School, 2003. – [Electronic resource]. – Mode of access: http://www.isc.hbs.edu/pdf/Frontiers_of_Cluster_Research_2003.11.23.pdf
7. Klasterijna politika za rubezhom [Jelektronnyj resurs] – Rezhim dostupa: http://www.ckr-ugra.ru/cluster_policy/policy_out/.
8. Kulagin A.S. O stimulirovanii innovacionnoj dejatel'nosti / A.S. Kulagin, L.I. Leont'ev // Nedvizhimost' i investicii. Pravovoe regulirovanie. – 2002. – № 1 (10). – S. 17-21.
9. Kuz'o N. Klasterijna orhanizatsiia ahrariiv: zvolikaty ne mozhna ob'iednuvatysia... [Elektronnyj resurs] / N. Kuz'o. – Rezhym dostupu: <http://www.agro-business.com.ua/ekspertna-dumka/4153-klasterijna-organizatsiia-agrariiv-zvolikaty-ne-mozhna-obiednuvatysia.html>.
10. Muro M., Katz B. The New «Cluster Moment»: How Regional Innovation Clusters Can Foster the Next Economy // Entrepreneurship and Global Competitiveness in Regional Economies: Determinants and Policy Implications / eds. G.D. Libecap, S. Hoskinson. Bingley: Emerald, 2011
11. Nechaev V.I. Organizacija innovacionnoj dejatel'nosti v APK/ V.I.Nechaev, V.F. Birman, I.S. Sandu i dr. Pod red. V.I. Nechaeva. – M.: Kolos, – 2010. – 328 s.
12. Orlyk O.V. Klasterij iak innovatsijna forma rozvytku ahropromyslovoho vyrobnytstva / O.V. Orlyk // Visnyk sotsial'no-ekonomichnykh doslidzhen'. – 2012. – Vyp. 1. – S. 258-265.
13. Titarenko, H.B. Instytutsijni chynnyky rozvytku natsional'noi innovatsijnoi systemy Ukrainy: problemy metodolohii / H.B. Titarenko // Visnyk Sums'koho derzhavnoho universytetu. Seriya Ekonomika. – 2013. – № 1.- S. 110-115.
14. Vasylieva N. Cluster models of the agrarian production's development in the households / N. Vasylieva // Ekonomichni chasopys-XXI. – 2016. – № 3-4(2). – S. 13–16.
15. Velychko O. Cooperative formations in the system of regional providing logistics of agribusiness / O. Velychko // Ekonomika rozvytku. – 2013. – № 2 (66). – S. 20–25.

FORMATION OF THE INVESTMENT CLIMATE IN ECOLOGICALLY-FOCUSED GRAIN PRODUCTION IN UKRAINE

Summary

Formation of organizational-economic fundamentals in the development of grain production in Ukraine under the conditions of preserving ecological-economical systems, their discussion and analysis should consider the interrelation and interaction of processes, which take place in the economic component and in the environment is a significantly actual task taking into account the wider attention devoted to the formation of requirements to the quality of life and increase in standards of consumption in day-to-day life. The solution of this scientific task provides the task resolution to the formation of the strategy for the economic development of grain production in Ukraine. The results of those processes determine a new, higher level of life and higher social standards. The essential component, which defines the term «quality of life», is food. This very component directly influences our daily routine. The increase in indexes of standards of quality, which list a set of requirements for food, set the conditions, which might correspond to highly-clean agricultural processes of forming raw materials, from which nutrition values are made. The main aspects are the support at the corresponding level of the biological activity of soil with simultaneous production of food, and agricultural production with high consumption characteristics are based on it.

Introduction

Formation of competitive signs of grain complex produce, a list of factors and mechanisms of establishing analysis on their basis toward economic expediency of introducing modern, ecologically-focused agrarian technologies is an actual scientific task. State programs of developing grain production should provide not only modern approaches but also economic efficiency. Considering the fact that during the development of modern chemical, agro-technological, biotechnical fields of the industry, modern requirements started to be considered relatively recently in comparison to general historical and scientific traditions of those industries, not all methods and approaches, which provide high efficiency of agro-technological processes, are at the same time economically and socially expedient. Formation of the investment climate, which provides the investment policy and mechanism of its realization, determines the list of the unsolved tasks.

The development of the agri-technological processes in the coordinate system: person – animal – soil – plant is a maximally complete circulation (cycle), in which the main problem is the essence of processes when they are self-sufficient and do not require external additional inflow, is the main purpose of state programs on implementation of the innovative policy. The simultaneous resolution of contradictions, which lie in the need for the provision of positive dynamics of general economic indexes in combination with solving the problem of providing food to the general population of the country under conditions of simultaneous export satisfaction imply the limitations in the development of the enterprise focused on the closed cycle. While preserving mainly stable indexes of productivity, the

development is possible mainly in the direction of improving and enhancing the «purity» and quality of agri-technological processes.

It is obvious that those processes of developing the model of state regulation over the processes of developing grain production in Ukraine due to the transition to contemporary agrarian technologies should have a significant economic grounding at all stages of developing the new type, contain recommendations, implementation of which will ground the formation of competitive features in produce of the grain complex in Ukraine [9; 10].

Part 1. The theoretical-methodological and applied aspects of management over processes of forming the produce of the grain complex based on ecologically-focused technologies

Considering the experience of the state regulatory policy in countries of Eastern Europe, it is concluded that the typical transition of processes to a new type may take 2-4 years. It cannot help but influence the initial capital intensity. Besides climatic features of the region, in which new approaches towards the realization of agriculture are planned to be developed, should be considered. Minimization of risks is prompted by the organization of production with the maximally complete cycle, which includes stages from a plant growing to cattle breeding. Different time interval, which is typical for each agri-technological subcycle, makes possible to distribute the expenses by time and organize local positive subsystems [1; 5]. Thus, the most perspective from the point of view of providing the highest economic efficiency simultaneously with minimization of risks is the system of agri-technologies, which maximally completely includes the full list of agricultural activity, which is typical for a certain geographical region.

Ecologically focused technologies at the time of their application promote the significantly different set of actions, which require personal implementation. Considering final produce with much better quality, which could be obtained from grain crops grown by ecologically efficient technologies, and the prospect of their spread remain essential. Natural conditions in Ukraine provide the possibility for the active implementation of methods for growing grain crops, which minimizes the negative influence on the environment. The decrease in resource depletion of soils is provided by the correct application of organic fertilizers, which increase the level of dependency of crop yield on natural factors. Besides, the provision of technological processes is significantly more labour-consuming. It creates additional workplaces but requires the increase in financial expenses on the provision of technological processes. The foods, which were obtained by technological principles aimed at the same time at increasing the produce quality and provision of processes of the cyclic restoration of land fertility by using natural mechanisms with consideration of local climate conditions, are of a higher quality. At the same time, the mentioned type of technologies is significantly more capital-intensive and vulnerable to external negative factors.

An analysis of publications states that in general the task of the scientific grounding of the efficiency of using ecologically-focused technologies during the growth of grain crops is quite actual that is confirmed by numerous publications and social trends toward the development of standards of life quality [8–10]. Concurrently, the major difference of economic and technological processes, which take place in the system of ecologically focused technologies, grounds the need for the detailed scientific research [2; 7]. Particularly, classical stages with the determination of positions of goods at the market of consumers, stages toward

making decisions about the efficiency of implementation of new ecologically-saving technologies, possess certain differences. The feature, which is caused by new technologies that consider the ecological component while growing agricultural produce, creates new limitations and forms features of marketing in agriculture. Much attention of authors has been paid to determine those differences and develop methods to consider them but the strategy of forming and realization of marketing measures for grain crops remains incompletely defined [3].

The agrarian sector of marketing activity contains significant differences from other sectors. Firstly, it is a wide-range method of making decisions towards buying goods. For example, while visiting a grocery shop, the system of values of a consumer is essentially different from the process of choosing grain crops, from which the finished goods are made. For instance, making a decision about production of the corresponding quality and assortment, which will be in demand at the moment, or producing readiness, which will not sooner than one year later. The situation is complicated by the production of fertilizers, pesticides, and so on. Hence the process simultaneously belongs to two segments of activity: classical production and agrarian sector. Agrarian marketing is complicated by the fact that it deals with an extremely wide assortment of intermediate final produce, which has a different target value. For example, some of them are the goods of first need (essential bread produce) while others are raw materials for the processing industry (grain, flour and so on). Marketing influences the processes of adding value and creation of new values by providing such qualities for the goods, which make them useful for the consumption. Because of inclusion into the agrarian market of different types of activity (physical and economical), the formation of the strategy should consider a simultaneous connection and interaction of these processes [4]. Formation of strategic marketing means, their timely combination, and exact characteristics towards the determination for their realization and implementation should be based on the previously determined model of making strategic decisions [8]. Though in almost any decision, there are different components, which characterize it, and consequences of their implementation (Fig. 1).

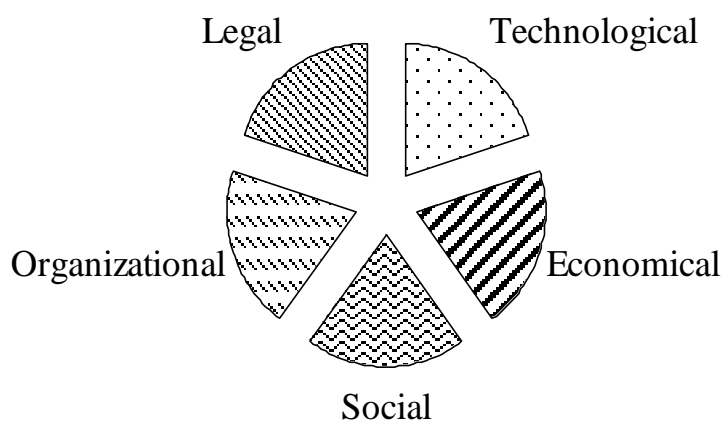


Fig. 1. Components of the decision

The economic component is characterized by economic consequences from the implementation of the made decision. For an ecologically-focused segment of the agrarian business, the time shift is essential (not less than one year) between the point of making a decision and the moment of receiving results from its realization. The organizational component considering much bigger labour consumption of agrotechnological processes in general and ecologically-saving technologies while

growing crops is vital, hence the workers themselves implement it into practice through the realization of managerial decisions. Technological component obtains major limitations; most of them cannot be excluded (for example, time factor, the sequence of actions, speed, and conditions of growing crops, and so on). The legal segment considers limitations in the field of the law; it is unacceptable to violate any regulations. The main purpose of the social segment is to consider trends and wishes of the society; the process of making decisions about any marketing strategy relies on them [11].

Multifold approach while making managerial decisions is an essential element of marketing provision for agricultural processes. Changes in requirements to agricultural produce, with the only unchanging trend of quality enhancement, complicate the process of making decisions require considering more and more factors and aspects, which form the environment for the economic system functioning. The theory of making decisions is based on fundamental works on mathematics, psychology, sociology, economic, and legal sciences (Fig. 2). Interdisciplinary type of the process of making decisions is grounded by its variety analysis of the phenomena, which form the decision. At the same time, an excess amount of the informational vector complicates the process of making decisions due to excess amount of secondary factors, which to the insignificant extent influence the formation of conditions for the functioning of the economic system.

Each of the elements, which form the decision (Fig. 2), has specific characteristics and methodologies of application. Thus, the informational aspect underlines the informational nature of making decisions. From the basic approaches of the informational aspect, the process of making decisions is considered as the process of transforming the incoming information into the information of managerial decisions.

This decision is formed during the processing of the informational vector for the condition of the object (system), which is studied by the subject of management. Usually, the informational component is implemented in the form of the system, which may include two purposes: support of the most optimal decisions among the list of all possible decisions or ranging of variants of decisions by certain lists of classification.

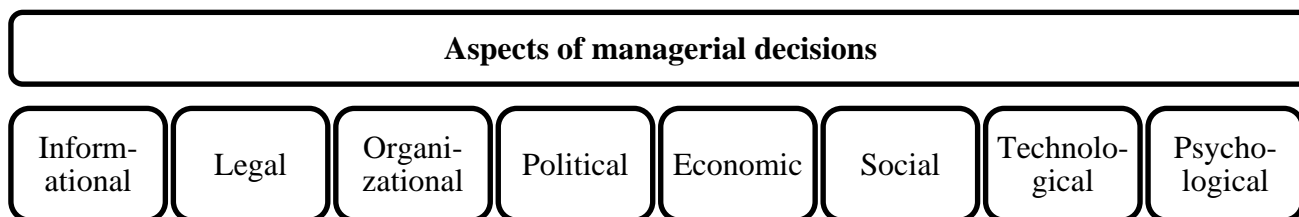


Fig. 2. Aspects of managerial decisions

For both variants, the most important are the reasonable selection of the set of criteria and their ranging by priority classifiers. During the analysis and search for information, the method of informative search is used, intellectual analysis of data, search for information in databases (Fig. 3), analysis of precedents, imitative modelling, evolutionary calculation and genetic algorithms, neural networks, situational analysis, and so on.

Each of the mentioned approaches (Fig. 3) focuses attention on a certain aspect or a set of aspects during the formation of the managerial decision, at the same time not providing an overall idea about it. General combination of all aspects while making a decision provides minimization of risks from incorrect managerial influence on the

economic system. Informational component makes possible to unite in one environment general for all aspects of making decisions, their characteristics, and conditions of implementation.

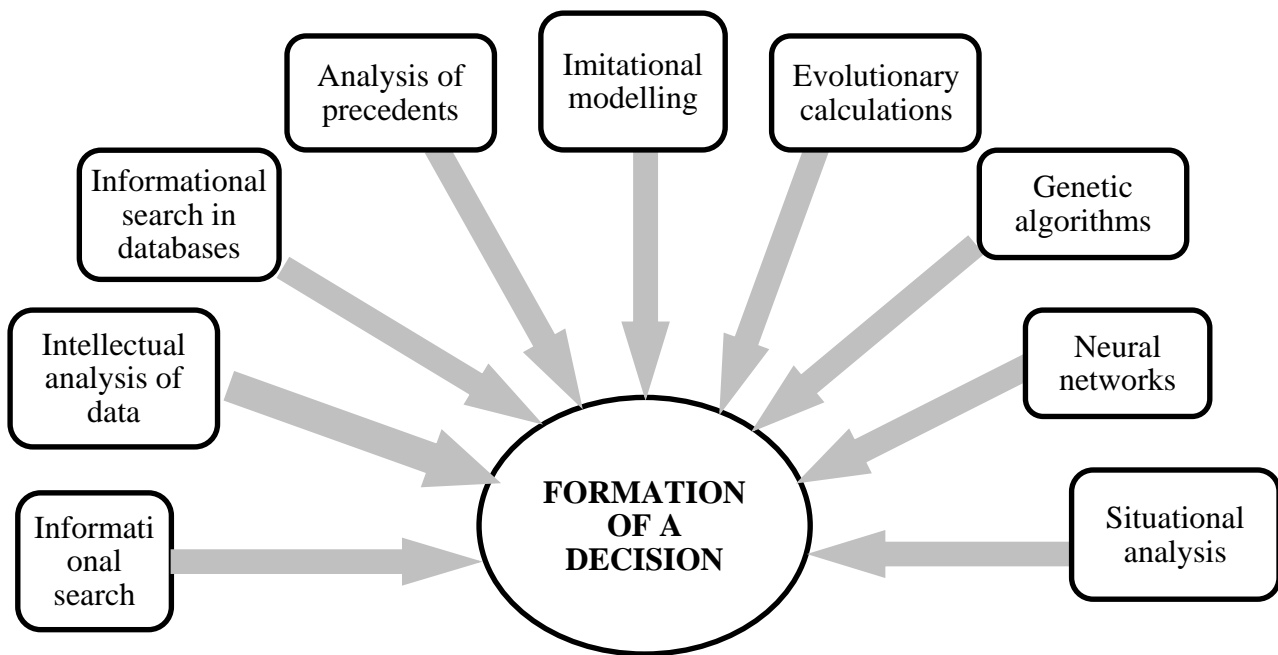


Fig. 3. Methods of analysing information for forming recommendations on decision-making

While making a decision, usually there are two approaches: intuitive and rationalistic. At the initial stage, it is possible to rely on intuitive choice only under conditions of possessing overall information in the market, using long-term statistics, which forms the dynamics of changes in demand. The dynamics of changing the demand for the produce received from ecologically clean grain crops mainly depends on the degree of attractiveness of a healthy lifestyle in the society, season, economical condition and prospects of developing the economy of the country and region. Uncertainty is the biggest problematic component while making decisions about marketing in the agrarian industry.

There are four types of uncertainties (Fig. 4). The low level of uncertainty almost does not influence the quality of making decisions. The middle and high levels of uncertainty require the development of new and specification of the existing methods of making decisions.

Extremely high uncertainty is located beyond professional competence or informational provision of a person who makes a decision.

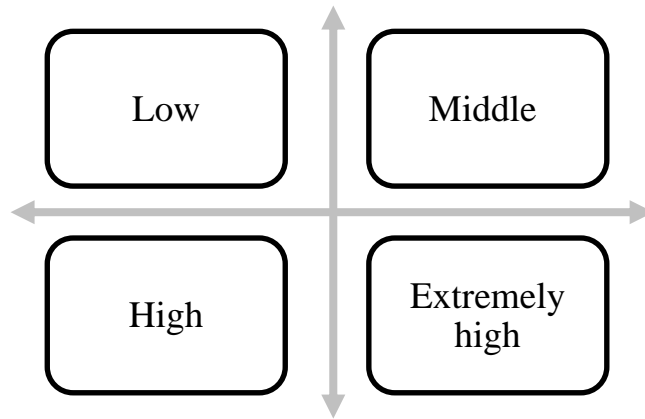


Fig. 4. Types of uncertainties

For agrarian business processes, there is a typical situation when the factor of uncertainty is extremely high but the competence of people who make decisions does not become doubtful. There are four known main types of models for making decisions considering managerial processes (Fig. 5). The suggested models unite the possibility of their application at the initial stage of decision-making toward implementation of ecologically-focused agrarian technologies of growing grain crops. The initial superficial analysis, which includes a wide range of informational vector condition, provides the possibility to choose the correct direction toward making decisions and formation of the following tasks concerning analysis.

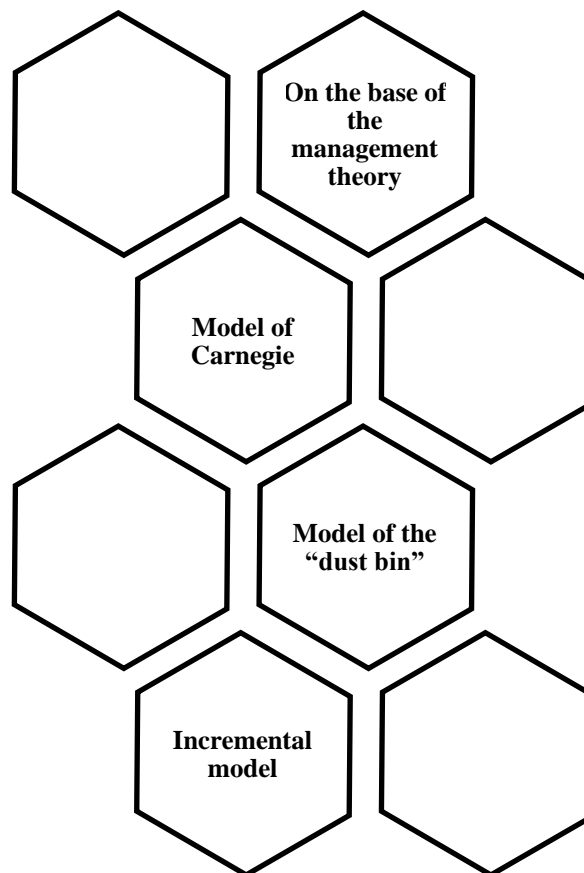


Fig. 5. Models of making decisions

At the stage of macro- and micro-environment, it is quite reasonable to carry out the analysis of trends, which form conditions of functioning of bank establishments

and policy of support for the agrarian sector from the government. Hence technological agrarian processes, which are focused on the ecological component, preservation of the environment is more long-term by the time of the implementation and they possess smaller margin of safety toward hardly foreseeable contaminations, determination of trends and prospects for the allocation of financial inflow (investment) at the early stages of developing new technologies are a necessary factor. Formation of the price policy, retailing and wholesaling prices is based on a consideration of such a factor as sufficient presence of ecologically friendly fertilizers at the needed amounts. It influences crop yield and quality of the received grain crops. The unknown factor at that stage is information about weather conditions of ripening and harvesting grain crops. This factor also cannot be influenced by any factors except for environmental (excluding technological disasters). Formation of the methodology of calculating multi-segment price policy, which considers a variety of factors of influence on the process of making decisions by a consumer provides stimulation for processes of consumption and purchasing by means of widening segments of produce consumers, should be based on a motivational factor, which is caused by the dynamic component of the price. For example, if the produce is used for the first time, the price discount is provided.

Organizational measures planning aimed at selling produce also stimulates sales and it should consider the significant used capacity (use of «remote» workforce in the process of supporting technologies for providing conditions of growing grain produce). It causes big financial expenses but the bigger part of those can be viewed as an investment into future business processes. Strategic marketing forms the trajectory, which considers maximal possible equal interests of a consumer, agrarian producers and ideally related enterprises, which provide business processes in the agrarian sector. So, at the initial level, it is necessary to provide a formulation of tasks, main objectives, which must be achieved as a result of implementing the marketing strategy (Fig. 6).

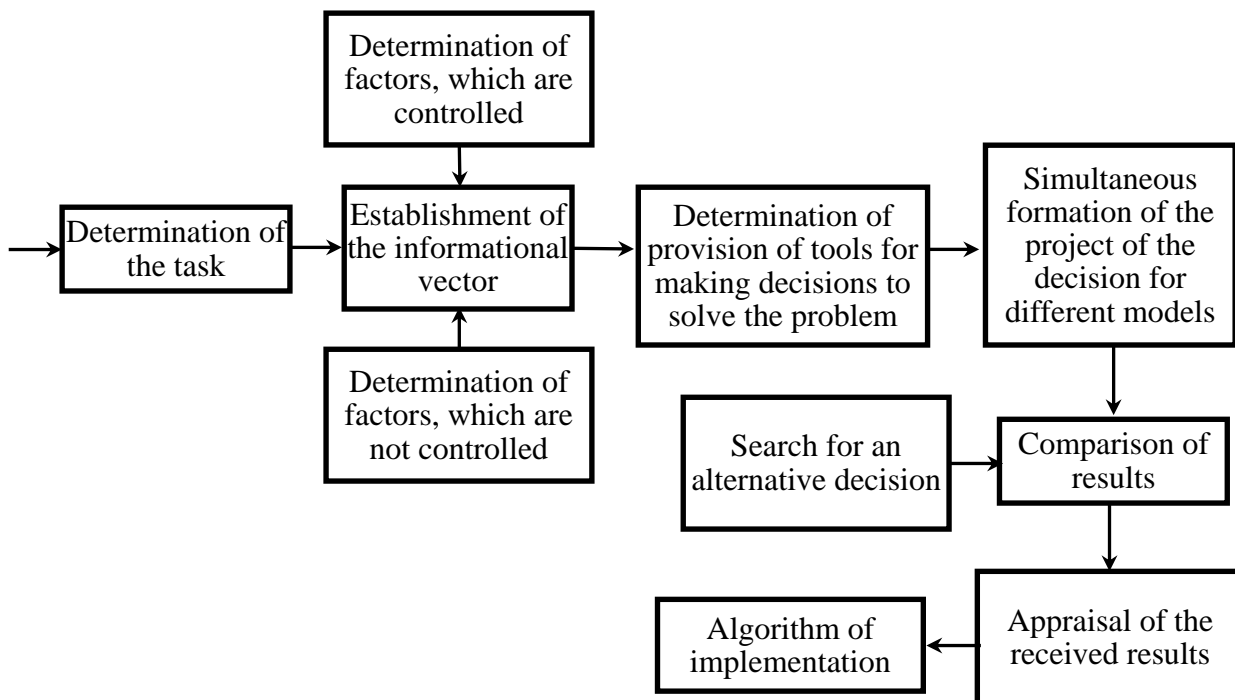


Fig. 6. Stages of forming a strategy

While forming the informational vector, it is necessary to realize all numerical characteristics, which describe the capacity of the market, its dynamical and statistical indexes, trends toward seasonal changes, and so on. The essential stage is the determination of a set of factors, which can be corrected and should be considered as uncontrollable and weakly determinative. Based on that, the model for making decisions and formation of decisions simultaneously by the set of certain models is defined. Based on a comparison of results, the analysis is carried out toward the possibility and necessity of alternative tools for solving the set task. Upon carrying out appraisal, the algorithm of implementing the suggested strategy is formed.

Part 2. Distinguishing features of the contemporary process of growing grain crops and formation of macroeconomic indexes of grain production

Global processes significantly influence the list of components of demand for agricultural produce, which also stimulate the essence of the ecological component in the characteristics of the agrarian produce. Taken together all that forms the sales strategy of agricultural enterprises. But the production, which was made using ecologically-focused technologies, possesses certain distinguishing features while developing production cycles and in the process of selling and promotion (targeting) in the market.

In the market economy, the term «demand» means a description of needs, which possess their own form of manifestations, financial representation. The interrelation between price and demand for production states to the fact that the decrease in production price stimulates its purchase by potential buyers (Fig. 7). In case, there is a change of indexes in amounts of purchases by production users with invariable prices the demand curve is moving to the left or to the right from the initial position.

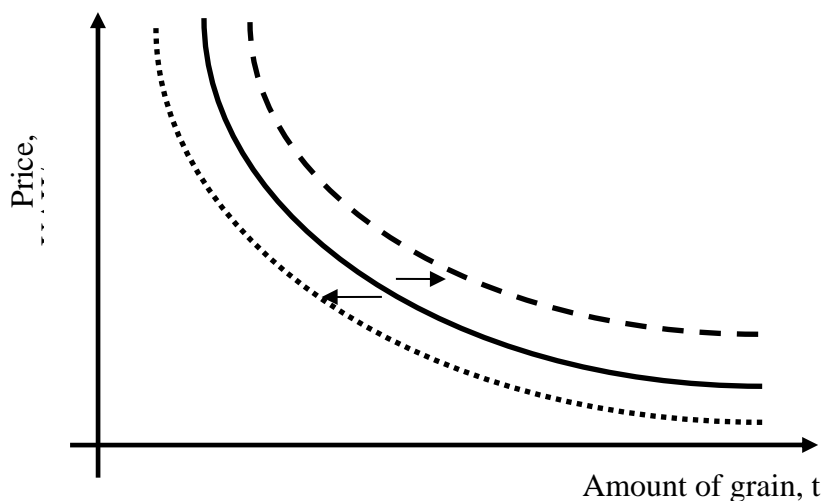


Fig. 7. Demand curve for grain

Analysis of the demand for the production of agricultural enterprises determined certain features, which should be considered in researches:

1) derivative nature of demand. Demand for grain produce depends on changes in demand and its structure for finished goods, which are produced with such main ingredient as grain crops;

2) changes in demand for agricultural production is more slowly compared to indexes, which characterize the dynamics of changes in demand for the produce of other production fields;

3) under conditions of insignificant inflation influence, the demand for agricultural produce tends to be stable.

It is worth noting that the grain market is structured by the types of produce as the market of fodder grain, the market of bread-grain, and the market of seeds. Each of these types has a typical set of factors, which determine the level of elasticity of the curve «price-demand» and dynamics of processes. Tastes and preferences of consumers directly influence the use of agricultural production, which was received using ecologically-focused technologies. The attention to the produce of this segment is caused not only by its consumer characteristics but also by the desire of people to protect the environment and improve the ecological condition of the environment. It is notable that the attention to the condition of the environment is not typical for a certain layer of society and does not depend much on the income of people. First of all, the relation to ecological problems is formed in the outlook of the citizen and during his/her routine life and experience (negative / positive) – getting through or recovering from the disease, conditions of rest, meeting with attitude to the environment and surrounding world.

Dynamics in changes of the area under wheat cultivation in Ukraine from 2005 to 2011 demonstrates almost permanent numbers (Fig. 8).

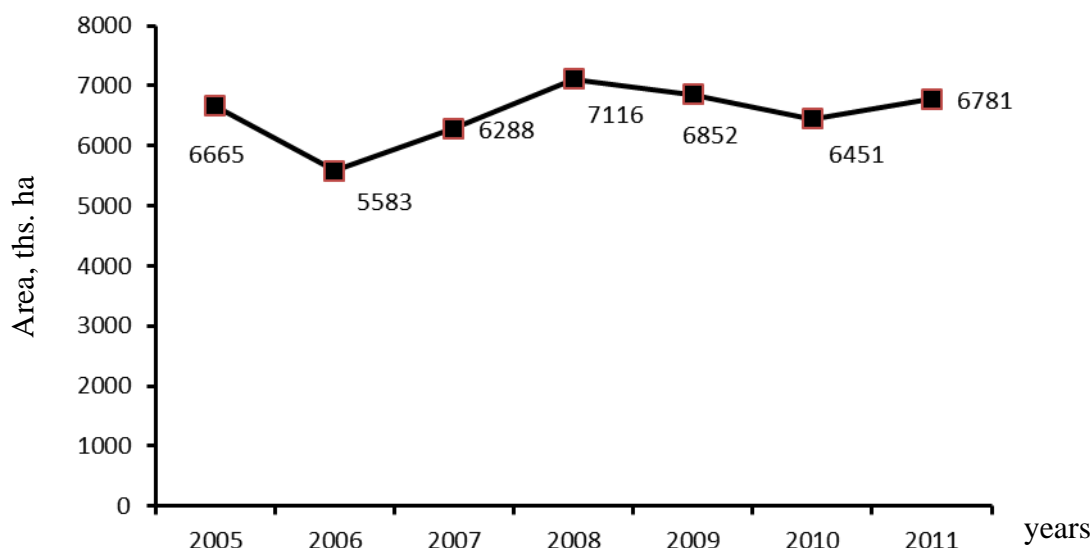


Fig. 8. Area under wheat cultivation in Ukraine

One of the factors, which causes small fluctuation in numbers of areas under wheat, is more dynamic processes in other crops (rape, sunflower, corn for grain, barley and so on), which are caused by more situational and financial attractiveness for selling a certain set of grain crops and technical crops. The almost similar situation is observed in the low dynamics of changes in the number of agricultural enterprises (Fig. 9).

The difference between minimum values in 56,133 enterprises and maximum in 59,059 makes less than 5%, which implies, on the one hand, the certain condition of saturation of the agrarian market, on the other hand, the moderate speed of changes in consumer characteristics of the suggested produce.

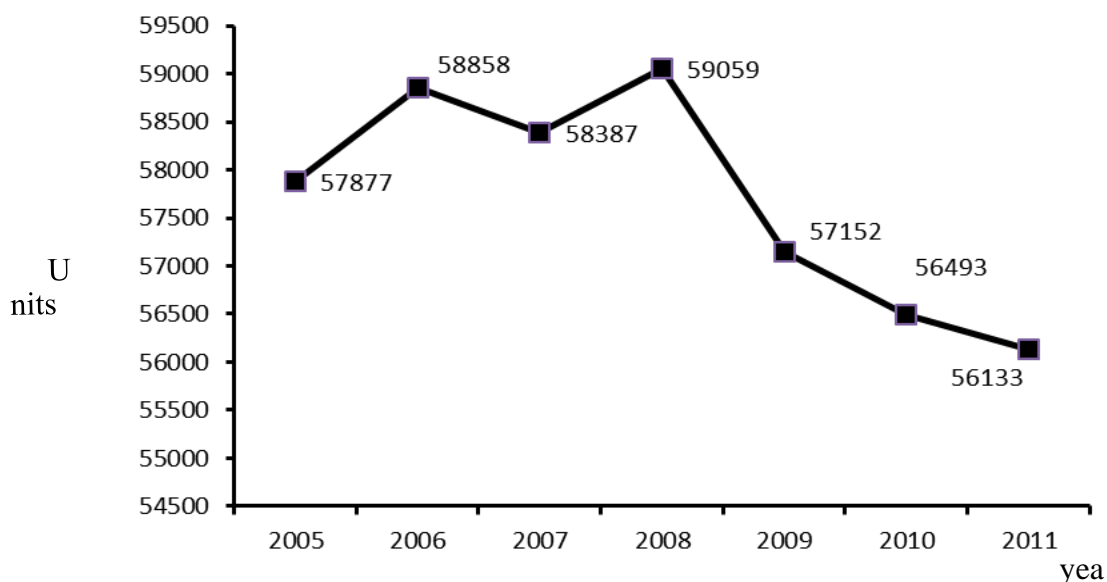


Fig. 9. Number of the existing agricultural enterprises

It is remarkable to pay attention to fluctuations in indexes, which characterize changes in production of wheat. They were the largest (Fig. 10). Thus, the difference between the minimum and maximum values is 46% from maximum. Undoubtedly, it has been caused not least by natural-climatic conditions for growing grain crops.

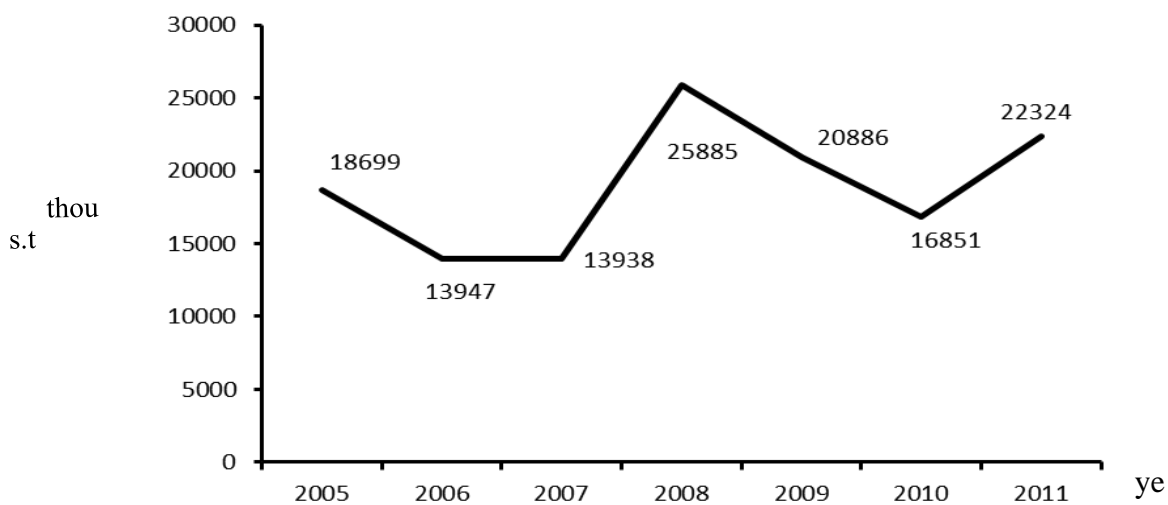


Fig. 10. Production of grain crop (wheat)

Hence the product offering at the market of grain crops is strategically difficult to predict. Unfavourable climatic conditions for growing grain crops create contradictions between desires of producers to sell more produce at the increased price and limitations in the existing amount of production (strategic reserve grain funds are limited by the capacity). The speed of getting grain crops depends on climatic, seasonal changes.

Expenses per hour to grow agricultural produce are also poorly controlled since the time of passing natural processes can be changed only within a narrow time range.

Part 3. Analytical research of conditions for the functioning of the grain complex based on ecological-focused technologies

It has been reported [6] that the use of neural networks provides the most positive effect in situations when it is precisely known that between the list of incoming parameters and characteristics, which describe reaction to them, there is an interrelation though the exact type of that interrelation remains unknown. One more condition for application of neural networks is the possibility to carry out the process of education. To provide data gathering, which is the basis for the process of studying the neural network, it is necessary to determine the number of variables, which are to be gathered and the amount of data, which characterizes them and is necessary. The simpler is the case when data are characterized by a numerical scale. It can be statistical information, which describes intensity and efficiency of economic processes.

Taking into account advantages of neural networks over classical approaches of analysis and synthesis of new knowledge, it is quite reasonable to create the system of informational provision of economic processes, and the main difference is the ability to learn from a huge number of examples and conditions, when mechanisms of the situation and function development depends on input and output indeterminate. It is worth noting the proven capacity of neural networks to successfully form decisions based on the incomplete informational vector. Considering area spread of agricultural land and the level of development of wireless technologies, which provide access to the Internet, the ability of neural networks to be integrated with databases significantly exceeds the efficiency of the process for initial data processing.

It is known [6] that an artificial neuron imitates the features of a biological neuron. Several signals are sent to the input of the artificial neuron, each of those signals is the output of another neuron. Each input is multiplied by the corresponding weight which is the analogue of synoptical effort. The whole multitude is added, which defines the level of activation of a neuron. The model, which realizes this principle (Fig. 11), contains the sum-total of input signals x_1, x_2, \dots, x_n , to vector X . The weight of each signal is defined as $\omega_1, \omega_2, \dots, \omega_n$. Each weighting coefficient multiplied by the own input signal is delivered to the totalizer \sum . Output «NET» contains the result of transformations of the chains mentioned above. The next step is in the transformation of the signal «NET» by the function, which activates «F» and forms the output signal «OUT».

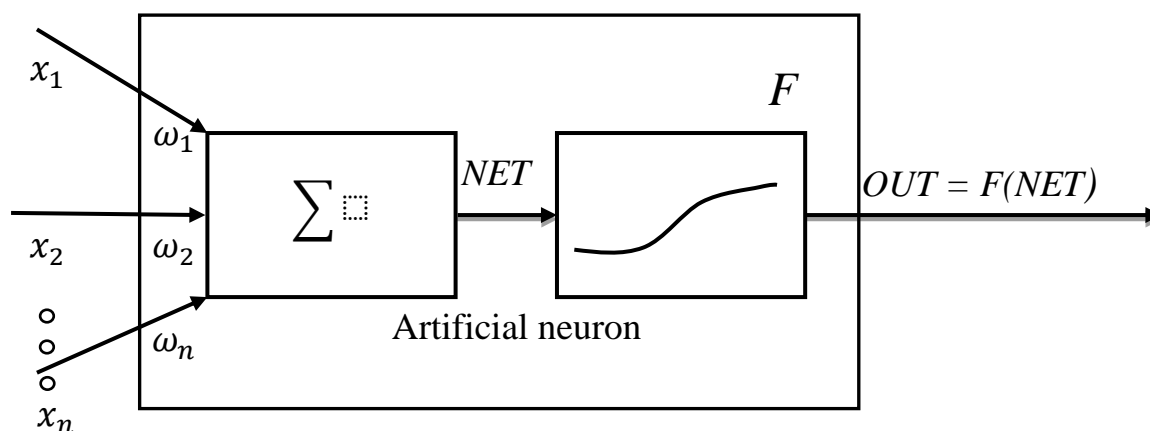


Fig. 11. Artificial neuron with the activating function

The function, which activates, can be an ordinary linear function of the type $OUT = K(NET)$, where K – constant of the threshold function, T – constant threshold value:

$$\begin{cases} OUT = 1, NET > T; \\ OUT = 0, NET \leq T. \end{cases}$$

Block «F» (Fig. 1) carries out the narrowing of value «NET» in such a way that at any values of «NET» the value «OUT» will have a certain limited range. The function, which performs narrowing, is most frequently a sigmoid or logistical function: $F(x) = \frac{1}{1 + e^{-x}}$. Thus we can determine: $OUT = \frac{1}{1 + e^{-NET}}$.

It is necessary to note that the use of sigmoid function makes possible to process (consider) both poor and multiple outputs of stimulation. Using different variations of the narrowing function and activating function, it is possible to use neural network approaches to: predicting and risk estimating possible future deal; predicting amounts of sales; predicting loads of work capacities; predicting demand for new production; determination of trends, correlations, typical samples, and exceptions in big amounts of data. The need to consider different factors, which influence the formation of prices in the mechanism of self-regulation of the market economy leads to the need for the development of mathematical models, with the help of which it is possible to carry out the prediction of price trends [8].

The equilibrium is the result of interaction between demand and supply (Fig. 12). The point of equilibrium (point «A», Fig. 12) reflects the equilibrium price, which satisfies both the buyer and the seller. In the classical situation of the market economy, the increase in prices leads to the increase in supply and decrease in demand. In the case of produce with a changeable time of production (industrial goods), the time of reaction delay to external stimulus is similar to the time needed to produce the goods. For agricultural production, the situation is different.

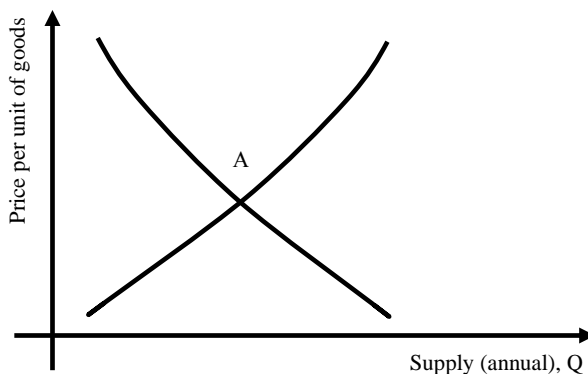


Fig. 12. Equilibrium price

In the first place, manufacturers of agricultural production do not possess significant possibilities to influence the time of receiving (ripening) production especially considering ecological limitations. Thus, the manufacturers react to market changes with a big delay. It leads to cyclic fluctuations of supply and price.

We shall consider the model of equilibrium price for the market of one type of goods – grain crops. We consider the time to be continuous. Demand and supply

(d, s) are such factors that depend on price by the linear law. Change of price is proportional to the exceed of demand over supply: $\Delta p = \gamma(d - s)\Delta t$, on conditions that $\gamma > 0$. Based on the above, we can write: $\frac{1}{\gamma} \frac{dp}{dt} + (b + \beta)p = a - \alpha$, $p(0) = p_0$.

Thus, we can see that the process of changes in prices is described by inertial chain by the constant of time (Fig. 13): $T = \frac{1}{\gamma(b + \beta)}$. Equilibrium price p_e that is the point of intersection of demand and supply graphs is determined as: $p_e = \frac{a - \alpha}{b + \beta}$.

The transitional process, which describes the change of price by time for the market of one type of goods, takes the following form of a curve (Fig. 13 a).

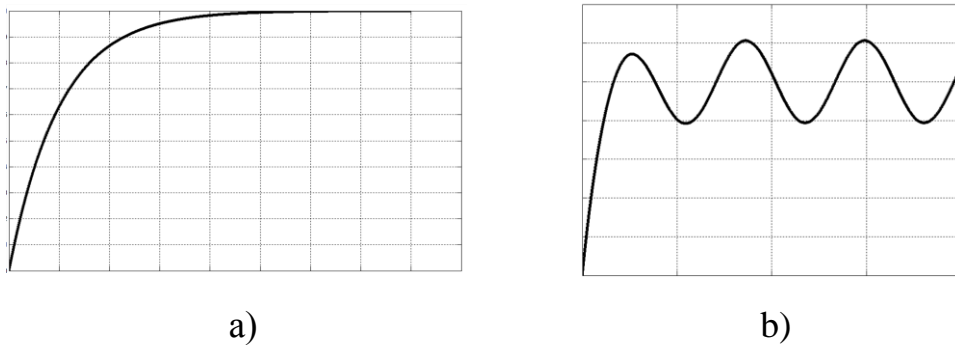


Fig. 13. Curves of price changes by time without considering a variable component (a) and considering a variable component (b)

At the same time, the presence of cyclic fluctuations influences the supply and prices and changes the graphic solution for the equation with price is represented (Fig. 13 b). From the picture, it can be seen that there are fluctuations of the price around a certain equilibrium value. Creation of a mathematical model, which considers factors, which influence the process of price formation makes possible to predict trends of variable changes in the market of grain crops.

On the whole, investment prospect of ecologically focused agricultural technologies depends on a multi-variable system of making decisions by potential consumers of the finished goods. Therefore, it is reasonable to apply tools, which consider multi-variability with the purpose of defining prospect and investment attraction of ecologically-focused technologies under specific economical-social conditions. Moreover, agriculture just as any other field considers the effectiveness of work in other fields of economy.

We will consider the multiple interconnected linear dynamic system, in which the output condition is defined by several output variables y_1, \dots, y_n . The statistical intersectoral analysis by Leontiev is obtained by comparing field outputs by final consumption to the produce of the fields [8]:

$$x - Ax = y. \quad (1)$$

At that $(n \times 1) x = \begin{pmatrix} x_1 \\ \dots \\ x_n \end{pmatrix}$ – column vector of annual gross field outputs;

$(n \times 1) y = \begin{pmatrix} y_1 \\ \dots \\ y_n \end{pmatrix}$ – column vector of annual final demand for field produce;

$(n \times n)A = \|a_{ij}\|$ – matrix of direct costs at that each element a_{ij} demonstrates the number of units of produce i necessary to produce the unit j of produce.

To obtain the model of the dynamical intersectoral equilibrium vector y_i in each year t will be written in the form of two vectors, which characterize investment goods and consumer goods: $x_t = Ax_t + B(x_{t+1} - x_t) + c_t$. At that $(n \times n)B$ – a matrix of capital-output ratio, which increases. Each element of the matrix shows how many units of produce i are necessary to produce in order to increase the annual production of j product per one unit; c_t – column vector of final consumption. To move from the discrete form (1) to continuous time, it is possible to write [4]:

$$\begin{aligned} B(x_{t+1} - x_t) &= (E - A)x_t - c_t, \\ B(x(t + \Delta t) - x(t)) &= ((E - A)x(t) - c(t))\Delta t \\ B \frac{dx}{dt} &= (E - A)x - c(t) \end{aligned}$$

Or in the form when there is matrix B^{-1} then:

$$\frac{dx}{dt} = B^{-1}(E - A)x - B^{-1}c(t), \quad x(0) = x^0. \quad (2)$$

To provide the stability of the economic system, the roots of the characteristic equation must have negative and real parts:

$$|B^{-1}(E - A) - \lambda E| = 0. \quad (3)$$

Thus, for example, if $n=1$ the expression (3) will take the form: $\frac{1-a}{b} - \lambda = 0$. Considering that a – a part of the intermediate product in the total yield, b – positive capital-output ratio of the gross production, then: $\lambda = \frac{1-a}{b} > 0$ – the economy is not stable and it can formally without limitations increase the gross output, which is impossible in real life. Therefore, it is necessary to consider limitations. For example workforce resources.

Conclusion

Thus, considering the mentioned features of agrotechnological processes of growing grains by ecologically protecting technologies, it is quite reasonable to form the informational vector, which describes the system of making decisions considering controllable and uncontrollable factors of influence. It makes possible to set the level of uncertainty for processes of predicting possible situation and it leads to achieving the purposes of the marketing strategy.

It is necessary to consider features of the agrarian market itself and motivational components for making decisions by the potential consumer during the positioning in the food market.

Under conditions of practically unchangeable (or insignificantly changeable) indexes in the number of enterprises-producers of agricultural produce, areas under wheat, dynamics of crop yield are essential. This yield in combination with other additional risks, which are typical for ecologically-focused agricultural technologies, and consideration of factors, which influence integral indexes of supply and demand, the level of their influence on the process of making decisions towards buying the corresponding produce, require additional research.

To decrease the risks that are important for enterprises, which use ecologically-focused agricultural technologies, it is reasonable to create the system of informational provision of economical processes. The main difference of such a system should be the ability to learn by a large number of examples if patterns of situations and dependence functions between input and output data are unknown.

Application of the dynamic model of intersectoral balance by Leontiev makes possible to predict by the time the trajectory of movement for the main values, which characterize economical processes. At the same time, incorrect ignorance of the limiting factors leads to the presence of mathematically correct but economically not grounded results. It is quite logical to develop the methodology of defining the list and coefficients of limiting factors to provide an adequate mathematical model in the real object of the research.

References:

5. Vasilieva N. K. Prediction of prices in the field of plant growing in Ukraine and regions / N.K. Vasilieva // *Economical Journal* – XXI. – 2013. – # 11-12 (2). – P. 26–29.
6. Venttsel E.S. Research of operations: tasks, principles, methodology / E.S. Venttsel. – M.: Drofa, 2004. – 208 p.
7. Zakharchenko Y.V. Informational component in making managerial decisions / Materials of all-Ukrainian scientific-practical conference of young scientists and students «Economy and entrepreneurship: theoretical-methodological aspects of accounting, analysis and control» – Poltava, PDAA, 2014. – P. 106-108
8. Zakharchenko Y.V. Grounding the expediency for profound research of produce in ecological-economical systems / Y.V. Zakharchenko // *Bulletin of Dnipropetrovsk State Agrarian University*. – 2013. – # 2. – P. 182-185
9. Zakharchenko Y.V. System of predicting changes of quantitative indexes of stocking by time / Y.V. Zakharchenko // *Bulletin of Dnipropetrovsk State Agrarian University*. – 2015. – # 1(35). – P. 22-24
10. Kallan R. Main concepts of neuronets / R. Kallan. – M.: Publishing House «Williams». – 2001. – 295 p.
11. Kolemaiev V.A. Mathematical economy / V.A. Kolemaiev. – M.: UNITY, 2005. – 295 p.
12. Novotorov O.S. Ecological aspects of optimizing land tenure / O.S. Novotorov // Materials of international scientific conference «Theory and methods of estimating the optimization of usage and restoration of land resources». – K.:RVPS of Ukraine NASU, 2002. – P. I. – P. 147–157.
13. Strategic directions in development of agriculture in Ukraine up to 2020 / edited by Y.O. Lupenko, V. Y. Mesel-Veseliaka. – K: NNC «IAE», 2012. – 218 p.
14. Arfini, F., & Donati, M. (2013). Organic Production and the Capacity to Respond to Market Signals and Policies. *Agroecology and Sustainable Food Systems*, Vol. 37, Is. 2, P. 149–171.
15. Velychko O. (2014) Fundamental basis and connection of modern entrepreneurial logistics and SCM, *Review of European Studies*, Vol. 6, No. 4, p. 135-146.

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THE MESOLEVEL OF SELF-ORGANIZATION OF CROSS-BORDER ECONOMIC SPACE ON THE BASIS OF NETWORK CLUSTERS

Summary

This work represents a new approach to clusters systems in cross-border dimension based upon implementing instruments of strategic planning. Concept, structure, and life cycle of net forms of self-organization of a cross-border economic space in conditions of developing a postmodern economy are considered. An analysis of works by neoinstitutionalists forms grounds to judge that net clusters become a new source of competitive advantages of European regions involving Ukraine and, in the essence, not only change the system of disposition factors but also a structure of peripheral economic space. This section is devoted to the exploration of the main features inherent to mesolevel of international integration formations representing network structures in intra-branch and inter-branch cooperation in the form of cross-border cluster systems encompassing macro-levels and micro-level of integration of the national economy of multiple states. Possibilities of theory synthesis of international economic integration and cluster concept in economic area virtualization environment are revealed. Cluster approach is proved to be the most efficient mechanism to develop cross-border economic relations and represents, finally, a mesolevel of competitive international integration systems and mandatory condition of quality advance for Ukrainian-European integration. Major objectives of the work are, as follows: to prove statement that international integration schemes in the form of cross-border clusters generate positive externalities, which catalyse the Euroregional competitiveness; to apply newer approaches to revealing and systematizing cluster externalities; to emphasize a special part played by network externalities and effect of «knowledge spill-over» within the cluster framework being of utmost importance for the formation of cross-border cluster systems and increasing their competitiveness. Based on the above research, it seems reasonable to formulate specifics of cluster model in cross-border cooperation as the most adequate in modern conditions of the global economy development and the current stage of integration of Ukraine in general and, in particular, within the framework of the EU economic space.

Introduction

Clusters being geographically concentrated business entities deriving advantages for their activities via close mutual disposition, cooperation, and competition occupy stronger positions in the innovative development policy of the post-modernistic economy. Such a situation stimulates a review of a basis of traditional industrial policy where centralized management models dominated so far. The new approach is characterized with more emphasis placed upon regional manufacturing systems and self-organization, growing role of local corporations in forming regional development strategy, and necessity to take into account local competitive advantages.

One of distinguishing features of the modern global economic development consists in worldwide economy entering a phase of misbalanced infinity, which changes the former opinion of the scientific community about cyclic character and other objective patterns in the development of the postmodern economy. The postmodern is also known as an age of disappointed modernization with vanishing reality replaced by network structures forming a virtual economic space. The postmodern economy advance occurs as a result of leaving centralized control system of economic space for pluralism with the further step from vertical hierarchies to horizontal networks. This process was identified by Western scientists as «quasi-integration» with network clusters being one of its forms. Nowadays, the topic of cross-border clusters development with the purpose to homogenize manufacturing and innovations within the EU rises at the EU topmost level.

A sufficient number of positive examples may be found in cross-border business relations at the mesolevel, including manufacturing and innovative clusters. However, corporative and public experience in this aspect is not sufficiently studied and no trends, obstacles, and factors stimulating the development of such cooperation system are revealed so far. Decreasing significance of territorial component with advancing IT and self-organization of economic space of Euroregions draws to the formation of virtual intercompany networks and to opportunities to create *cross-border cluster systems* capable of evolving quickly in the modern environment. The cluster approach, therefore, broadens and enables to involve a greater number of corporations and states into global data exchange. The unified concept of the European economic integration is not yet formed taking into account development methodology for international industrial and innovative clusters [1, p. 6].

This problem statement may be described as a meso-economic synthesis of development strategies of international manufacturing and innovative clusters and international integration formations and, to the author's opinion; it enables to draw up both practical mechanism, as well as the scientific idea of development for modern integration systems.

The relevance of the topic of the proposed research is pre-conditioned by an important part of cross-border cooperation in competitiveness improvement for peripheral regions adjacent to states' borders, reducing differentiation between inland sub-regions and those adjacent to borders, on the one side, and poorly explored theoretical and methodological aspect of studying mechanisms of cross-border cooperation, on another side. Modern EU regional policy in the development of regions adjacent to states borders construed a pre-condition for searching new forms of cross-border cooperation meeting a challenge to improve efficient cooperation, mitigation of negative influence of existing states' borders to achieve a full-scale integrated economic space [2, p. 17].

Part 1. Self-organization of innovation clusters as a basic modernization strategy for the economy of cross-borders regions

An important contribution to the development of the theory of economic space organization has been made by economists representing institutionalism trend (O. Williamson [3], R. Coase, W. Nordhaus, F. Hayek). In their works, they drew utmost attention to the lack of information, affecting mutually profitable activities, differences in obvious and «hidden» knowledge concentrated on studying the influence of transactions expenditures on the advantage of various forms of organization. Their works displayed they are being aware of existence and importance of net clusters phenomenon, including researches in growth poles and

structures with direct links and feedbacks, reviews of agglomerations' economy, economic geography, urbanized and peripheral economy, national innovation systems, regional science, industrial areas, and social structures.

Works by M. Kastels and M. Himanen showed on the basis of Oulu and Vuorinena technoparks that they are linked with foreign corporations to a greater extent, than with their own business entities. However, the technoparks show economic progress only where and when they are joined with significant innovative clusters. Technoparks activities' efficiency analysis influenced the transformation of Finnish national policy in economic development from programs based on national priorities towards supporting private and public entities involved in regional development (corporations, local authorities, public initiatives) in their business activities.

«Possible self-organization, i.e. spontaneous emergence of order from chaos is experimentally proved and theoretically grounded for the most various open-type unbalanced systems.» In general, a self-organizing system is defined as a «complicated dynamical system capable of preserving or improving its organization in altering external or internal conditions of its functioning and development considering the past experience.»

Matters of self-organization on the inter-disciplinary level of scientific knowledge are dealt by synergy – a branch of science studying the general regulation of phenomena and processes in complicated unbalanced systems (physical, chemical, biological, ecological, social, etc.) basing on their inherent self-organization principles. Synergy is developed within various scientific schools under various names but is primarily associated with work by H. Haken under the same heading. Recently published works establish a direct connection between the economy and self-organization (such as work by V.-B. Zhang). Some other scientific schools attempt to apply principles of natural sciences to the analysis of economic phenomena (such as «*Econophysics*» by D. S. Chernavskiy).

Strong resemblance between clusters, industrial areas, and complicated adaptive (capable to self-organization) systems are marked by a number of researchers. As Mr. M. Porter writes, «Cluster is a system of interconnected corporations and institutions that in total exceeds a mere sum of its components», thus displaying systemic effects and self-organization basis of clusters [4, p. 68].

Prof. T. Brenner from Max Plank Economy Institute suggests that «... cluster is reviewed as a result of evolutionary processes forming specific conditions and motivating forces in a certain particular area in a certain particular time leading to a phenomenon called in literature as a cluster, industrial area, innovation environment, etc.» Clusters are directly associated with systems capable to self-organization in another work by Prof. T. Brenner, «... local system is considered as a set of corporations operating in one or more branches of economy deriving mutual advantages from their proximity to each other and local accessible conditions and resources. Cyclic stimulating mechanisms are inherent with such or similar systems capable, together with favourable local conditions, to maintain a high level of employment within the corporations, which, in their turn, support local favourable conditions. It means observing aspects with positive influence upon each other and thus bringing their state to a new, more advanced level. These are the features of a system capable to self-organization».

An important feature of clusters consists of trans-border components influencing their activities. Clusters may be categorized by scales of being built-in internationally displayed not only via the mere presence of trans-national corporations but, primarily, via desire of such corporation to be involved in mutual adaptation processes. Such a

readiness may be expressed in extent, to which trans-national corporations respond to needs of local and international corporations in such an individual cross-border cluster.

Development of cross-borders cooperation based on clusters principle becomes an important aid for the social and economic development of regions and states in general. Theories of the regional development prove an essential part played by cross-border development in the economic growth of regions adjacent to state borders. In Ukraine, the cluster model of trans-border cooperation organization has not yet gained a sufficient application and spreading. The lack of adequate investments and innovations mechanisms of clusters formation, as well as low efficiency of financial mechanisms of governmental regulation of their activities, are among the most restricting factors [5].

Strategic planning of territorial, social, and economic development is nowadays regarded as one of the most prospective and efficient means of implementation of long-term regional policy in view of increasing tendency to self-organization among territorial societies at all levels [6]. So, finally, it is necessary to form a territorial cluster, which could be capable of solving efficiently and competently multiple problems of local or even regional level. To our opinion, determined processes may include outlining development strategy but human involvement adds a stochastic component into it, which is hard to forecast.

Self-organization in economic system means consistent dynamical bringing parameters of a system possessing a target function to optimal values. So, a territorial cluster means bringing human resources to coordinated joint actions and commonly acceptable solutions. Self-organization means an objective alteration in system's organization, a process of spontaneous arrangement (transfer from chaos to order), training and development of structures without regulating administrative influence. Science studying self-organization within the theory of running a state is known as synergy. This term consists of two words of Ancient Greek origin: Sy –meaning a joint action and «Energysm» – activeness. Literally, this term may be translated as a «Theory of joint action». Synergy explores general principles of development of self-organized material systems of various levels. Therefore, synergy is generally known as a science of self-organization. However, synergy is a very «young» branch of science and faces differing opinions in our modern world.

To our opinion, a process of self-organization and synergy cannot operate at the same stages of functioning of an object being scrutinized. So, from our point of view, the object in question should pass the stage of self-organization – generating a uniform system with appropriate effects, which may be defined as «territorial cluster». The synergic process is more complicated, as described above. Therefore, it is a territorial cluster, which should be an object or priority attention at the stage of strategy planning, since strategy planning in regulatory aspect bases on the presumption of existing system.

Cluster strategy of the trans-border cooperation provides for the formation of territorially localized clustered groupings of regions adjacent to states' borders around foreign corporations – innovators whose network agents (manufacturers of innovative products and services, suppliers, infrastructural objects, scientific research centres, educational establishments) interact on the basis of cooperation and competition, generating a synergic effect, mutually adding to each other and strengthening competitive advantages of both business entities and the cluster in general. Clusters are imminently associated with networks, which may be both formal

and informal organizations simplifying exchange of information and technologies and facilitate the coordination of activities and cooperation among cluster members [7].

Cross-border clusters encompass territories adjacent to neighbouring states' borders with institutions and business entities residing at both sides of the border. Therefore, the trans-border clusters may be classified as groups of independent corporations and associated institutions, which are geographically concentrated within the *cross-border region*, cooperate, compete, and specialize in various branches, are linked by common technologies and skills and mutually contribute to each other, which, finally, enables to achieve synergic and network effects, sharing with knowledge and skills.

Cross-border cluster systems (CBCS) are proposed for review as an object of strategy planning. They are defined as territorially localized social and economic systems formed by a group of independent business entities residing at both sides of the states' border, organization of executive administrative bodies of the European Region States and public society, interacting with each other on a stable basis by means of data exchange, services exchange, personnel and finances exchange, and provide a higher efficiency in comparison with other objects without systematic organization. CBCS may become centres of regional development, funding attraction, innovations spreading, the formation of human resource of new quality, business culture, development of adequate institutions aimed at solving problems of economic progress in entire national scale (Fig. 1).

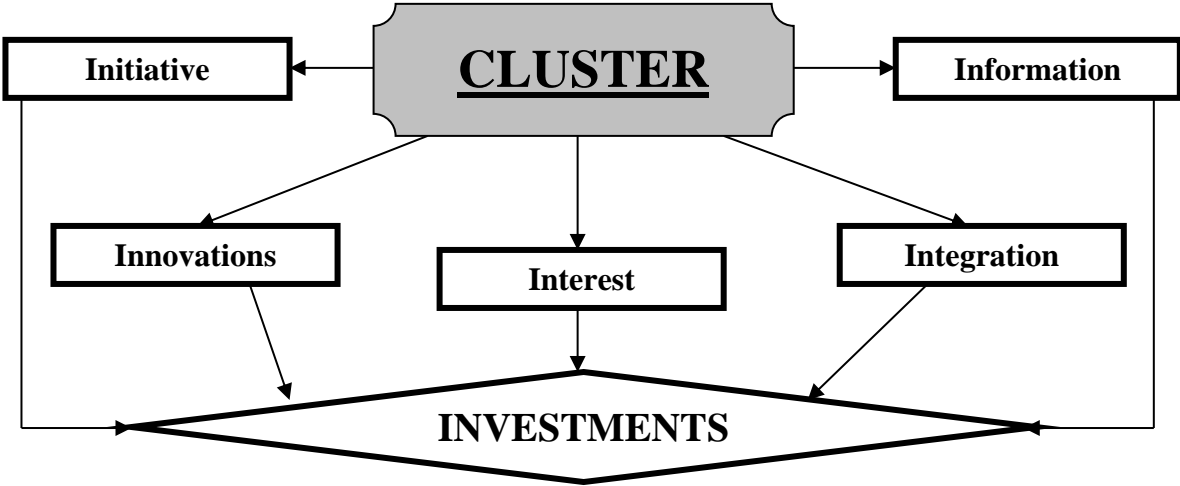


Fig. 1. Preconditions for obtaining investments on the basis of cluster technologies

Three items are essential to explain efficient clusters' functioning. Firstly, successful clusters are based on economic structures already available in the region in question. Therefore, economic prospects of a territory are inevitably connected with its past. Hence, examples of «the best practice» are dealing with «unique models» rather than typical cases, demonstrating only that competitiveness of a region depends on its inherent specific features. Secondly, territorial traditions should be combined with modern tendencies and successful clusters are always the result of «newer combination» of traditions with global trends. Thirdly, giving an evaluation of existing examples of clusters and cluster policies, it cannot remain unnoticed that the contribution into success from a state is amazingly miscellaneous. All the clusters

emerged spontaneously and, even if the state did play any part in their development, its participation is shown only at further stages.

Generally, the cluster should be regarded as a system of corporations differing from each other, autonomous in adopting decision but connected with each other in a certain way, competing and cooperating in the context of the unique local environment (which means a certain proximity to each other). Distinctive features of clusters consist in their innovativeness and substantial weight of smaller and medium business. From the point of view of evolution, such a cluster may be regarded as a population of agents; each of them may be characterized by three variable parameters: volume of manufactured production, magnitude of expenditures, and innovative technological component. In total, these parameters determine current efficiency and competitiveness of agents. An innovative component represents a multi-dimensional characteristic representing the available scope of technologies capable of altering the course of innovative search and/or simulation. Agents consume resources and manufacture production doing it with different efficiency and quantities. Agents of the system are autonomous (in adopting decisions about manufacturing at their own discretion) and with restricted rationality (they do not possess comprehensive information about the situation in the market).

T. Andersson and others point out that each cluster passes a certain number of stages. They may vary and their dynamics is subject to changes. However, a process of the cluster life is subject to certain internal logic enabling to describe the most common stages of its development [8, p. 117]. The lifecycle of a cluster normally consists of the following inherent stages:

1. *Agglomeration*. A certain number of corporations and other economic agents exist within a region.

2. *Emerging Cluster*. Some participants in agglomeration start to cooperate around major activities and implement common opportunities applying to interactions.

3. *Developing Cluster*. The scope of cooperation between the cluster members increases, new participants of the same or associated activities are involved, new formal or informal institutions are formed to support cooperation.

4. *Matured Cluster*. Maturity depends on the extent of approach to a certain critical mass of involved parties. The cluster had already developed links in the external environment, activities' directions, and other regions. Internal environment development dynamics is favourable for incorporating new business entities, joint ventures, etc.

5. *Transformation*. As time passes, markets, technologies, and processes change and demand changes in the clusters. The cluster should be sensitive to innovations and capable of adapting itself to rapidly changing environment in order to survive, to remain active, and to avoid stagnation and disintegration. It may apply transformation into one or more newer clusters, which may concentrate on another activity or just to alter operation mechanism.

System approach enables to understand the main causes of failure in cluster policy involving complicated and unique nature of the object of regulation. The experience of other states and territories is undoubtedly important for specifying aims and developing a mechanism of cluster policy implementation. However, local specifics should be thoroughly taken into account while choosing either of possible instruments of governmental involvement into economic development. There are multiple regional differences in starting positions, economic structure, and institutional specifics, so anything operable within one region may appear unacceptable or achievable within another.

It should be noted, as a summary, that trans-border clusters as an active and prospective form of cooperation between home and foreign business entities catalyze positive social and economic changes and improve efficiency of manufacturing, since they create a basis for attracting investments, development of smaller and medium business, training of a wide scope of businessmen, increase flexibility and mobility of corporations, create a wide scope of network structures. Trans-border clusters represent a forum for a dialogue between governmental, business, and scientific bodies about ways to implement competitive advantages within the framework of a city, district, region, state, and at the international level [9].

Therefore, in view of modern conditions of urgent demand for trans-border cooperation between Ukraine and adjacent states cluster models may become one of efficient aids to form national competitive advantages of homeland business, increase manufacturing efficiency due to vertical and horizontal integration of individual branches of economy and business entities, implementation of advanced technologies and, consequently, achieving stable and steady development of entire national economy advancing to full-scale entry into global economic space.

Worldwide experience of the last decade demonstrates high efficiency of cluster formation as territorial incorporations of interconnected business entities and institution within appropriate region. By the way, IT sector demonstrates the highest dynamics of progress. Leading role of clusters in the regional economic development is commonly illustrated by examples of IT clusters development (the Silicon Valley, Finnish IT clusters, Singapore). Still, modern cluster concept greatly exceeds the classic concept formulated by M. Porter [10]. It provides for involving into clusters integrated and frequently heterogeneous corporations, governmental and public agencies, and institutions aimed at manufacturing brand new or advanced production. Development of clusters gives rise to network corporate structures, which, on the one side, are interlinked within the chain of creation of added value, being, on the other side, separated autonomous structures. Creation of a large powerful corporation within the same chain of value formation is a greater challenge for a particular region.

It should be emphasized that global experience of clusters development demonstrated that they cannot be created artificially. The key part is played by regional resources potential and development of business relations within the network. Relations between corporations, forming a cluster, depending on a type of their activity, may be classified as technological and economic, which contribute to their commercial activities. Once the former kinds of activities concern the physical creation of productions, its promotion in the market and delivery to consumers, further maintenance, support for activities provides for factors facilitating manufacturing and infrastructure making possible manufacturing itself. The objective of each cluster consists in the creation of business relations based on striving to meet the best needs of the consumer in production supplied by the cluster. Thus, we have individual business entities, which incorporate business relations into a chain generating the added value based on pragmatic commercial interests, competition, and search for ways to reduce expenditures. Hence, the efficient regional strategy of modernization should possess chains of added value creation, which either exist within the region or are at the stage of formation.

Clusters should be differentiated in narrow and broad meanings. In the first case, we speak about a group of corporations within branches, in which cluster specializes, which form its core. In the second sense, we study a cluster as a specialized manufacturing core in its connections with supporting and auxiliary branches, scientific institutions, educational establishments, governmental bodies, public

organizations, etc. Nevertheless, principles of analytic approach, independently on selected aspects, remain in force, and studying the core is a primary and inevitable aim. In view of such approach analysis from the bottom to the top, aimed towards the cluster core has the following primary objectives:

1) Cluster's typology identification (identification of key parties, their mutual relations, key characteristics and distinctive features, classifying the stage of its lifecycle, etc.);

2) Identification of interconnections between potential competitiveness factors, cluster structuralization in sub-areas of factorial terms;

3) Identification of competitiveness factors and «bottlenecks» in the cluster development;

4) Evaluation of efficiency and current and prospective competitiveness of the cluster. The process of analysis of a cluster from the bottom to the top should be ideally finalized with the cluster system description. Cluster activity criteria are broad and should be selected in relation to research aims. The analysis of available literature shows that various objects may be evaluated – the cluster itself, cluster project, cluster initiative, and cluster policy, in general.

Traditionally, criteria of cluster activity are classified into resulting and factorial. The first group includes a number of the corporation in the cluster, including newly established; employment; specific added value; efficiency; export; profit; quantity of innovations; etc. and dynamics of changes in the said indications in time. As a rule, these indicators are of numerical nature and easily measurable. According to the conclusion drawn by the British Regional Development Agency, «Most of the measurements are focused on economic indicators of cluster activities. They encompass results but do not provide information about what facilitated the cluster's success» [10].

Prominent researchers, such as M. Porter and S. Rosenfeld state that a newer set of features is required to run the clusters adequately. These features include not only easily measurable parameters but also quality indicators, which may be evaluated only by means of interviews. If we regard the cluster as a system of interlinked agents operating in a certain environment, the author's position consists in a reasonable approach to evaluate cluster's functioning in view of the following key characteristics:

1. Internal characteristics of the participants, including efficiency indicators (characteristic of system agents).

2. Relations between the cluster participants (internal links).

3. Factorial conditions: resource markets (external links)

4. Demand conditions: production markets (external links)

5. Institutional environment.

6. Innovative activities of the cluster participants (for science absorbing industrial clusters).

Each group of factors forms a unique slice of a cluster, the projection of its structure enabling to identify organization end evolution of the cluster. Particular slices in total enable to create a simulative model of a cluster as a system tending to self-organization.

Task-oriented cluster researches as an object of management from the part of regional or central authorities showed the necessity to concentrate efforts in the creation of favourable conditions for partnership between business entities, facilitating the development of existing branches of the economy, which successfully pass market challenges. The policy of clustering economy should consist in the

implementation of favourable general economic conditions for manufacturing system to bring it to competitive state on the basis of partnership and cooperation. Surely, clear awareness of extent, to which individual clusters facilitate to regional economic development, is required accompanied by appropriate regulation of their activity.

Regional development analysis highlights economic advantages of densely populated territories of a state and significant disproportions in their economic indicators. The concentration of financial and human resources does not always provide competitive advantages. The analysis gives grounds to pay attention to lower productivity of regional economic systems and specifics of their specialization in the national economy. It enables to note about a model of peripheral dependent development in Ukraine with active development of a few metropolitan cities, which use resources available in peripheral regions. The major hazard of such a development pattern lies in increasing regional disproportions. Territorial stratification may be considered as a special arrangement of life activity within a territory, i.e. so-called layering, which permits to disclose specific features of a particular territory involving the following components: natural potential; scientific and technological potential; labour potential; financial potential; information potential; economic development; infrastructural development; social development; political development. Individual components of stratified territory may be characterized by using various indicators. Stratification of marketing area of a particular territory enables authorities to develop a certain policy applicable to territorial development, outline concepts, and identify competitive advantages and so-called «bottlenecks» which, in their turn, should be taken into account in the course of territorial clusters' formation.

Clusters should become new structural elements providing development of territories adjacent to borders in a globalized economy. They should form a basis of network organization of peripheral economic space. Their activities should facilitate the increase of competitiveness for Euro-regions and state in general and implementation of a development model encompassing investments and innovations.

Part 2. The mesolevel of the development of network forms of cross-border cooperation

The review of researches and publications for the latest past years shows a great interest in the competitiveness problems existing in regions adjacent to states' borders. Possibilities to apply marketing tools for clusterization processes are studied in works by M. Porter, H. G. Bolt, I. Tolendo, P. Doyle, F. Kottler, H. Lyce, J.-J. Lambain, E. Toffler, and many others. As experience shown, in advanced states development worldwide confirms, economic competitiveness may be only achieved by means of applying innovative development model with the final aim of implementation to increase the well-being of nation by means of acceleration in economic growth.

Problems in market structural modernization and competitive development as factors stimulating innovative activeness of economic systems are reviewed in researching works by J. Schumpeter, K. Arrow, R. Nelson, and S. Winter. The enlisted scientists researched market subjects' integration mechanism, the formation of innovations structures to generate manufacturing, technological and organizational advance. Representatives of the institutionalism O. Williamson, R. Coase, W. Nordhaus, F. Hayek contributed greatly to solve the problem in question. The enlisted persons in their works applied efforts in the areas, as follows:

1) pointed out drawbacks in information preventing mutually beneficial activities, discrepancies between apparent and hidden knowledge;

2) concentrated on studying the influence of transaction expenditures upon advantages of various forms of organization. Modern sources classify industrial areas, holdings, clusters, territorial manufacturing complexes as territorial forms of network industrial integration, encompassing regions, technological platforms, etc. As time ran the concept of «*industrial area*» evolved – analysis of notable characteristics was made by A. Marshall, G. Becattini, O. Williamson.

Nowadays, there are various hybrid forms in cross-border quasi-integration involving Euroregional subjects of the economy with stable long-term contacts and assigned control of common activities over the lack of legally supported proprietary titles transfer, such as clusters, business associations, strategic alliances, various network formations.

Michael Porter in his work «Competitive Advantage of Nations» draws a remarkable conclusion, as follows, «...*developing an investment policy, transition economy should strive to develop mutually dependent industrial cluster involving basic and auxiliary branches of industry*» [10, p. 42]. An approach to estimating a regional competitiveness may be formulated based upon a national competitiveness concept proposed by M. Porter.

Works by national economists, such as B. V. Bourkinsky, V. M. Heyets, M. I. Dolishniy, V. S. Kravtsiv, Yu. V. Makogon, S. I. Sokolenko, S. V. Filippova etc. deal with development problems of forms and tools of cross-border regionalism on the quasi-integration basis accompanied by prevailing newer technological mode and newer challenges imposed by global instability reviewing various aspects of development innovative forms in network cooperation, including grounded strategies of economic progress in view of problems with European integration of Ukraine. Works by scientists, as enlisted above, define theoretical and methodological aspects of competitive cluster development. Nevertheless, it should be worthwhile to note that mechanism of cross-border cluster systems in Ukraine is not practically explored, which imposes a demand to deal with this subject. Academician V. M. Heyets noted a lack of methodological approaches to evaluate economic efficiency of cluster formations in various branches of the economy, particularly for the potential development of regional formations as structurally integrated and original territorial and administrative units [11].

Modern industrial and innovations clusters take a form of international (cross-border) cluster systems, which may be regarded as a major research object for mesoeconomics, i.e. the crucial meso-economic system. Mesoeconomics should be intended to play a role of linking bridge between microeconomics and macroeconomics but is an underestimated component of economic science, especially in view of modern international economic relations. In brief, mesoeconomics may be defined as a system of interconnections between branches of the economy consisting of networks and chains of certain types [12].

Mesolevel of international economic integration is an organizational structure of intra-industry and inter-industrial cooperation in a form of international cluster systems, which integrate micro- and macro-levels of integration of national economies. Cross-border economic interactions should be highlighted as a component of meso-economy leading to cross-border regions formations (contact function performance) [13, p. 24].

National clusters, as their development advanced, became to expand beyond national borders in areas adjacent to national borders. In other words, the cluster

paradigm shifted into a sphere of cross-border and international cooperation with the concept of cluster cooperation becoming a matter of several states instead of single. At the same time, a process of virtualization of intercorporation cooperation and, respectively, clusters' virtualization started gradually.

In general, international clusters system concept synthesis logics as a mesolevel of international economic integrations bases on the criteria, as below:

- Demand to increase efficiency of regional integration formations with accelerating economic and innovative cycles;
- Development of mesolevel of international economic integration (regions, institutions, intercorporations network);
- International cluster systems, which display most completely mesoeconomic approach in modern conditions;
- International clusters as business and ecologic systems, evolutionary, network approach to the development of international economic integration [14].

Cross-border cluster systems are advantageous since they generate certain synergy effects and increase efficiency being of low cost at the same time. The main synergy sources in clusters are knowledge exchange, accessible pools of skilled competent employees for participants in a cluster or accessible general public benefits. Cluster in this context represents signal characteristics of «real» economy.

Cluster thinking and cluster strategies possess a potential to speed up regional economic progress and facilitate economic restructuring. However, the most important factor in this context consists in clusters being a paradigm to a greater extent. So, the second reason to turn to cluster concept consists in the capability of clusters, further to a mere practical aspect, to provide a powerful paradigm to understand principles of economic life and economic policy.

And, finally, from the economic policy point of view, the third reason of modern turning to clusters consists in the clusters' capability to construct the pre-manufacturing postmodern economic system and to evade rhetoric of obsolete «industrial policy» enabling, nevertheless, national authorities to strengthen national competitiveness.

Cross-border clusters form in regions adjacent to borders of two or more states «over and beyond» their administrative borders. They encompass adjacent territories with institutions and corporations residing on either side of a border or even at both sides. The cross-border clusters, therefore, may be defined as groups of independent companies, which are geographically located in *cross-border region*; cooperate and compete; are specialized in different branches, connected with common technologies and skills and complement each other, all of which in total enables to obtain synergy and networked effects, knowledge and skills diffusion.

The *cross-border cluster systems (CBCS)* are proposed for the consideration as strategic planning objects meaning territorially localized social and economic systems formed by a group of independent economic subjects at both sides of national border involving organization of public authorities of States representing both Euroregion and civil society, cooperate steadily with each other by means of data exchange, services exchange, personnel exchange and funds exchange and achieve higher efficiency in comparison with other objects being not organized systematically. The CBCS may become centres of regional development by means of attracting investors, implementing and spreading innovations, forming personnel fund of newer quality, business culture, and adequate institutions' development aiming at solving problems of the national economy modernization in general.

The CBCS is considered as a network structure involving interconnected territorially and complementary enterprises located at either side of national border (including specialized suppliers of raw materials, components and services, as well as manufacturers and customers) grouped around scientific and innovation centre with vertical links with local authorities to improve competitiveness of enterprises, regions and the national economy. The «Cross-Border Cluster» term displays the fact that corporations in the global instability conditions compete with each other not so much in productivity than in the capability to innovations. The cluster unions of enterprises are capable of adapting to modern innovation processes. Cluster strategy of cross-border cooperation provides a formation or territorially localized cluster units of regions adjacent to national borders around foreign innovation corporations whose network agents (manufacturers of innovative production and service providers, suppliers, infrastructure objects, scientific and research centres, higher education establishments) cooperate basing on principles of competition and cooperation and generating synergy effect, complementing each other and increasing competitive advantages of both individual corporations and the cluster in general.

Classic integration provides total control establishment both in respect of property and assets of united business entities. Depending on the scope of activity, a number of integration kinds may be classified. Horizontal integration consolidates manufacturers being at the same chain stage and provides an advantage due to scale effect. Vertical integration represents a strategy protecting the essential business from markets' deficiencies. Reverse vertical integration (at the initial stage of manufacturing chain) is normally necessary to protect from suppliers' monopoly. Direct integration enables to increase added value and influence final demand. The most common form of classic integration is represented by the creation of various transnational holdings. The driving power of a holding formation consists in striving to keep stable links and to improve own stability in the economy by means of forming a balanced business portfolio. There are various kinds of corporate management within the framework of holding structures. Common objective advantages inherent with all the types of holdings are as follows:

- Substantial decrease in transaction expenditures;
- Scale effect;
- Substantial manufacturing synergy and risks hedging.

Since the formation of cross-border cluster is an inherent evolution of social, technical, and technological relations at the mesolevel, the cluster policy becomes a new policy in Euroregional development. A cross-border cluster as an economic agglomeration of mutually dependent business entity is a «growth point» or an important factor in steady social and economic development for Euroregions. In this view, the cluster policy, firstly, creates favourable conditions to activate innovations in the real sector of the economy and for its modernization for the further technological breakthrough. Secondly, such a policy in poor resources environment and not always consistent national policy enable to solve social problems of a Euroregion. With modern global economic trends and priorities, social development becomes a prospective strategy to enable stability and competitiveness of peripheral territories. The part played by socially-oriented network clusters in Euroregion becomes more important. M. Porter and M. Enright nominated at least three major reasons to stimulate the development of cluster systems:

- 1) Increase labour efficiency and manufacturing efficiency;
- 2) Stimulate innovations;
- 3) Facilitate knowledge and production commercialization.

In the modern theoretical economics, «integration – disintegration» dichotomy is complemented with one more category – «quasi-integration» and «corporation – market» dichotomy is extended with the «hybrid» category. Applying the asters control criterion, the quasi-integration may be defined as a process of establishing control of the behaviour of formally independent corporations with their property being beyond the control. There are various hybrid forms of cross-border quasi-integration as a grouping of Euroregional business entities with stable long-term relations and assigned control of common activities without any legal transfer of proprietary titles: clusters, business associations, strategic alliances, various network groupings, etc. Their common feature, as defined, is a greater share of medium and minor business but not large business.

Quasi-integration structures are network structures, to which industrial and innovations clusters may be assigned to a full extent. In other words, industrial and innovations clusters are quasi-integrated structures consisting of legally independent corporations where, with uncontrolled assets ownership titles, there is a control of their management.

Review of quasi-integration processes within the CIS economic area might be carried on most obviously based on the concept of sub-regional integration with a region as a quasi-corporation, i.e. a substantial subject of economic activity producing public and private *cross-border* benefits, cooperating with corporations and governments and, thus, being one of the subjects of economic power. However, to the author's opinion, cross-border integration is a complex process generating complicated systems. Therefore, the cross-border Euroregion contains multiple political and economic functions. To the author's opinion, it is corporative integration, which plays a key role in a process of possible international clusters formation as a mesolevel of integration within the European economic space. Science, high technologies, and cross-border network organization structure transform geo-economic space changing relations in manufacturing, influencing relations between cities and regions, «centre – periphery» model. Advancing differentiation of local structures in network economy transforms the global infrastructure of the geo-economic system in total.

Thus, from the point of view of cross-border cooperation within the framework of international integration structures, the most important criterion of its efficiency, to the author's opinion, lies in the transfer to a unified trans-border region by means of border contact function development as network cooperation.

Basing on researches, it may be feasible to formulate certain specifics of a cluster model of cross-border cooperation as the most adequate in view of modern global economy development tendencies and stage of integration, in particular, within the framework of the EU common economic space.

Cross-border business association (being either industrial or territorial union) is a form of horizontal integration. Its distinguishing feature consists in cooperation of competitors and partners from adjacent links of cost generation chain who provide their resources to develop and regulate common market, lobbying common interests in public entities, such a form of integration becomes a key instrument to improve efficiency of industrial policy and enables sometimes to compensate both market failures and even national failures. The value of industrial communities lies in significant club advantages for their members (common brand or trademark, belonging to the circle of chosen ones, lower costs of training, interests' protection, information support, etc.). The most significant industrial benefit provided by the business association lies in interests lobbying at a lower cost, broad publicity, and

higher chance of a positive solution. A specific feature of a cross-border cluster as a quasi-integration form lies in its geographical localization, preventing concentration of mutually dependent corporations, specialized suppliers, and servicing organization within restricted territory, which compete and at the same time carry on common activities on both sides of national borders. Researching competitiveness problems, M. Porter identified three major advantages of the clusters. Firstly, the clusters improve productivity providing the access to specialized resources and labour, facilitating access to information, institutions, and social benefits. Secondly, the clusters motivate higher temps of generation of newer business entities transforming former employees of existing enterprise into new businessmen. Thirdly, they increase opportunities for corporations to implement innovations by means of quicker diffusion of technological knowledge. The unique capability of cross-border clusters to speed up innovations diffusion permits to classify them as the innovatively active economic formation or cross-border area of higher innovative activeness. Here the cluster positioning as a specific structural component of the economy is complemented by its definition as a specific local social and cultural community with the internal environment of trust and cooperation. The CBC facilitates the deepening of economic integrations of its members into global economy and increasing level of their international competitiveness due to the formation of common manufacturing and sales chain, cross-border spreading of knowledge and innovation, costs saving achievement in manufacturing, reducing transaction expenditures due to common management bodies, and reducing transport costs due to using common infrastructure, etc.

The cross-border cluster is an innovation model providing a multiplicative effect in solving a complex of social, economic, scientific, technical, educational, political, investment problems of peripheral areas of Ukraine. The cross-border cluster system is a newer type of a system with a newer ideologically functional configuration enabling to expand sphere of functional and organization relations, which generate complex activity connecting people, aids, resources, and newer paradigms for Ukrainian information space formation, monitor logistic chain of integrated application of all the interrelated types of resources.

It can be stated that a newer wave is generated in the development of cluster theory. It confirms the significance of this topic and permits to develop this concept in the cross-border cluster systems.

Probable directions of the «second wave» in innovation clusters researches are enlisted below:

- Clusters development in the context of theory of evolutionary economics, cluster concept as business and ecological systems;
- Possibilities and regulations of international cluster systems formation, including cross-border clusters;
- Clusters as stimulating systems of internal and international economic progress;
- Mutual competition and other synergies within the cluster and among clusters;
- Reducing the influence of territorial component of clusters' development, cooperation networks virtualization within the framework of «network space».

Important preconditions enabling to form objects of cross-border cluster systems are represented by strengthening of external and internal competition and necessity to involve Euroregional enterprises into international chains generating added value. Essential factors facilitating clusters generation include activation of international cooperation between regions adjacent to national borders and implementation of

large-scale joint projects of creating objects of transport, power-generating, touristic, and leisure infrastructure.

Prospective industrial vectors of clusters development are visible in power generation, transport and logistics, foreign trade, tourism, and leisure complexes. The prospective sphere may include also scientific and technical cooperation between scientific and educational centres, which create favourable conditions for the creation of cross-border innovations and implementation clusters.

Distinguishing feature of a cluster as a quasi-integration form is its geographical localization, which is expressed in concentration of mutually connected corporations, specialized suppliers, and servicing structures within a restricted territory, which compete with each other and carry on common activities at the same time. Clusters continue to remain such a theoretical construction, which has not clear outline and positive external features. However, in a long-term future, these quasi-integration forms will become a main driving force for innovative development. Essential significance from the point of view of treating clusters as a mesolevel of international integration schemes is represented by modern tendency of changing territorial paradigm of global economy for spacious paradigm both at the theoretical and practical levels and – as a consequence – a tendency to reduce gradually role of territorial component of industrial and innovative clusters and development of information virtual clusters and *clouds of intra-clusters' and inter-clusters' relations*.

At the same time, cluster concept is not dispersed as well, as it is not brought to an absolute. It is a gradual reconsideration of the cluster definition as an eclectic concept within a multiplicity of business entities and types of the solution being selected that is taking place at the current moment.

In view of described actual trends, an insistent demand is rising to reveal and analyse externalities of international integration groupings and formations and cluster systems as «overflow» effects. Their merging forms a field of effects produced by international cluster systems as a mesolevel of international economic integration [15]. Basing on the analysis of international aspects of cluster development, an *international cluster system* term has been introduced with its essential types outlined as international, cross-border and globalizing providing opportunities for the development of said types of cooperation involving Ukrainian business structures.

The cluster concept itself experiences, to the author's opinion, the «second wave» of scientific and practical interest expressed in research of opportunities for the internationalization of industrial and innovations clusters, understanding clusters in the evolutionary economy context as business and ecological systems bringing necessary variety and capability to adapt to existing model of network cooperation and possibilities to reveal both positive and negative externalities.

Part 3. Externalities of cross-border cluster systems as a factor contributing to Euroregions' competitiveness

Growing significance of special component of network clusters' development transfer the cluster externalities definition into more virtual, multi-dimensional area demanding newer approaches to their identification and evaluation.

Increasing number of research worldwide indicates that geographical proximity of appropriate kinds of economic activities enables to gain a higher level in productiveness and innovations. Clusters, i.e. final manufacturers, suppliers, researching laboratories, educational establishments, and other institutions within an appropriate branch of the economy are essential moving forces in the regional economy development. Nowadays in Ukraine, cluster models are addressed more and

more often in search for solutions to problems of regional economy development. Clusters creation already occupied its place in the agenda of regional and local public authorities in Ukraine.

For the past decades, clusters became a basis of competitiveness of entire states and regions. Despite differences in approaches, a majority of the European states worked out their own *cluster strategy*. A significant number of economists admits that regions with clusters being formed at their territory gain leading positions in the national economy. It is those regions, which begin to determine the competitiveness of the national economy. Clusters influence positively on regional economy status worldwide. And clusters cannot be left aside or ignored with increasing international competition in certain spheres. Cross-border clusters are formed in adjacent regions of two or more states overlapping their administrative borders. They encompass adjacent territories of neighbouring states and include institutions and corporations situated at both sides of the borders. Therefore, cross-border clusters may be defined as groups of independent companies and associated institutions, which possess features, as below: they are geographically located in cross-border region; they cooperate and compete simultaneously; they specialize in various branches of economy; they are linked to each other with common technologies and skills and mutually contribute to each other, which enables finally to obtain synergic and networked effects, knowledge and skills diffusion (Fig. 2).

Cluster form of business organization leads to a special form of innovation – «summarized innovation product». Cluster formation based on vertical integration forms not a spontaneous concentration of various scientific discoveries and technological inventions but a certain system in spreading newer knowledge and technologies. An essential condition for inventions to transform into innovations and innovations, in their turn, into competitive advantages consists in the formation of a network of stable communications linking all the parties involved in the cluster. Communications in the framework of international technological cooperation are particularly important since they beneficially contribute to the international clusters generation. Clusters create a pre-condition for the regional innovations systems formation. Euroregional cluster is a spacious agglomeration of similar and associated economic activity laying a basis for the local environment for the cross-border economic area, enabling to overspill knowledge and to stimulate various forms of training and adaption at both sides of the border. Normally, such clusters consist of a minor and medium-size business entities and the crucial element of their success is concentrated in social resources and geographical proximity. Another inherent feature lies in their components being not so dependent and related to each other as it is with industrial clusters.

The distinguish feature of a cluster lies in the generation of a number of positive effects within its framework, which enable to gain comparative advantages of such a form of organization of inter-corporate relations. The first of them is an effect of manufacturing scale based on a core of innovation activeness represented by an individual business entity within the cluster. The second positive effect, typical for clusters, is a scope effect. In general, it appears with existing manufacturing factor, which may be used simultaneously to obtain multiple kinds of production. With corporations grouping into a cluster, the scoping effect increases substantially, since an opportunity appears to use such a multi-functional factor with various enterprises with minimum transaction expenses accompanying its transfer. The third positive effect of a cluster is that of synergy, which is generated, for example, when unified standards for production are applied.

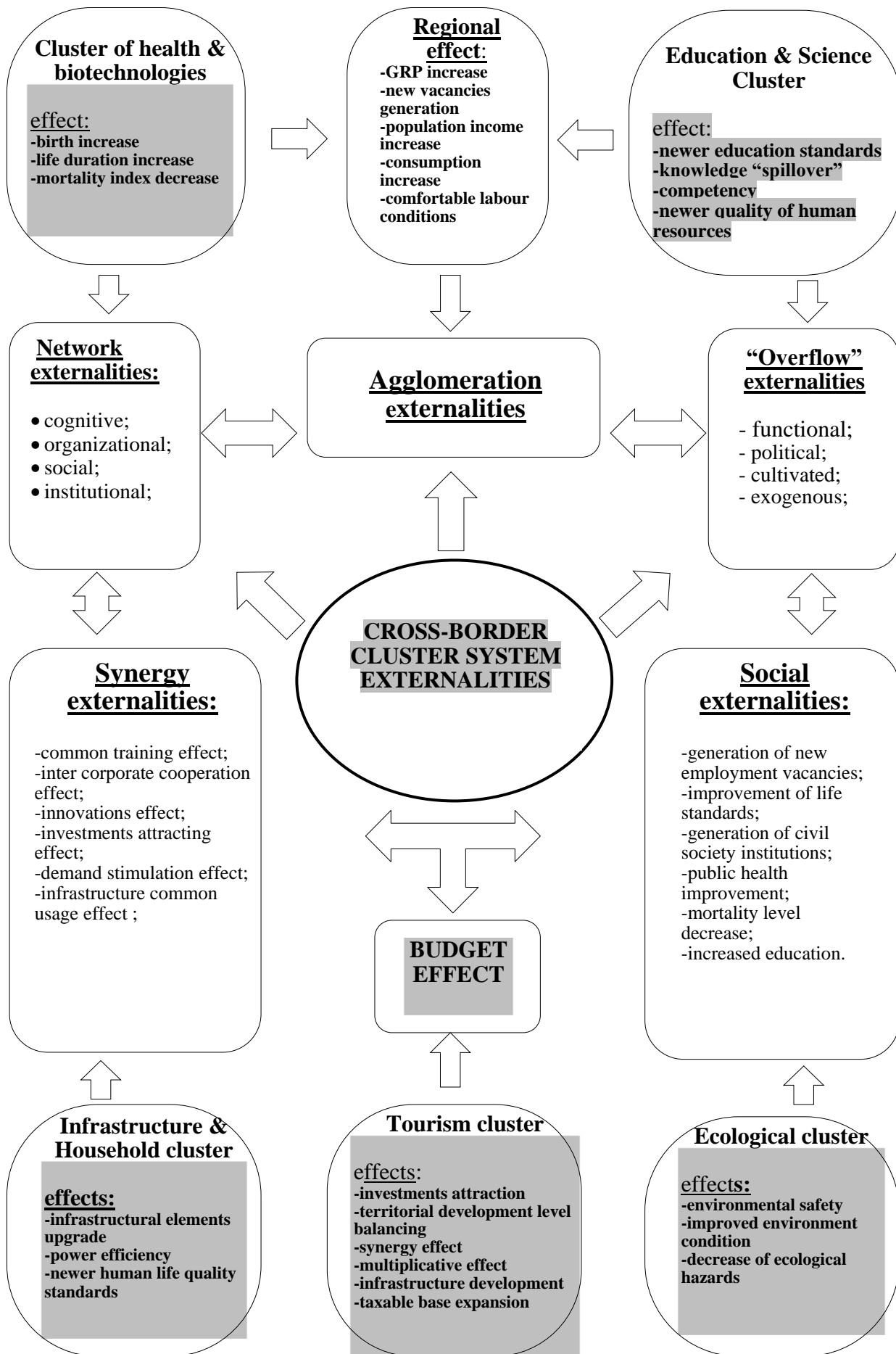


Fig. 2. The CBCS effects field

Once efficient cooperation is achieved, synergy effect appears. It consists in the interaction of two or more factors with their joint feature to substantially exceed effects produced by each particular component in the form of their adding to each other. This effect displays itself in decreased integral corporate expenditures as a result of multi-functional resources spending. The revenue obtained from synergic effect, i.e. from two, or more, elements' combination increases so that productivity of such combination exceeds effect gained from a sum of its individual elements.

With all these three effects (scale, scope, and synergy) in action, non-profitable cluster participants may overcome the lower border of profitability with the help of specialization, which enables to increase productivity and reduce costs of production. Thus, cluster participants gain additional competitiveness. Furthermore, innovations cluster is associated with so-called triggering effect. This effect occurs when primary innovations or initial production require to carry on a number of expensive secondary alterations. As a result, the revenue derived from the basic innovation or production may appear to be even less than expenditures for required re-organization. Facing such a situation for an individual business entity is very likely. Cluster participants may minimize costs for such secondary alterations, which enable them to implement most various technologies. Communications networks inherent with clusters create the most favourable conditions for their prompt spreading.

In view of the current global economic trends and priorities in the development of society, social development becomes a strategic prospect to achieve stability and competitiveness of a peripheral territory. So, the role to be played by socially oriented network clusters in a Euroregion increases substantially. M. Porter and M. Enright revealed three main motives to stimulate the development of cluster systems.

- 1) They facilitate to increasing labour productiveness and manufacturing efficiency;
- 2) They stimulate innovations;
- 3) They make it easier to commercialize knowledge and production.

Clusterization provides certain positive externalities within the framework of traditional (territorial) approach. They are as follows:

- 1) Labour resources' pool formation (according to Alfred Marshall's concept) pool [15];
- 2) specialized infrastructure reducing expenditures;
- 3) generation of newer economic formations (an indication of dynamic development);
- 4) spin-off effects.

The cross-border cluster systems (CBCS) are considered herein as, on the one side, the localized system including enterprises of an individual branch and, on the other side, as urbanized agglomerations encompassing multiple branches of economy and generating agglomerated effects as a result of their:

- Localization;
- Urbanization;
- Jacobs' externalities;
- Advantages resulting from interrelated variety.

The CBCS participants may have a common access to well-developed infrastructure, highly-qualified labour personnel or specialized services at both sides of a state border bringing benefits to all kinds of business in various branches within the region. As it was stated by Jane Jacobs, an expert in urbanization, the urbanization played a decisive role in the regional economic development. Newer knowledge appearing in cities contribute to newer economy branches generation and

development of human potential (Jacobs, 1969). It is important to note that the scale of cities and variety of their residents provide a multiplicity of mutual relations generating newer ideas.

Creating and development of newer products and technologies («new works», as they were called by Jane Jacobs) are the source of economic development. Comparing cost-saving effects from localization and urbanization, Jane Jacobs insisted on the point of view that urbanization had had a higher priority and included into her concept new types of diversification, other than branches' diversification. Nowadays, cost-saving from urbanization are defined as *Jacobs' Externalities*.

An attention should be also paid to the fourth revealed category of externalities – advantages of interrelated variety from the point of view of cross-pollination with ideas. This type of externalities is in less dependence on cluster localization and seems to be the most prospective. The field of effects produced by international cluster systems may be clear to percept in the context of well-known «triple spiral» model combining efforts applied by three categories of involved parties – business, public authorities, and science – proposed by Henry Itzkovitz from Stanford University and Loet Leidesdorf from Amsterdam University. In order to reveal effects of the international cluster system, this principle is overlaid upon already noted types of proximity between the parties involved into network cooperation – all, except geographical as its significance decreases gradually:

- Cognitive (formation of uniform knowledge base, possibility to develop alliances in scientific research activities);
- Organizational (agreements of organizational nature between partners, which may smoothen or correct market failures);
- Social (formation of trust area and canals for knowledge spill-over);
- Institutional (establishment of an informal institution capable of spreading and influencing corporations beyond the cluster).

Corporations within an individual cluster gain their advantages from an entire set of positive externalities: access to developed institutional environment; skilled labour personnel; legitimacy; spillover of reputation and status; and others. As noted by M. Porter in 1998, potential benefits from clustering may include: increased and simplified access to specialization factors; ease access to market and technologies information; complementarities and cooperation between corporations; access to infrastructure; competition [10]. Furthermore, there are other externalities of non-economic nature, which make a cross-border cluster a prominent solution in such aspects, as manufacturing deployment or even a strategy based on knowledge. These externalities are connected with the gain in legitimacy and infinity reduction by means of simulation.

From the point of view of the development of exterritorial information clusters, so-called *network externalities* gain the highest significance [15]. There is a regulation, confirmed for the technological network (e.g. in telecommunications area) – the larger a network, the higher its value for an individual participant since it provides an access to a greater number of potential partners. This advantage does not require extra expenditures for individual participants in the network and is a classic example of external savings (externalities). However, in the cluster context, this phenomenon should be also evaluated from the point of view of access to other infrastructural resources. As it is stated, in particular, the externalities occur as a result of advance in the education system, which provides specific qualification skills and permanently supplies labour resources for the development of corporations in the cluster. The level of qualification available with the system of education or in other companies

involved in cluster represents an external saving (externality) [15, p. 128]. Total improved qualification level and extent of specialization meeting the needs of cluster development represent external resources accessible for an individual corporation free of charge. From the point of view of positive network externalities, it is not geographical concentration being the key feature but the extent of their interconnection, which to greater extent meets the modern idea of international mutual relations in an individual cluster and between clusters.

To the author's opinion, effects of international cluster systems are formed by a combination of spill-over effects within the framework of international integrating formations and industrial and innovative clusters. Such combinations provide also an opportunity for synthesis of cluster development concepts and those of international economic integration. For this purpose, probable spill-over effects should be determined for international integration processes and industrial and innovative clusters being externalities in their essence and, overlapping each other, form effects of cross-border cluster systems [15, p. 118]. Analysing concepts of international economic integration, the theory of neofunctionalism attracts a certain interest. Being rather disputable, it brings an important, to the author's opinion, the idea of «*spill-over*» explaining certain motivating forces of integration processes. In general, «spill-over effect» was interpreted by neofunctionalists as a situation, in which certain action undertaken with a certain purpose generates a situation, in which the original aim may be achieved only by means of undertaking other actions, which, in their turn, generate needs and conditions for yet other actions, and so on. A kind of «toothed gear effect» is suggested by Jean Monnet to describe a process of the European integration, where each decision in cooperation on the European level should inevitably draw the parties to enter into another agreement deepening the integration. Neofunctionalists (E. Haas, L. Lindberg) identified two types of «spill-over effect»: *political* and *functional*. Later on, they were added with *cultivated*, i.e. artificially developed, and *exogenous* spill-over effects [16].

It is the functional effect that occupies the top priority for international cluster systems' development. The chain reaction of involvement of related and supporting branches into integration process is a cornerstone for the international cluster systems formation, whether being cross-border clusters in traditional branches of the economy or virtual information clusters involving the newest hi-tech sectors. A functional type of spill-over effect in CBCS is explained by tight and close interrelations in modern industrial economies. Therefore, neither sector may be separated from others. Thus, participants-states should integrate either sector of their economies, its relation with other sectors will inevitably cause the integration spill-over to other sectors (e.g. it is impossible to perform an insulated integration for a certain power generating resource production since it causes a spill-over effect within the entire branch).

Creation of super-national self-administration models similar to those predicted by neofunctionalists, which emerged later in the EU. Political spill-over leads to the generation of super-national political elites applying pressure from the top to deepen integration processes.

The following principles should be specified among those applicable for cross-border cluster systems' social efficiency evaluation:

- Purposefulness principle;
- Complexness principle;
- Open system principle;
- Synergy principle.

Such cluster features, as integrity and multilevel structure, enable to draw the conclusion that social efficiency of cluster functioning should be evaluated from both points of view of an individual enterprise in its structure and the entire structure in general.

Essential cluster's features research applying the system approach enabled to work out the methodology of evaluation of the cluster structure efficient operation, logical sequence of which provides for stages, as follows:

1. Review of existing mutual relations between the cluster participants and revealing integrated structure levels.

2. Identification, classification, and grouping of social and economic interests:

a) for participants of integrated structure based on their scope and nature of activities;

b) for structures cooperating or otherwise interacting with the cluster.

3. Working out a system of common and individual efficiency criteria of the integrated structure basing on meeting social interests of participants and taking into account indexes of social and ecological efficiency.

4. Calculation and evaluation of indexes of functional and institutional efficiency for cluster integrated structure.

5. Revealing external factors and outlining system of their indexes. At this stage, efficiency within the cluster structure should be reviewed as well, as in its contact with external environment and maintenance of its development purposes without any contradictions with national interests and territorial, social, and economic interests.

6. Calculation of total (integrated) index of efficient integrated structure functioning. Integral efficiency should indicate what social and economic effect is achieved by mutual cooperation of all the cluster participants.

7. The insight of obtained results and development of measures aimed at increasing social efficiency of cluster structure operation.

As a variable rate index of social and economic growth at the Euroregional level is proposed being logarithm GRP per capita. Variable logarithm enables to minimize asymmetry in economic values distribution and in a number of cases approximates residue regression distribution to normal.

Logarithm GRP per capita represents a function f (possibility of innovative activities, resources quality improvement, and quantity increasing, infrastructure development).

Among the essential social effects of clustering, some of them should be emphasized. They are an increase of employment index, wages level rising, increase in assignments to budgets of various levels and to non-budget funds, development of innovative infrastructure, increase of satisfied demand for touristic and information services, living standards improvement. Therefore, cluster formation should provide for deriving budget income and social effects from implementation of any commercial project, as well as the formation of growth points at the territory, creation of favourable conditions for accelerated innovations and economic development of Euroregion, facilitate to increase its potential of steady development. To the author's opinion, the proposed system of indexes may enable to estimate the social efficiency of cluster formation establishment and functioning with maximum accuracy and comprehensiveness. Express analysis of cluster structure efficient operation in view of a practical implementation of enlisted criteria may be performed by means of grade rating model, which may be represented, as follows:

$$I = \sum(K_i \times B_i), (i = I \text{ through } n),$$

where I – integrated evaluation of a level of practical implementation of social efficiency criteria of integrated structure functioning;

K_i – weight ratio of the i^{th} criterion of integrated structure social efficiency;

B_i – value in points of the i^{th} criterion of integrated structure social efficiency.

Under the reviewed circumstances, the cluster structure efficiency represents a multi-aspect phenomenon displaying both at the mesolevel (branch) and at the national level (employment generation, unemployment allowances decrease, taxes increase, increase in currency earnings from export increase, attraction of foreign investments) and Euroregional level (decrease in social tension, solving environment protection problems or improvements in infrastructure).

Conclusions

1. The cross-border clusters concept is an approach to the stimulation of peripheral regions economic development adequate to modern conditions. Its distinctive features and advantages consist in taking into account comprehensive dynamical competition and linking problems of meso-levels and macro-levels with conditions, in which individual business entities are operating.

2. Active formation of network forms of self-organization in trans-border economic space corresponds to impulse composing a newer economic reality of the post-modern, which waives away «total ideology» but admits variety and freedom of economic choice. Network clusters become a new source of competitive advantages for Euroregions involving Ukraine and, in the essence, change not only systems of deployment factors but even the structure of economic space. Implementation of cluster system of business organization in trans-border scale facilitates to a great extent development of network structure of economic space, strengthening its unity and integrity.

3. Modern tendency to change territorial global economy paradigm for spacious with consequent tendency to reduce gradually territorial component of industrial and innovation clusters and development of information virtual clusters in Euroregions involving Ukraine gains an important role from the point of view of considering cross-border clusters as a meso-level of international integration systems. Thus, necessity of formation and identification essential meso-level particulars for international integrating groupings being organization or administrative structures of intra-industrial or inter-industrial cooperation in the form of cross-border cluster systems combining macro- and micro- levels of the national economy integration is proved.

4. Newer postmodern reality lies in combination of post-industrial manufacturing with network economic space providing for institutions transplantation by means of self-organization of hybrid network clusters at both sides of a national border, which becomes a factor facilitating concentration and free circulation of capital funding in Euroregions. Competitiveness of a newer manufacturing mode is determined by innovations seed rate and capability to continuous upgrading. Thus the post-industrial economy evolved into a system of interacting institutions to form a newer cluster paradigm of postmodern in a cross-border dimension requiring virtual resources for its development, such as information, innovations, communications, knowledge.

5. In modern post-industrial paradigm of the European regional development priority of essential factors of deployment sustained substantial transformations changing the function of peripheral territories from physical basis as a location of deployment of material factors, it is more and more shifting to spacious environment for the development of labour resources, innovations, and self-development promotion. The cluster approach becomes the most efficient instrument for the development of

international economic cooperation under modern conditions and, finally, construes a meso-level of competitive international integration systems and essential precondition for the quality integration advance in the European economic area.

6. The mechanism of transplantation of network economics institutions is studied as the necessary growth factor of competitive capacity of the European regions in terms of the European integration. By means of institutional approach, it is justified that post-industrial economy evolved into the system of interlocking institutions, forming a new economic area of postmodernity in cross-border dimension, in which such virtual resources of development are necessary as: information, innovations, ways of communication, knowledge, and other institutions of post-industrial society. It is concluded that a new postmodern reality lies in the combination of post-industrial production with the network construction of economic area, involving transplantation of the institutions by means of self-organization of hybrid network clusters on both sides of the border that becomes the factor of integration and free circulation of the funds in the European regions.

References:

1. Declaration concerning regionalism in Europe / Assembly of European Regions. – Strasbourg: Secretariat General Immeuble Europe, 1996. – 10 p.
2. Cluster policy in Europe / A brief summary of cluster policies in 31 European countries. – Europe Innovation Cluster Mapping Project. – Oxford Research AS, January 2008. – 34 p.
3. Williamson O. The Economic Institutions of Capitalism. – New York: Free Press, 1985. – 450 p.
4. Porter M. E. Clusters and competition: new agendas for companies, governments, and institutions // Porter M. E. On Competition. Boston, MA: Harvard Business School Press, 1998.
5. North, Douglass. Institutions, Institutional Change and Economic Performance, 1990.
6. Krugman P. The Self-Organizing Economy. – Cambridge: Blackwell Publishers, 1996.
7. Klejner G. B. Evolyuciya institucional'nyh sistem. – M.: Nauka, 2004. – 240 pages.
8. Andersson T., Schwaag-Serger S., Sorvik J., Hansson E.W. The Cluster Policies Whitebook. [Elektronnyi resurs] // Malmo, Sweden: International organization for knowledge economy and enterprise development. – 2004. – 250 p.
9. Enright M. J. Survey on the Characterization of Regional Clusters: Initial Results : [working paper] / M. J. Enright. – University of Hong Kong, Institute of Economic Policy and Business Strategy: Competitiveness Program, 2000. – P. 16.
10. Porter M. The Competitiveness Advantage of Nations. – London: Macmillan, 1990.
11. Geets V. M. Strategichni vikliki XXI stolittya suspilstvu ta ekonomitsi Ukraini / V. M. Geets, V. P. Seminozhenko, B. E. Kvasnyuk. – T. 3. – K. : Feniks, 2007. – P. 244.
12. Marshall A. Elements of Economics of Industry Being the First Volume of Elements of Economics. L., 1928.
13. Armstrong H. W. The Role and Evolution of European Community Regional Policy / B. Jones, M. Keating (Eds.) // The European Union and the Regions. – Oxford: Clarindon Press, 1995. – P. 23-62.
14. Mikula N. A. Strategiya formuvannya ta pidtrimki rozvitku transkordonnih klasteriv / N. A. Mikula // Sotsialno-ekonomichni problemi suchasnogo periodu Ukraini. Klasteri ta konkurentospromozhnist prikordonnih regioniv: Zbirnik naukovih prats. Vip. 3 (71) / NAN Ukraini. In-t regionalnih doslidzhen; Redkol.: Vidp. red. E.I.Boyko. – Lviv, 2008. – Pp. 129-141.
15. Rekord S. I. Metodologiya razvitiya klasternyh sistem kak mezourovnya mezhdunarodnoj ehkonomicheskoy integracii / S. I. Rekord. – SPb. : Izd-vo SPb GUEHF, 2012. – 211 s.
16. Rekord S. I. Razvitie promyshlenno-innovacionnyh klasterov v Evrope: evolyuciya i sovremennaya diskussiya. – SPb.: Izd-vo SPb GUEHF, 2010. – P. 12.

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CONCEPTUAL AND METHODOLOGICAL ASPECTS OF ASSESSING THE EFFICIENCY OF TRANSPORT-LOGISTICS CLUSTERS INNOVATIVE TYPE

Summary

Transportation and logistics clusters, as rightly consider a number of scholars, are of the innovation cluster type. For modern Ukraine, forming innovative transportation and logistics clusters – is an opportunity for effective economic restructuring reaching a new level of international relations in the field of management. Therefore, the effective functioning of clusters is an important step in substantiating the usefulness of economic subjects for building national and international cluster systems. As each subject cluster evaluating the appropriateness of entry, trying to take into account their own economic and social interests, this necessitates the formation of the system performance through integrated together using agreed criteria and interdependent interests of all actors cluster. As a result of the definition of performance criteria for cluster systems, there is formed a system of indicators with defined parameters and revealed the qualitative and quantitative performance indicators at all levels of operation of the cluster.

Introduction

The cluster system is the embodiment of a unique combination of scientific, industrial and commercial structures, based on the benefits of cooperative interaction, promote the formation and effective use of real competitive advantages of individual companies, industries and national economies in the increasingly competitive global confrontation. At this stage of development of Ukraine, clusters can make an effective tool for the intensification of domestic business and strengthening market positions of individual economic actors.

One effective solution for the integrated management of material flows and related organization is transportation and logistics clusters. Today cluster approach is used as a key element of the strategy of economic development of many countries.

Improving the competitiveness of the national economy (better access to the workforce, suppliers, specialized information; increase in foreign trade activities, improving the quality of goods and services by integrating knowledge, experience and capacity to the cluster); growth rate of innovation and identify new areas and lines of business (through better vision and understanding market opportunities and

rapid changes sufficient flexibility, lower price experiments, reducing the pressure on members of the cluster); stimulating the creation of new businesses, new businesses, new jobs, new market niches expression; improve people's lives – this is not a complete list of objectives, implementation of which ensures the formation of transport-logistics clusters (TLC) in Ukraine.

At the same time, weak innovation activity of transport and logistics business, poor logistics, and lack of efficiency in Ukraine sufficient experience and appropriate legislative process to ensure the formation of cluster structures requires finding solutions to strategic priority process and mechanism of formation of TLC in Ukraine.

Part 1. Problems and advantages of clustering the economy of Ukraine

An analysis of different definitions of the term «cluster» that occur in foreign and domestic economic science suggests that at present there is no single interpretation of the definition of economic and organizational essence of the term that is explained, firstly, by the availability of different types of clusters, secondly, the complexity of organizational formations, thirdly, connection with the evolutionary development of cluster theory. It seems that at this stage of economic development, the cluster should be considered as the latest organizational form of integrated supply chain management. Therefore, the strategic role at the present stage of evolution theory given cluster formation of clusters such an infrastructure, which includes primarily transport-logistic clusters.

Logistics clusters – is a specially structured and organized economic clusters that combine features of logistics systems and economic clusters, subject to the general principles of functioning and development of complex organizational systems [1].

Cluster – is an optimal transport logistics system innovation type, the specifics of which is the integration of state and local government transport and logistics business, scientific and educational institutions, aimed at innovative development and obtaining synergies, resulting in increasing the competitiveness of the system as compared with separate business entities through the cooperation and effective use of partners for a long period and combined cooperative and competition principles [2].

An important distinguishing feature of a cluster of any type is a factor of innovative orientation. Clusters are usually formed where there is either expected «breakthrough» in engineering and manufacturing technology and further expand into new market niches [3]. In this regard, many countries – both economically advanced and beginners only, forming a market economy – are increasingly using the cluster approach to supporting the most promising areas and forms of business activity in the formation and regulation of their innovation systems.

Transport-logistics cluster consists of companies that perform different functions but united by one process – the transport and delivery of goods from manufacturers to their customers, resulting in a complex product – reliable and quality service transport service created by all members of the cluster since those engaged in scientific research and development and training, and ending with transport companies and logistics intermediaries.

Interest to TLC is explained by the following features of this category of clusters [2; 4]:

- 1) TLC – is a cluster of services that differ significantly from clusters of commodity production. Attitude to cluster service changes with the development of services;

2) TLC – is a cluster infrastructure, the level of which affects all sectors and areas of life;

3) TLC – is an industry cluster, which occupies a special position in the economy, creating cargo and passengers countries and regions;

4) TLC – is a cluster of modern business area – logistics, which only formed as a separate branch and has the features: on the one hand, it has an integration (cross-functional) nature, on the other hand, one could argue that logistics formed an independent powerful sector economy, although, unfortunately, this is not yet reflected in particular in the national program and records;

5) feature of the logistics cluster form is the transformation of relations between the parties to the organizational and planning, rather than on spontaneous market basis. Transport clusters are formed at the intersection of major cargo flows and combine many specialized facilities.

6) TLC – is a cluster that displays the triple helix model – a cooperation between government, business, and science, ensuring their synergy, competitiveness and levelling risks, and requires effective public-private partnership;

7) TLC is a cluster of innovative type, which stimulates the innovative activity of all of its structural subsystems and requires the creation of a powerful IT platform;

8) TLC – is a modern organizational form of supply chain management integration.

The main competitive advantage of transportation and logistics cluster as the cluster model is the creation of so-called «value-added» or the formation of new value through synergies and that the accumulation of improving resource that exists, creating competitive advantages of all subjects of this association, directly influencing the supply chain [5].

The impact of clusters on the competitiveness of the supply chain is shown in Figure 1.

This allows more quickly and efficiently distributes new knowledge, scientific discoveries, and inventions; focus on business processes that provide the most added values, transferring the rest to outsourcing; effectively attract and utilize investments; reaching multiplier effect on the dissemination of information within innovation clusters [1].

Because of the logistics cluster is organized in a special way, logistics system – the concentration of logistics activities that identify a group of companies and organizations aimed at organizational, structural, organizational, and analytical improvement (optimization) of flow processes and production functions of any content in reproduction (logistics) cycle [6].

Despite the outstanding advantages of cluster model of development of Ukraine, there are some problems that prevent the effective implementation of innovative development tools.

Problems and prospects of transport-logistics clusters in Ukraine are presented as SWOT-analysis of TLC in Table 1.

Given the analysis of the main problems of formation and development of TLC in Ukraine, their causes, and measures to address these problems are presented in Figure 2.

The mentioned measures are aimed at restoring and accelerating economic growth through increasing the potential clustering of the economy, creation, and development of TLC in Ukraine on the innovative basis. This will help determine the «area of responsibility» and every subject of interest and determine TLC contribution to the economic operation of the cluster, providing a synergistic effect.

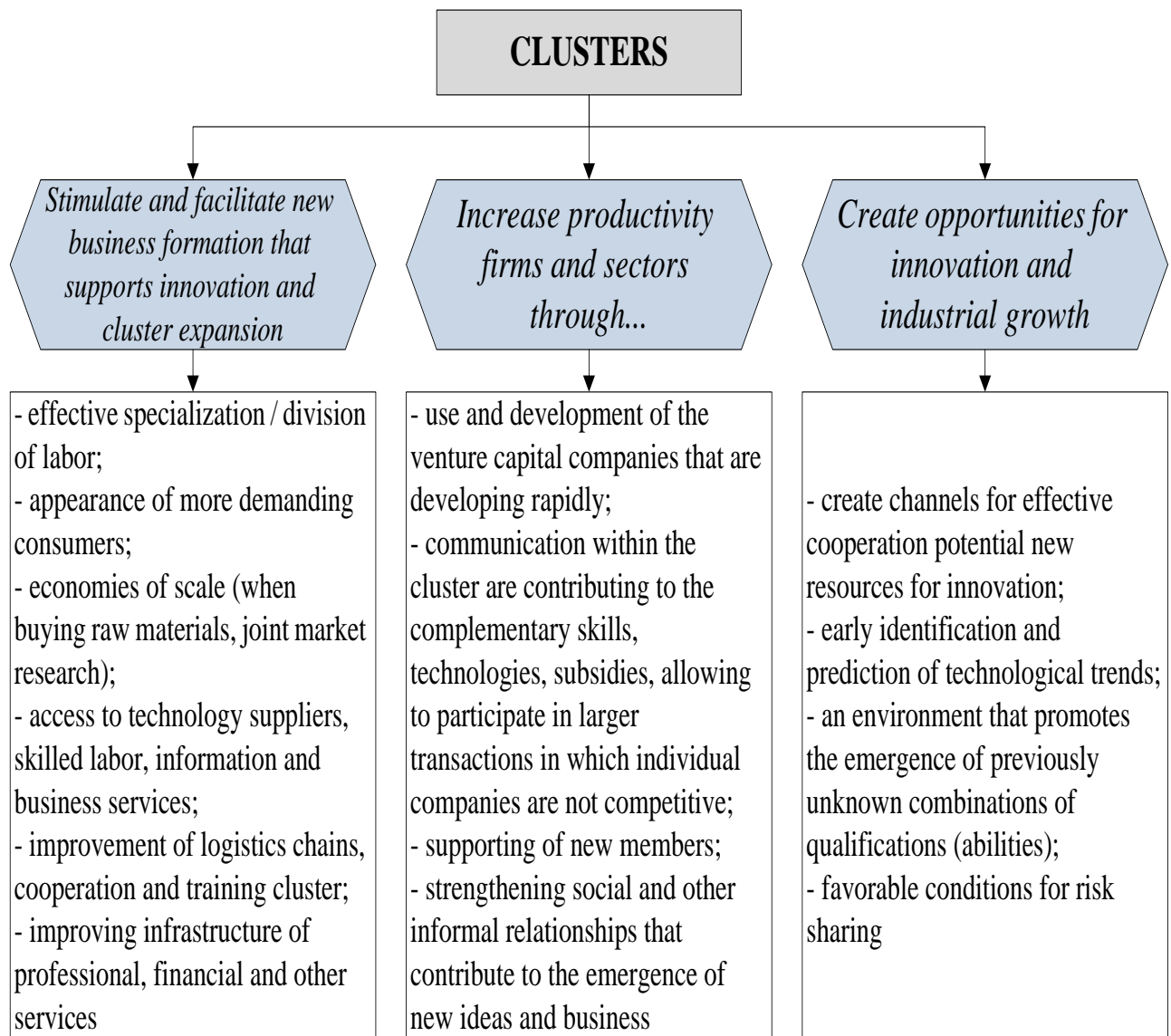


Fig. 1. The impact of clusters on the competitiveness of the supply chain

Source: own research

Table 1

SWOT-analysis of preconditions of TLC development in Ukraine

№	Strengths	Weaknesses
1	good geographical location of the country in general and certain of its regions, geopolitical component, the presence of transport and logistics infrastructure;	lack of perfect legislation on clustering the national economy; imperfect mechanisms for implementing legal norms and rules regarding regional initiatives;
2	considerable scientific and human resources, an extensive system of research and educational institutions;	imperfect clustering development programs and public support; not created the basis of scientific and technical, information and consultative, educational support of TLC;

3	the presence of significant production potential companies that have facilities that are not used;	lack of skills and experience of the effective partnership; lack of interest of small and medium business association in the system;
4	the ability of economic agents to allocate their limited resources to some extent;	weak interest in the implementation of real innovation in the economy, no skills partnerships with colleagues from abroad;
5	experience in difficult conditions, speed decision making.	lack of investors due to low investment attractiveness of the region.
6	Opportunities	Threats
7	improving the efficiency of supply chain management through the creation of new organizational forms – TLC;	market crisis, economic stagnation of the region (becoming a full competitive TLC – a complex and long-term task for the state);
8	improving the competitiveness of cluster members through the introduction of new technologies;	political and legal risks;
9	providing significant synergies in the economy;	limitations customs and tax legislation;
10	increased susceptibility to the capabilities of high specialization and innovation;	imperfect legal framework to regulate relations between members of clusters;
11	reduce costs and improve product quality through the synergy and unification of approaches to the quality, logistics, engineering, information technologies;	insufficient benefits for all the insight cluster members, as evidenced by the lack of cluster initiatives both from the state and from the business.
12	increased productivity, greater flexibility, and large scale effect;	
13	more efficient and rational use of available resources, as well as attracted investments;	
14	mutual enrichment of knowledge, ideas, contributing intellectual capacity augmentation;	
15	financial support between members of the cluster, forming single financial resources;	
16	complementarity and harmony cluster components through the implementation of joint organizational and economic measures and effective marketing.	

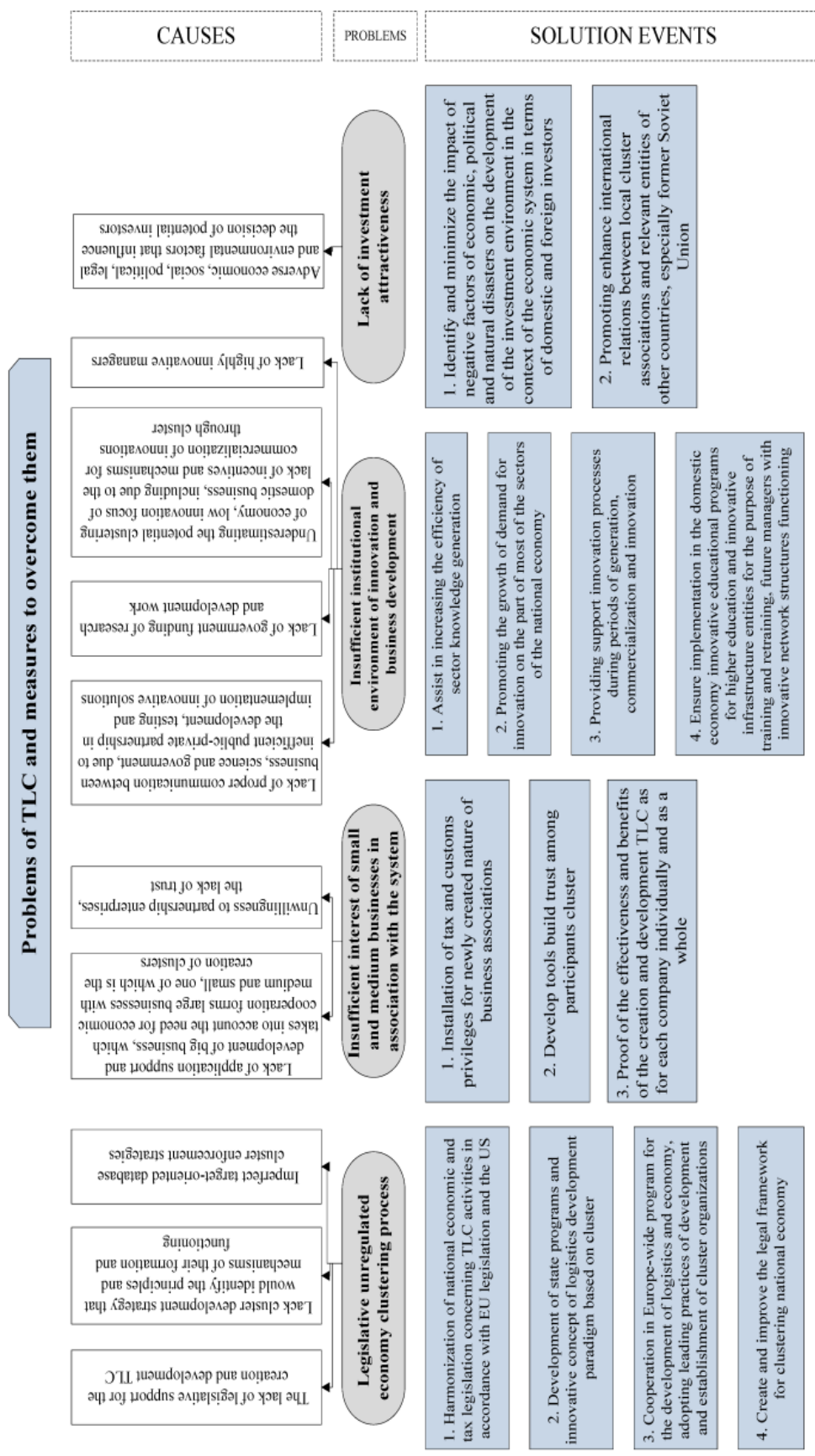


Fig. 2. «Tree problems» of the formation and development of TLC in Ukraine and measures to solve them
Source: own research

Part 2. Methods of assessing the efficiency of transport and logistics clusters innovative type

Effective functioning of clusters is an important step in the justification of usefulness of economic subjects for building national and international cluster systems. Providing an objective assessment of efficiency can be provided using complex interconnected together and agreed criteria.

The economic essence of efficiency cluster is that an integrated approach for each unit cost was a significant increase in profit than the operation of each company separately [7]. That is, the efficiency of cluster interaction is available through synergies.

The main subjects of cluster formation synergies include:

- market actors shaping, transforming, and absorbing material flows, namely producers, consumers, intermediaries;
- transport company engaged the surface, water, and air transport modes;
- shipping companies, including freight forwarders, couriers, freight forwarders, agents (brokers), operators of mixed cargo, linear cartels;
- warehouses, distribution centres, and terminals;
- institutional bodies (Ministry of Infrastructure, Customs Control Committee, Ministry of Finance, Services of sanitary-epidemiological and veterinary control, etc.);
- subsidiary companies (financial institutions and organizations, research organizations, insurance companies, consulting and analytical organizations, training centres for training and retraining of the personnel, marketing structures);
- organizations that provide related services (maintenance and repair of transport, road construction companies, service organizations).

The analysis of the international and domestic experience of the transport-logistics clusters reveals a synergistic effect of the interaction of all participants (Figure 3).

The positive systemic socio-economic impact of cluster activities for participating enterprises and regional is due to the synergy that association resources and their effective use to achieve a common goal [9]. In particular, synergy within the cluster provides the following major effects: the effect of joint innovation, the effect of the use of outsourcing, the effect of risk sharing between members of the cluster effect of sharing infrastructure, the effect of reducing transaction costs, the effect of forming a single product and distribution base.

Consider them in detail.

1. The effect of joint innovation: creating efficiency of the cluster can be achieved only if the knowledge-based innovation and its development [10]. Innovation synergy is the result of sharing production facilities, R&D expenses of transfer from one product to sharing high-tech equipment and more. Sharing technology significantly increases the overall competitiveness cluster, as well as new ideas, business processes, and technologies, are in the cluster available to all enterprises, which, in turn, seek to establish and improve their knowledge, thus creating new competitive advantages and consequently improving competitiveness cluster, region, and state as a whole.

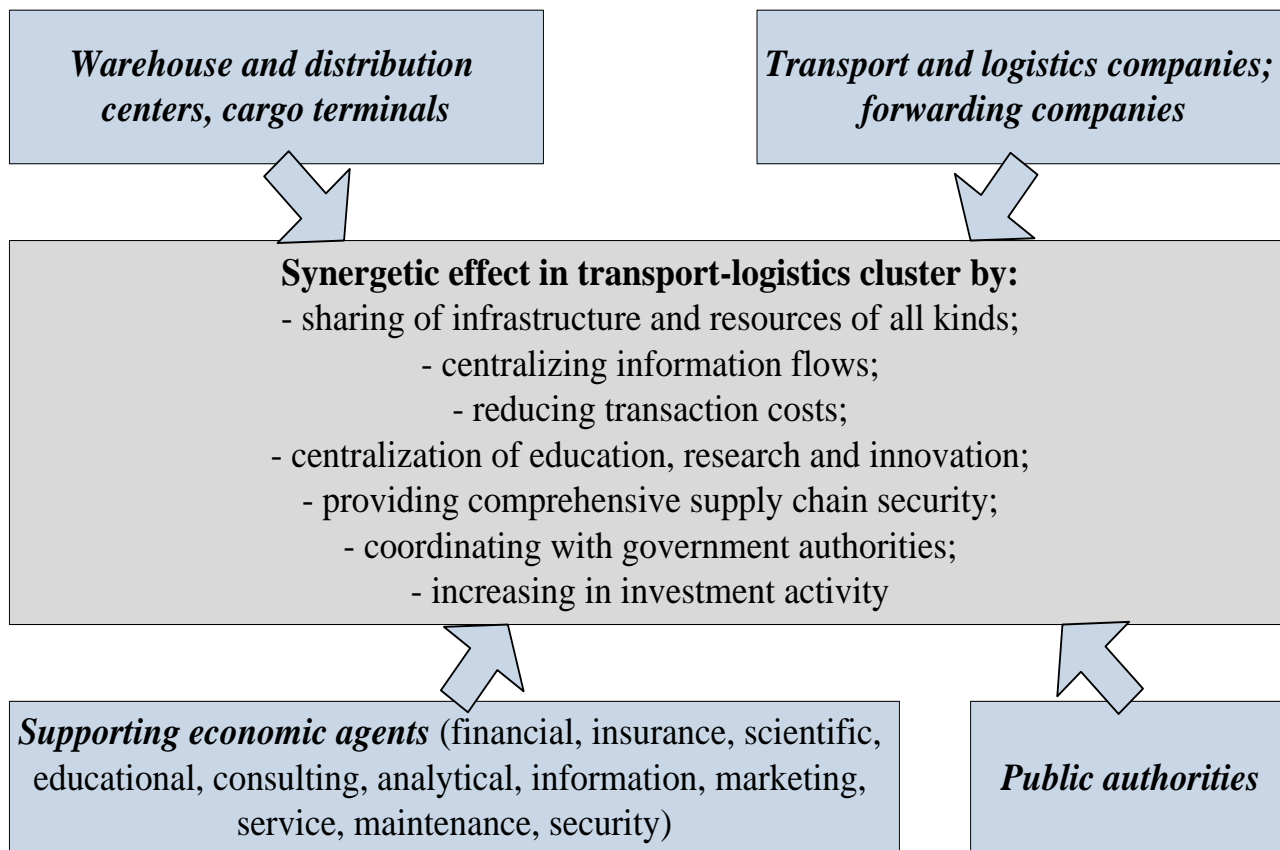


Fig. 3. Synergetic effect of transport-logistics cluster

Source: based on [8]

2. The effect of outsourcing: the transfer is now based on the agreement of certain business processes or production functions in service to another company that specializes in the relevant field. The main source of cost savings with the help of outsourcing is to improve the enterprise as a whole and the emergence of opportunities to release the appropriate organizational, financial, and human resources to develop new areas or to focus on existing needing attention. It should be noted that the main difference is the outsourcing of subcontracts that is a part of the outsourcing and covers only industrial, scientific, and manufacturing sector [11].

3. The effect of risk sharing between members of the cluster: businesses cluster in joint measures of risk management to reduce the size of the possible loss. Union spending on measures to minimize the risks of each company within the cluster increases the feasibility of risk management measures. This effect in terms of increased instability and risk of the environment is of particular relevance.

4. The effect of sharing infrastructure: between companies, participating in the cluster, cooperation takes place through the deepening of industrial and technological specialization and cooperation, the creation of the cluster service and utility industries, infrastructure.

5. The effect of reducing transaction costs under the cluster formed a common base of knowledge and information as a result of overflow between enterprises cluster, which reduces the specificity of a resource and, therefore, the transaction costs [12]. In addition, as part of the cluster reduces the cost of information search, prospecting, negotiation, etc.

6. The effect of the formation of a single commodity distribution base for each type of traffic, functioning within the cluster provides companies reduce the cost of

immobilization of working capital at the time of a finding in the process of delivery. The size of these costs is defined as the value of the commodity mass, and the effect – as a result of reduction accelerating delivery of goods [13].

To calculate the above-described effects of proposed methodological approach (Table 2), which is based on the method of determination socioeconomic effect formation of the transport-logistics cluster, which is offered by Derhachev V.A., Domaskina O.P., Motsarenko V.I., Tarakanov M.L. [14]. In calculating the individual economic effects was based on methodological approaches by Khariv P.S. (innovations) [15] and Kuhayevskiy A.A. (use of a single commodity distribution base) [13].

Table 2

The methodical approach to evaluating the economic efficiency of cluster systems [based on [3, 13, 14, 15]]

№	Index	Formalization
1	The effect of joint innovation	$E_i = \left(C_0 \frac{P_i}{P_0} - C_1 \right) * P_i,$ <p>where E_i – effect of innovation within the cluster, monetary units; C_0 – cost of production per unit to the introduction of innovations, monetary units; C_1 – cost of production per unit after the introduction of innovations, monetary units; P_0 – annual output of the introduction of innovations, t; P_i – annual performance after the introduction of innovations, t</p>
2	The effect of outsourcing	$E_a = C_s - C_a,$ <p>where E_a – effect of the use of outsourcing, monetary units; C_s – independent production costs of this type of work or services, monetary units; C_a – cost of acquisition of works, services in outsourcer, monetary units</p>
3	The effect of the allocation of risk between cluster members	$E_r = C_{rm_0} - C_{rm_1},$ <p>where E_r – effect of risk sharing between members of the cluster, monetary units; C_{rm_0} – annual cost of risk management measures to reduce the size of possible damage to the formation of the cluster, monetary units; C_{rm_1} – annual cost of risk management measures to reduce the size of possible damage after the formation of the cluster, monetary units</p>
4	The effect of sharing infrastructure	$E_{CI} = I_0 - I_1,$ <p>where E_{CI} – effect of sharing infrastructure, monetary units; I_0 – annual operating costs of infrastructure to form a cluster, monetary units; I_1 – annual operating costs of infrastructure after the formation of the cluster, monetary units</p>
5	The effect of reducing transaction costs	$E_t = C_{t_0} - C_{t_1},$ <p>where E_t – effect of reducing transaction costs within the cluster, monetary units; C_{t_0} – annual transaction costs to the formation of the cluster, monetary units; C_{t_1} – annual transaction costs after forming a cluster, monetary units</p>

6	The effect of the creation of a single product and distribution base for each traffic	$E_{rb} = T_0 - T_1,$ <p>where E_{rb} – effect of creating a single commodity distribution base, monetary units; T_0 – cost commodity mass to create a single inventory distribution base for this type of cargo, monetary units; T_1 – cost commodity weight after the creation of a single commodity distribution base for this type of cargo, monetary units</p> $T = \frac{t*Q*P}{365},$ <p>where t – a number of days required for delivery of cargo; Q – annual traffic volume, t; P – price of a ton of cargo, monetary units; 365 – duration in days.</p>
7	The integral indicator of cluster economic efficiency	$E_{TLC} = E_i \times ki + E_a \times ki + E_r \times ki + E_{CI} \times ki + E_t \times ki + E_{rb} \times ki$ <p>where ki – weight of each type of effect, which is determined by an expert</p>

The methodical approach allows evaluating the efficiency of transport-logistics cluster based effects generated within the cluster.

As stated earlier, TLC is one of the most effective forms of economic organization and interaction of all participants in the transport and distribution process. Moreover, this interaction provides maximum integral economic effects $E_{TLC}^{integr.}$ with minimal logistics costs S_{ijk} :

$$E_{TLC}^{integr.} = \sum_{i=1}^I \times \sum_{j=1}^J D_{ij} - \sum_{i=1}^I \times \sum_{j=1}^J \times \sum_{k=1}^K S_{ijk} \rightarrow max, \quad (1)$$

where i – of subjects transport-logistics activities ($i=1; I$); j – logistics function to maintain traffic at TLC ($j=1; J$); k – resources used ($k=1; K$); D_{ij} – income of i -th subjects to perform the j -th logistics functions in TLC when serving traffic; S_{ijk} – costs of i -th subjects of fulfilment of the j -th logistics functions in TLC when serving traffic using the k -th resource.

According to the approved Guidelines on implementation of the cluster policy, clusters have five important indicators [16]:

1. The presence of viable enterprises.
2. The presence in the territory of the competitive advantages for the development of the cluster.
3. Geographical concentration and proximity.
4. A wide range of participants and their presence «critical mass».
5. Availability of communication and interaction between members of clusters.

A very important step in the formation and development of the transport-logistics cluster is to evaluate the efficiency of the cluster from the perspective of national interests and the interest of the participants TLC position (Figure 4).

Evaluating the effectiveness of cluster members during its formation is advisable to determine based on the changes of economic development. For each individual participant, cluster effectiveness of such cooperation is defined differently. In

particular, with regard to companies that are in a cluster, the manifestations of economic efficiency are a variety of economic effects and improve the quality of goods and service, cost reduction, material consumption, capital intensity, the complexity of production, increase productivity, increase profits, etc. [17].

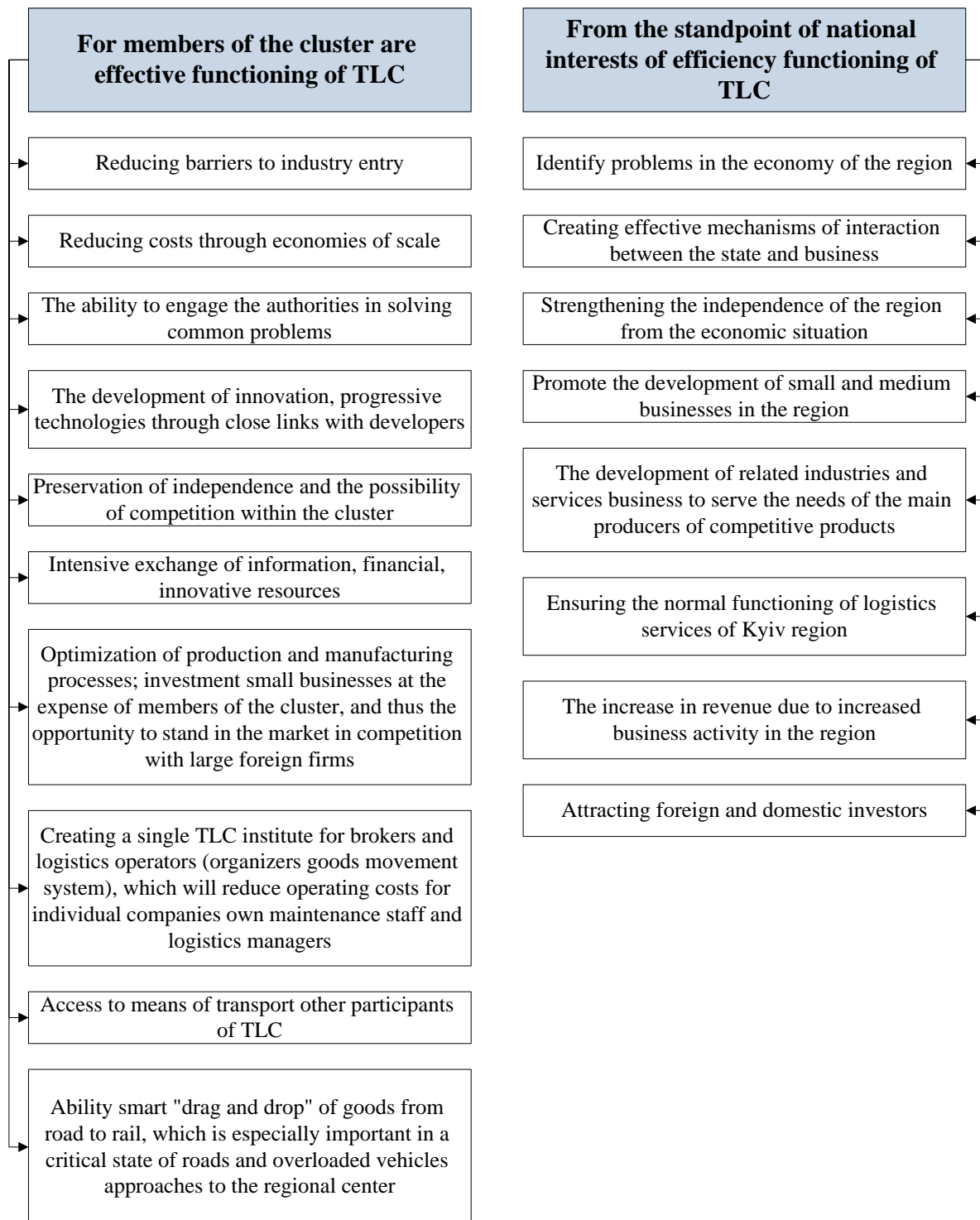


Fig. 4. Effectiveness of the cluster from the perspective of national interests and positions of interest of participants TLC

Source: own research

Consider it appropriate to emphasize the practical value of this approach, which users could become stakeholders such as investors, financial institutions. This

technique can be applied in the development of competitive regional policy and public programs for the region.

Key indicators that can be used in determining the efficiency of the transport-logistics cluster are in Table 3.

Table 3

Key indicators of efficiency of cluster members

№	The subjects of evaluation levels	The purpose of evaluation	Indexes
1	Companies – members of the cluster	Determine the feasibility of entry into the cluster or the effectiveness amenities	Profitability, sales; the level of expenses; productivity; materials consumption of production; the capital intensity of production; the complexity of products.
2	Regional authorities	Evaluate activities of subjects associations and to monitor the effectiveness of the cluster	Filling the regional budget; optimizing performance management solutions; a number of additional jobs; changing innovation potential; increase regional competitiveness.
3	Banking and financial institutions	Determine the economic and financial effect from being in a cluster	Return on equity, assets, and costs; sepred clean; net interest margin; the level of other operating income.
4	State	Determine the impact of clusters on the level country's economic development	A number of created new working places; reducing the level with unemployment benefits; the level of budget revenues (cluster members); the amount of obtained new projects; increase the competitiveness of regions; changing innovation potential, exports, attracted investments.
5	Research institutions	Determining the impact of cluster development in science and the prestige of the institution	Level and prestige of science (scientific, technical, research) institutions on the scale of scientific potential and achievements; impact of scientific, technical and innovation institutions (number of state awards, publications, international awards, patents, inventions, licenses, protected the thesis for a doctorate degree, PhD); citation index, performance of research
6	Educational institutions	Determine the competitiveness of science and communication with business practitioners	Share of additional educational programs (including author's) in the curriculum; the proportion of subjects profiled nature graduation rates (grades) in the curriculum; proportion of pupils (students) winners of competitions at various levels in the total number of students.

Evaluating the effectiveness of the cluster is based on a system of indicators used at the macro level (the number of new jobs, reduction level of unemployment payouts, budget revenues (members of the cluster), the volume of attracted foreign investments, the amount of received new projects, changes in the innovative capacity of the region (state), and export volume and so on.), at the regional level (indicators, reflecting the decrease in social tensions, environmental safety issues or improve infrastructure and others), at concretion company – by cluster (profitability, sales, spending, productivity, materials, capital intensity, complexity of products, etc.), at research institutions (rating institution, the impact of scientific, technical and innovation, citation index, volume of research, etc.) and educational institutions (share of additional educational programs (including copyright) in the curricula of schools, the proportion of subjects profiled nature graduation classes (courses) in the curriculum, the proportion of students (students, job seekers) – winners of competitions at various levels in their total population, the number of PhD and master's theses and others.

Conclusions

At the present stage of development of the theory of clustering, the cluster should be considered not only as a form of business combination, as well as an innovative organizational form of effective management of integrated supply chain.

The proposed methodology for evaluating the effectiveness of creation and development of transport and logistics cluster is based on the fact that the effectiveness of cluster interactions should contribute to a synergistic effect in the economy. Among the effects that provide synergies within the cluster identified: the effect of joint innovation, the effect of the use of outsourcing, the effect of risk sharing between members of the cluster effect of sharing infrastructure, the effect of reducing transaction costs, the effect of forming a single commodity distribution base for each type of traffic.

The effectiveness of cluster activity is formed by a combination of integral indicators prevailing classification based on different approaches and criteria: social and economic values, qualitative and quantitative parameters, factors of extensive and intensive development, special requirements and more. A clear definition of performance criteria for cluster systems can form a system of indicators with defined parameters and reveal the qualitative and quantitative performance indicators at all levels of operation of the cluster.

The system estimates the efficiency of the generated cluster, includes certain evaluation criteria, including determining the available capacity of enterprises, the impact of the enterprise cluster on the industry in the region, company image cluster in the degree of innovation of the industry, commercialization of new technologies, the scope of works (services), the number of employees in the industry, investment in fixed assets, the level of cooperation and trust, creating the infrastructure necessary for the development of the cluster, entering a new level of management, its geographically close cluster members, government support for clusters.

The basic indicators of efficiency of the cluster members that can be used, assessing the feasibility of entry each participant in the cluster, are considered. The proposed conceptual and methodological approaches contribute actively to the formation of transport-logistics cluster development and modernization of transport infrastructure, the creation of modern logistics terminals, the geographical expansion of transport, stimulating innovation and introduction of new technologies in the logistics industry, improving efficiency and achieving a fundamentally new quality of

interaction between business and state and education, provide a synergistic effect of their activities, which in turn led to the innovative activity of strategic partners TLC growth and promote economic competitiveness at both national and regional level.

References:

1. Rol klasternykh formirovaniy v budushchem ekonomiky Ukrainy [The role of cluster formations in the future of the Ukrainian economy] // [Electronic resource]. – Access mode: http://www.rusnauka.com/33_NIEK_2008/Economics/37328.doc.htm (In Russian).
2. Stratehiya formuvannya ta rozvytku transportno-lohistychnykh klasteriv v Ukrayini: innovatsiyno-intelektual'nyy pidkhid [Strategy formulation and development of transport and logistics clusters in Ukraine: innovation and intellectual approach] // Monograph / S.V.Smerichevska, E.E.Fedorov, T.V.Ibrahimhalolova. – Donetsk: «BIK», 2013. – 360 p (In Ukrainian).
3. Smerichevska S.V., Ibrahimhalilova T.V. Metod kohnityvnoho modelyuvannya parametriv i faktoriv struktury upravlinnya transportno-lohistychnoyu systemoyu [The method of cognitive modeling parameters and factors management structure of transport-logistics system] // Teoretychni i praktychni aspekty ekonomiky ta intelektual'noyi vlasnosti. – Mariupol: DVNZ «PDTU», 2012. – № 1, T.2. – Pp. 290-293 (In Ukrainian).
4. Formuvannya transportno-lohistychnykh klasteriv u YeS: ukrayins'kyi kontekst [Formation of transport and logistics clusters in the EU: Ukrainian context] // [Electronic resource]. – Access mode: <http://visnyk-geo.univ.kiev.ua/wp-content/uploads/2016/04/5-60.pdf> (In Ukrainian).
5. Transportno-lohistychna klasteryzatsiya yak faktor zabezpechennya innovatsiynoho rozvytku rehioniv Ukrainy [Transport-logistics clustering as a factor of innovative development of regions in Ukraine] // [Electronic resource]. – Access mode: [file:///C:/Users/%D0%A2%D0%B0%D0%BD%D1%8F/Downloads/Nv_2014_9_7%20\(2\).pdf](file:///C:/Users/%D0%A2%D0%B0%D0%BD%D1%8F/Downloads/Nv_2014_9_7%20(2).pdf) (In Ukrainian).
6. Transportno-lohistychni klastery – vektor rehional'noho rozvytku [Transport-logistics cluster – vector of regional development] // [Electronic resource]. – Access mode: [http://eir.pstu.edu/bitstream/handle/123456789/9190/Virtus_2016%20\(236-239\)_p236-239.pdf?sequence=1](http://eir.pstu.edu/bitstream/handle/123456789/9190/Virtus_2016%20(236-239)_p236-239.pdf?sequence=1) (In Ukrainian).
7. Metod otsenky efektyvnosti orhanyzatsyy vzaymodeystvyia uchastnykov transportno-lohistycheskoy ynfrastruktury rehyona [Method for assessing the effectiveness of the organization of interaction between participants in the transport and logistics infrastructure of the region] // [Electronic resource]. – Access mode: <http://cyberleninka.ru/article/n/metod-otsenki-effektivnosti-organizatsii-vzaimodeystviya-uchastnikov-transportno-logisticheskoy-infrastruktury-regiona> (In Russian).
8. Formuvannya klasteru yak napryamku innovatsiynoho rozvytku ekonomiky [Forming a cluster toward innovative economic development] // [Electronic resource]. – Access mode: <http://economics.opu.ua/files/archive/2014/No2/132-138.pdf> (In Ukrainian).
9. Synerhetycheskyi efekt klasternykh obrazovanyy y parametry eho otsenky [Synergetic effect of cluster formations and parameters of its evaluation] // [Electronic resource]. – Access mode: <http://eee-region.ru/article/2904/> (In Russian).
10. Otsenka efektyvnosti sozdannya otraslevoho klastera [Assessment of the effectiveness of the creation of an industry cluster] // [Electronic resource]. – Access mode: <https://www.fundamental-research.ru/ru/article/view?id=31301> (In Russian).
11. Zakharchenko V.Y., Osipov V.N. Klaster'naya forma terrytorial'no-proyvodstvennoy orhanyzatsyy [Cluster form of the territorial-production organization]. – Odessa: «Favorit» – «Pechatnyy dom», 2010. – 122 p. (In Russian).
12. Otsinka efektyvnosti diyal'nosti innovatsiynoho klasteru [Evaluation of the effectiveness of the innovation cluster] // [Electronic resource]. – Access mode: <http://www.economy.nayka.com.ua/?op=1&z=245> (In Ukrainian).
13. Kuhavskyy A.A. Efektyvnost' rehional'noho transportnoho kompleksa (metodolohycheskye voprosy) [Efficiency of the regional transport complex (methodological issues)]. – Novosybyrsk: Nauka.Syb.otd-nye, 1989. – 128 p. (In Russian).
14. Burkynskyy B.V., Stepanov V.N., Derhachev V.A. Morekhozaystvennyy kompleks [Sea-economic complex] / AN USSR Odes. otd-nye Yn-ta ekonomiky. – K.: Nauk. Dumka, 1991. – T. 1. – 352 p. (In Russian).

15. Analiz rozvytku lohystychnykh posluh na suchasnomu svitovomu rynku [Analysis of logistics services on the world market] // [Electronic resource]. – Access mode: http://www.ej.kherson.ua/journal/economic_06/41.pdf (In Ukrainian).

16. Podkhody k formyrovanyuu y otsenke efektyvnosti ekonomycheskykh klasterov [Approaches to the formation and evaluation of the effectiveness of economic clusters] // [Electronic resource]. – Access mode: <http://www.ini21.ru/arhiv/2-10/908.php> (In Russian).

17. Otsinka ochikuvanoi efektyvnosti klastera yak osnova dlya pryynyattya rishen' shchodo klasteroutvorennia [Assessment of the expected performance of the cluster as a basis for decisions on cluster formation] // [Electronic resource]. – Access mode: http://www.visnyk-econom.uzhnu.uz.ua/archive/6_1_2016ua/34.pdf (In Ukrainian).

18. Kontseptsyya formyrovanyua ynnovatsyonnoy ekonomyky Ukrainy na osnove klasternoho podkhoda [The concept of formation of innovative economy of Ukraine on the basis of the cluster approach] // [Electronic resource]. – Access mode: file:///C:/Users/%D0%A2%D0%B0%D0%BD%D1%8F/Downloads/Траєв_2013_1_1_52.pdf (In Russian).

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ТРАНСКОРДОННА МІГРАЦІЯ РЕГІОНІВ УКРАЇНИ: ПРОБЛЕМИ ВРЕГУЛЮВАННЯ

Анотація

Розкрито передумови виникнення міграційних процесів, їх причини і наслідки. Проаналізовано динаміку чисельності міжнародних емігрантів у світі за останні роки. Виявлено основні тенденції сучасної транскордонної еміграції. Окреслено можливі наслідки інтенсифікації міграційних процесів та транскордонної міграції, зокрема в Україні. Запропоновано заходи міграційної політики щодо упорядкування міграційного простору країни.

Вступ

Нині проблема еміграції її громадян до інших країн є однією з найактуальніших проблем для сучасної України. Зрозуміло, що емігрувати за межі рідної країни змушені люди, що з різних причин не можуть повноцінно жити на її теренах. Перехід України на ринковий шлях розвитку супроводжується не лише великою кількістю політичних і соціально-економічних змін, а й глибокою демографічною кризою, однією з першопричин якої є еміграція населення.

Дослідження даної теми продиктоване низкою серйозних змін у соціальному, політичному та економічному житті України. Після набуття Україною незалежності одним із здобутків демократизації суспільного життя стало усунення обмежень на перетин державного кордону, забезпечення вільного пересування громадян.

Домінуючою тенденцією у міжнародних відносинах сьогодення є глобалізація, одним із проявів якої виступає міжнародна еміграція робочої сили. Важливість дослідження еміграційних процесів, їх причин та мотивів зумовлена також стрімким зростанням обсягів, нарощуванням інтенсивності, вагомих впливом на економічний та соціальний розвиток країн. Особливе місце еміграції робочої сили в сучасних умовах визначається насамперед високою динамікою, швидким реагуванням на зміни в суспільстві та економіці. Все більшого поширення і значення набуває переміщення людських ресурсів, зумовлене соціально-економічними, військовими, етнічними та релігійними чинниками. Швидке зростання масштабів міжнародної еміграції, залучення до неї значних обсягів трудових ресурсів робить актуальним дослідження міжнародної еміграції робочої сили як однієї з форм світових господарських зв'язків та її впливу на світове господарство.

На сучасному етапі розвитку глобалізації трудова еміграція виступає своєрідним каталізатором цього процесу, адже вона є одночасно причиною (консолідації культур, релігій) та наслідком («стирання кордонів» між етносами, державами) глобалізації. Однак українська трудова еміграція не є явищем, пов'язаним лише зі світовими тенденціями. Особливістю мотивації до переселення наших громадян на нові місця проживання та працевлаштування за кордоном є воєнні дії на сході держави та кризові економічні чинники всередині країни.

Питання трудової еміграції громадян України за кордон є проблемою державного рівня. Тема українських заробітчан активно обговорюється в пресі та на телебаченні, привертаючи увагу всього суспільства. Мільйони трудових емігрантів з України, більшість з яких працює в Росії, країнах Західної Європи та Північної Америки, змушують державу по-новому усвідомити важливість проблеми захисту прав та свобод її громадян. Нині більшість наших співвітчизників перебуває за кордоном у статусі нелегальних трудових емігрантів і належить до найбільш дискримінованої та незахищеної категорії іноземців. У зв'язку із цим зростає кількість звернень до органів державної влади України від громадян, які потрапляють у складні ситуації за кордоном, із проханням надати їм допомогу та захистити. Ця важлива проблема підкреслюється масштабами та тенденціями трудової еміграції з України.

Розділ 1. Особливості еміграційних процесів в Україні

В останні десятиліття Україна була ареною активних еміграційних процесів. За оцінкою Світового банку (СБ), країна входить до п'ятірки найбільших постачальників емігрантів у світі, поступаючись лише Мексиці, Індії, Китаю та Росії. За даними статистики, у 2012 р. за межі України виїхало 14 517 громадян, народжених на території України. А вже в 2014 р. кількість людей, які виїхали за кордон, становить 51 991 особа. За даними статистики на 2014 р., поза територією України проживають 8,6 млн. її громадян. Із кожним роком даний показник зростає, що збільшує чисельність українців, які працюють за кордоном тимчасово та на постійній основі, використовуючи свої знання та навички на благо інших країн.

За даними Державної служби статистики України, кількість емігрантів порівняно з 2009 р. у 2010 р. зменшилася від 19 470 до 14 677 осіб. Із 2010 по 2012 р. кількість людей, які емігрували за межі України, майже не змінювалася, проте в 2013 та 2014 рр. можна спостерігати стрімке збільшення населення, яке емігрувало: від 14 517 осіб у 2012 р. до 51 991 особи в 2014 р. Варто зазначити, що станом на 2016 р. кількість іммігрантів перевищувала емігрантів (рис. 1).

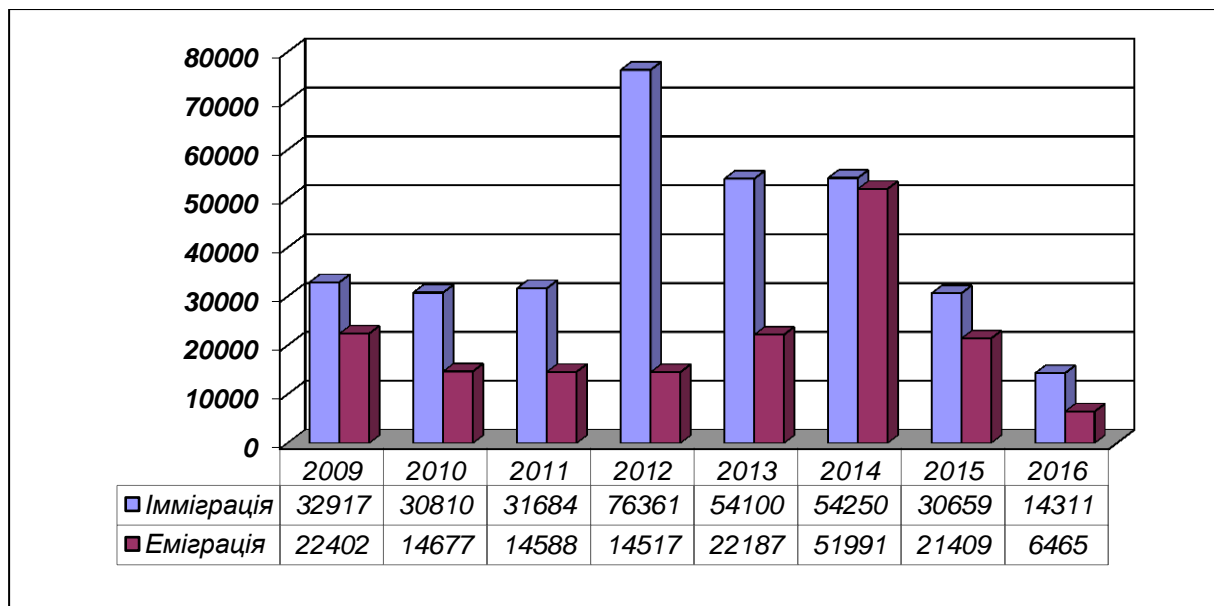


Рис. 1. Міграційний рух населення України [1]

Трудові міграції більш поширені серед чоловіків – вони становлять дві третини від загальної кількості трудових мігрантів. Серед українських чоловіків у віці 15–70 років частка трудових мігрантів становить 4,8%, тоді як серед жінок – майже вдвічі менше (2,2%).

Сільські мешканці формують 54,3% усього контингенту заробітчан. Рівень участі сільського населення в трудових міграціях у 2,9 рази вищий, ніж міського: до них залучено 6,3% сільського населення у віці 15–70 років проти 2,2% міських мешканців.

Більшість трудових мігрантів у віці 25–49 років уже має певний досвід роботи та кваліфікацію і водночас зберігає високий рівень працездатності. Звертає на себе увагу той факт, що чоловіки починають активно залучатися до трудових міграцій із 25-річного віку, тоді як жінки – із 30-річного [2].

Натомість якщо чоловіки після досягнення 50-річного віку різко знижують міграційну активність, то серед жінок і в передпенсійному та молодшому пенсійному віці спостерігається доволі високий рівень участі у трудових міграціях. Це пояснюється тим, що мігранти-чоловіки зайняті переважно важкою фізичною працею, тоді як більшість жінок – роботами, котрі не потребують значних фізичних зусиль.

Слід зауважити, що аналіз та врахування сучасних міграційних тенденцій в нашій державі в контексті участі України в європейському та світовому міграційному просторі розглядається як один із важливих чинників формування власної національної політики. Ця проблема і безпосередньо, й опосередковано перебуває в площині національної безпеки України.

Також нині особливо вирізняється проблема виникнення в регіонах України значної кількості вимушених переселенців у зв'язку з анексією Російською Федерацією Криму, зовнішньою військовою агресією Росії на Донбасі та військовими конфліктами, які тривають у Донецькій і Луганській областях. Слід особливо зазначити, що через ці причини найактуальнішою для України проблемою стало стрімке зростання внутрішньої (переселенської) міграції, а також еміграції.

Інтенсивність трудових міграцій є суттєво вищою у західних регіонах України. Тут до трудових міграцій залучено 10,8% осіб віком 15–70 років, тоді як в інших економічних зонах – менше 2%. Мешканці Західної економічної зони становлять понад 70% заробітчан, друге місце за інтенсивністю трудових міграцій посідає Південь – 1,9%, третє – Північ – 1,3%. На Сході України цей показник ледве перевищує 1%, а у Центрі не досягає й 1%. Найвища частка жінок серед заробітчан спостерігається у Західній економічній зоні (38,3%), найнижча – на Півдні (20,8%) та Півночі (20,4%) [2].

Як свідчать дані Державної служби статистики України, чисельність населення країни станом на 1 березня 2017 р. становила 42 млн. 541 тис. осіб, що на 180,3 тис. осіб менше, ніж на аналогічну дату 2016 р. Згідно з результатами дослідження, проведеного соціологічною групою «Рейтинг» 1–16 грудня 2016 р., більшість українців (71%), які в останні п'ять років хоча б раз працювали за кордоном, хочуть туди повернутися. Їх лякає не стільки війна, як постійна нестабільність у рідній країні, відсутність перспектив і неможливість швидкої самореалізації. 19% заробітчан дуже задоволені, 62% скоріше задоволені рівнем заробітку за межами батьківщини [1; 3].

При цьому ще у 2014 р. дещо змінилася географічна структура виїзду громадян України за кордон. Традиційно в Україні найбільшими трудовими міграційними потоками були Росія та Захід. Нині тенденція для виїзду на Захід значно посилилася, зокрема останнім часом українці віддають перевагу Східній Європі. Це зумовлено нестабільною економікою та військовими діями на сході, напруженими взаєминами з Росією. З огляду на зазначене, намітилася нова тенденція: до трудової міграції додалося бажання одержати статус біженця під час переїзду до нової країни. Лідером міграційного потоку, що приймає трудових мігрантів з України, нині є Польща. За даними Адміністрації державної прикордонної служби України, усього за 2015 р. кордон із цією країною перетнуло майже 9,52 млн. українців [4].

Що стосується прикордонних регіонів України, масовим і соціально значущим явищем, що позначається на демографічній ситуації, ринку праці, соціально-економічному розвитку, добробуті громадян, рівні бідності та соціальному розшаруванні, сімейних відносинах і вихованні дітей, має істотні психологічні, світоглядні, культурні наслідки, є транскордонна міграція. До характерних рис транскордонної міграції в Україні належать:

- визначальне переважання трудової міграції;
- асиметричність міграційних потоків (переважно прикордонні регіони України є донорами);
- короткотривалість і сезонність.

Спричинені нею проблеми потребують адекватних відповідей засобами міграційної, соціально-економічної, зовнішньої політики, політики захисту прав людини [5].

Світовий досвід переконливо свідчить, що трудова еміграція забезпечує як безперечні переваги, так і значні перешкоди як країнам, що приймають робочу

силу, так і країнам, які її постачають. Разом із тим міжнародна еміграція робочої сили породжує й гострі соціально-економічні проблеми.

Країни, що приймають робочу силу, отримують при цьому такі переваги:

1) внаслідок зменшення витрат виробництва підвищується конкурентоспроможність товарів, які виробляються країною, що пов'язано з більш низькою ціною іноземної робочої сили;

2) іноземні робітники, створюючи додатковий попит на товари та послуги, стимулюють зростання виробництва і додаткову зайнятість у країні перебування; за імпорту кваліфікованої робочої сили країна, що її приймає, економить на витратах на освіту та професійну підготовку;

3) іноземні робітники часто розглядаються як певний амортизатор у разі кризи та безробіття; іноземні робітники не забезпечуються пенсіями і не враховуються під час реалізації різного роду соціальних програм [6].

Заробітки емігрантів, які є як мінімум у три рази вищими, ніж в Україні, мають і позитивні наслідки. По-перше, заробітчани отримують роботу, по-друге, зменшується напруга на вітчизняному ринку праці, по-третє, вони здійснюють перекази зароблених коштів своїм родичам в економіку України. Обсяги переказів із-за кордону в 2007–2012 рр. представлені на рис. 2.

Перекази, що надійшли в 2012 р. як оплата праці (тобто від працівників, які працюють за кордоном менше року), становили 4,6 млрд. дол. Частка переказів у формі оплати праці має тенденцію до зростання: в 2008 р. вона становила лише 49,0%, у 2012 р. досягла 61,4% [7].

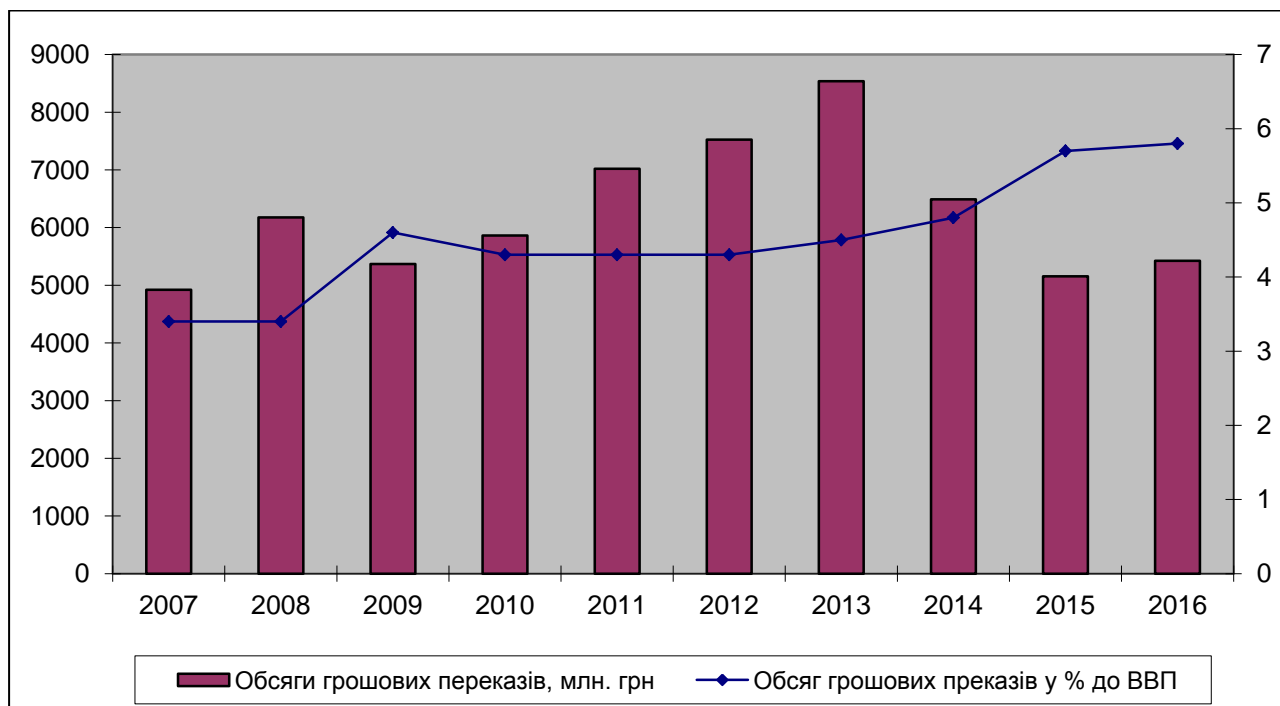


Рис. 2. Обсяги приватних грошових переказів із-за кордону [8]

Тим не менше перекази заробітчани покращують умови життя родин емігрантів, що, своєю чергою, підвищує платоспроможний попит. Негативним залишається той факт, що більшість надісланих коштів витрачається на споживання, і лише у поодиноких випадках може інвестуватися у розвиток бізнесу. Таким чином, рівень заробітної плати – чи не найважливіший фактор, який сприятиме еміграції українців. Оскільки оплата праці навіть не висококваліфікованих робіт у країнах Євросоюзу є в рази вищою порівняно не

тільки з Україною, а й з країнами СНД, можна припустити, що після спрощення візового режиму кількість емігрантів збільшиться. В умовах посилення конкуренції за людські ресурси одним із напрямів еміграційної політики багатьох країн стає заохочення повернення на батьківщину співвітчизників [9].

Залучення іноземної робочої сили призводить до зростання конкуренції на внутрішньому ринку праці, що до певної міри стимулює зростання продуктивності праці та ефективності виробництва в країні.

Найпопулярніші сфери працевлаштування українських трудових емігрантів представлено на рис. 3.

Варто зазначити, що трудові емігранти поділяються на кваліфікованих фахівців та некваліфікованих. Своєю чергою, кваліфіковані працівники поділяються на тих, хто працює за кордоном за професією, та тих, хто працює не за фахом.



Рис. 3. Основні сфери зайнятості працівників-емігрантів у 2009–2015 рр. [2]

Слід зауважити, що нерегульованість практичних питань міждержавної трудової еміграції викликає соціальну незахищеність українських громадян, які працюють за кордоном; вони зазнають дискримінації з боку іноземних роботодавців щодо платні, умов, охорони праці тощо. Із загальної кількості емігрантів менш як 1% (28 тис. осіб) працюють легально, проте і вони дуже слабо захищені. З 310 укладених міждержавних угод про регулювання трудової еміграції фактично виконуються лише угоди з Чехією та Словаччиною [10].

У зв'язку із запровадженням у низці сусідніх держав візового режиму оформлення в'їзних документів може стати для громадян України нереальним, а стихійне повернення нелегалів на батьківщину збільшить напруженість на регіональних ринках праці, особливо в прикордонних районах Львівської, Волинської, Чернівецької, Закарпатської, Луганської, Харківської областей. Так, застосування візового режиму в Польщі, Словаччині, Угорщині, Російській Федерації призведе до депортації та згорання виїзду до цих країн не менш як для 2 млн. нелегальних емігрантів з України.

Отже, незважаючи на низку переваг, головною проблемою залишається те, що нелегальний статус українців за кордоном знижує ціну їхньої праці, створює умови для численних зловживань, формує у свідомості роботодавців країн прибуття уявлення про Україну як недемократичну, неправову державу. Водночас нелегальна трудова еміграція не приносить доходів державі, не поповнює соціальні фонди, ускладнює взаєморозрахунки між державами із цього приводу.

Наголосимо, що нелегальна трудова міграція здійснюється під виглядом туристичних поїздок. До 85% усіх трудових мігрантів виїжджають за кордон саме за туристичними візами (переважно короткостроковими). При цьому, як правило, необхідні для цього документи не оформляються, а гарантії працевлаштування є вельми сумнівними. Але навіть така перспектива не лякає наших громадян заради заробітку.

Дослідження причин нелегальної трудової міграції українців показують наявність низки бюрократичних перепон як в Україні, так і в приймаючій країні. Також проблемою «туристичної» міграції є її пропагування з боку спеціалізованих організацій, для яких це основний вид бізнесу та значно великий дохід. Дані Інтерполу свідчать, що структури, які займаються подібними справами в усьому світі, заробляють понад 30 млрд. дол. щорічно. Вартість доставки одного нелегалу коливається від 3 до 30 тис. дол. [11, с. 82].

Оскільки більшість громадян виїздить на роботу за кордон саме за допомогою туристичних, гостьових віз, ваучерів чи запрошень, розбіжність між статистичними й оціночними даними переконливо засвідчує необхідність посилення уваги держави до цієї проблеми. Саме відсутністю такої уваги і користуються роботодавці за кордоном, запрошуючи висококваліфікованих фахівців. За таких умов величезний трудовий потенціал за мізерну винагороду використовується не в Україні.

Розділ 2. Наслідки та шляхи врегулювання транскордонного руху трудоресурсного потенціалу України

Трудова еміграція негативно впливає на соціально-економічний розвиток України, оскільки зменшується кількість кваліфікованих працівників. Слід зауважити, що еміграція некваліфікованих робітників дає змогу знизити рівень безробіття і скоротити пов'язані з ними витрати. Частина емігрантів отримує за кордоном освіту, додаткову професійну підготовку, цінний досвід роботи. Спостерігається зростання рівня кваліфікації робітників, які виїжджають в інші країни для працевлаштування, оскільки за кордоном емігранти залучаються до передових технологій, стандартів трудової дисципліни й організації виробництва. Але така ситуація не завжди має місце, тому що трудові емігранти з України – найчастіше освічені люди, з вищою освітою, які виконують за кордоном далеко не престижну, але більш високооплачувану роботу, ніж роботу за фахом у себе на батьківщині. У такому разі відбувається їх повна декваліфікація.

Щодо негативних наслідків трудової еміграції, то вони більшою мірою впливають на соціально-економічний розвиток країни – експортера робочої сили. Проблема полягає в тому, що в країні, яка експортує робочу силу, часто погіршується ситуація на ринку праці, знижується її інтелектуальний потенціал.

У контексті зазначеного слід зауважити, що зростання або розвиток економіки в просторі відбувається нерівномірно за типом «центр – периферія», що відповідає сучасним тенденціям співробітництва регіонів різних держав

світу. Так, коли економіка певного регіону чи цілої держави починає інтенсивно розвиватися, відбувається концентрація населення на її території (переважно у містах) за рахунок внутрішньої міграції та іміграції.

На початку 1990-х років трудова еміграція розгорталася у формі масових виїздів до сусідніх країн із дешевими товарами вітчизняного виробництва для придбання предметів широкого вжитку. Свого піку виїзд на роботу за кордон досяг на межі тисячоліть. У наступні роки, що відзначалися певним поживленням економіки України, виїзд на заробітки чисельно стабілізувався і почав поступово зменшуватися. Дослідження трудової еміграції, яке було проведене Державною службою статистики України, виявило, що близько 1,2 млн. осіб, або 3,4%, у віці 15–70 років працювали або шукали роботу за кордоном (2013 р.). Серед населення працездатного віку частка трудових емігрантів у цьому періоді становила 4,1% (у 2008 р. – 5,1%). Серед загальної кількості трудових емігрантів майже половину (48,5%) становили короткострокові трудові емігранти, понад третину – особи, що повернулися до України, і лише кожний сьомий трудовий емігрант працював за кордоном 12 місяців та більше [12, с. 29].

Причини трудової міграції переважно мають економічний характер. Але якщо на початку 90-х років ХХ ст. транскордонне заробітчанство зумовлювалося зупинкою роботи підприємств, багатомісячними затримками з виплатою заробітної плати, зростаючим безробіттям, то нині їх метою здебільшого є підвищення добробуту, вирішення житлового питання, фінансування навчання тощо.

Переважаючими мотивами, що зумовлюють поїздки трудових мігрантів за кордон, є:

- поліпшення житлових умов (купівля квартири чи спорудження будинку), придбання машини або інших дорогих товарів тривалого вжитку;
- задоволення поточних життєвих потреб: харчування, придбання необхідних товарів повсякденного вжитку (одягу тощо);
- оплата навчання дітей у вищих навчальних закладах;
- накопичення стартового капіталу для створення й розвитку власного бізнесу;
- мотиви нематеріального характеру (побачити світ, здобути певні трудові навички, поліпшити знання мови тощо) [5].

Водночас лібералізація умов перетину кордону та працевлаштування в ЄС для жителів західних прикордонних територій України сприяє трудовій міграції, а саме:

- преференції, що надаються власникам Карти поляка та Карти угорця (можливість безкоштовно отримати візу на довгострокове перебування в Польщі, Угорщині з можливістю багаторазового перетину кордону, а також право на легальну працю на території цих країн, на підприємницьку діяльність на тих самих умовах, що і громадяни країн ЄС). Власник карти має першочергове право на отримання фінансової підтримки, призначеної на допомогу полякам, угорцям із-за кордону, з державного бюджету або з бюджетів місцевих органів;

- особливі умови працевлаштування для сезонних працівників (у Польщі діє регламент сезонного працевлаштування для українців, що дає їм можливість сезонно працювати, зокрема в аграрній сфері, без оформлення офіційного дозволу на працю);

- режим місцевого прикордонного руху (МІР) між Україною, Угорщиною, Словаччиною, Польщею та Румунією (передбачає можливість перебування в 30–50-кілометровій прикордонній зоні без візи). Період дії дозволу – від двох до п'яти років, а строк перебування не має перевищувати 30 днів протягом одного візиту й загалом не перевищувати 90 днів упродовж шести місяців (табл. 1).

Місцевий (малий) прикордонний рух був запроваджений 2007 р. як «ексклюзивний» інструмент лібералізації візового режиму для жителів прикордонних регіонів. Перша така двостороння угода підписана між Україною та Угорщиною, згодом – між Україною і Польщею, а потім – між Україною та Словаччиною й між Україною та Румунією.

Таблиця 1

Особливості місцевого прикордонного руху для громадян України

Країна	Прикордонна зона перебування	Вартість дозволу	Строк дії дозволу	Строк перебування
Словаччина	30–50 км (299 словацьких та 280 українських населених пунктів)	20 євро	1–5 років	30 днів протягом одного візиту, не більше 90 днів протягом 6 місяців
Угорщина	50 км (244 угорських та 384 українських населених пункти)	20 євро	1–5 років	Не більше ніж 90 днів
Польща	30–50 км (408 українських і 1822 польських населених пункти)	20 євро	2–5 років	60 днів протягом одного візиту, не більше ніж 90 днів протягом 6 місяців
Румунія	30 км по обидві сторони спільного кордону, але може бути розширеною максимум до 50 км від лінії кордону для адміністративно-територіальних одиниць, які простягаються за межі 30 км (662 українських населених пункти)	20 євро	2–5 років	до 90 днів кожного разу з дати перетину кордону

Джерело: складено за [5; 13]

Місцевий прикордонний рух покликаний поживати діалог і спілкування громадян, які проживають з одного та з іншого боків кордону. Діалог, який має за основу родинні відносини, культурні, професійні чи бізнес, комерційні,

економічні відносини. Уряди домовилися таким чином поживити і створити певну динаміку відносин у прикордонні.

У зв'язку із цим довготривалу трудову еміграцію до країн далекого зарубіжжя (Італії, Португалії, Греції) в західних областях України почала замінювати сезонна транскордонна міграція заробітчан до країн-сусідів (Польщі, Словаччини, Угорщини). Окреслені чинники зумовили домінування трудової міграції в західних областях України. Найбільші потоки трудових мігрантів спостерігаються в Закарпатській та Чернівецькій областях, що входять до Карпатського євро регіону [5].

Місцевий прикордонний рух відіграє і буде й надалі відігравати, (незважаючи на негативні моменти) свою важливу і позитивну роль як інструмент комунікації для людей по обидва боки кордону. Навіть у разі запровадження безвізового режиму для України цей інструмент лібералізації візового режиму втратить своє значення.

Водночас проблеми, пов'язані з місцевим прикордонним рухом (**черги на кордоні, контрабанда цигарок і алкоголю та ін.**), можливо вирішувати **шляхом:**

- ліквідації умов, які сприяють контрабанді і зловживанням на кордоні;
- лобіювання зниження мита акцизу на імпортовані авто та вирішення на законодавчому рівні питання «пересічників»;
- більш активного поінформування політиків і законотворців думкою громадськості;
- посилення інформаційного складника в питаннях про призначення місцевого прикордонного руху і правил перетину кордону серед пересічних українців;
- створення таких соціально-економічних умов для життя українських громадян, щоб їм не доводилося перевозити по дві пачки сигарет, щодня заробляючи на життя, тоді коли контрабанда йде через кордон без проблем [14].

Серед сукупності факторів, які впливають на транскордонну міграцію, варто виділити основні:

- складна геополітична ситуація на Сході країни;
- диспропорційність розвитку прикордонних територій;
- відсутність єдиної нормативно-правової основи та механізмів взаємодії прикордонних територій;
- відсутність уніфікованої моделі транскордонного співробітництва;
- недостатність фінансових ресурсів;
- наявність бар'єрів етнічного та культурного характеру;
- проблеми митно-візового характеру [5, с. 24–25] тощо.

Щодо нелегальної зовнішньої трудової міграції, то вона з України є набагато більшою. Зарубіжним роботодавцям вигідно мати справу з нелегальними трудовими мігрантами, бо особи, які прибули в країну для заробітку на незаконних підставах, не мають юридичного та соціального захисту. Більше того, вони змушені погоджуватися на будь-яку роботу – важку і небезпечну; тарифні ставки, що встановлюються їм, значно нижчі, ніж громадянам своєї країни. Зовнішні трудові мігранти з України в багатьох країнах вимушені працювати подовжений робочий день та за шкідливих умов праці, мають обмежений або зовсім не мають доступу до медичної допомоги і соціального захисту, незахищені від низької оплати праці, професійних травм, хвороб.

Зазначимо, що нелегальна міграція має вагоме значення у структурі міграційних потоків. Вона є соціально небезпечним, шкідливим,

протизаконним явищем, яке реально загрожує економічним інтересам і громадській безпеці держави. Така міграція є однією з причин зростання злочинності, поширення небезпечних захворювань, розвитку підпільного ринку праці, виникнення напруженості у відносинах між державами.

Підвищена увага до нелегальної міграції в державі спричинена виникненням необхідності протидіяти їй як небажаному, шкідливому, суспільно небезпечному явищу. Розроблення стратегії і тактики такої протидії є складним організаційно-правовим завданням. Практика розв'язання аналогічних проблем свідчить про те, що вживати будь-яких заходів можна лише чітко уявляючи причини нелегальної міграції.

Нелегальна міграція має такі самі причини, що й інші міграції, але вони є більш глобальними, трагічними, конфліктними. Саме ці причини змушують нелегальних мігрантів ризикувати задля власного життя, життя своєї родини, вчиняти правопорушення заради покращення свого життєвого становища, втечі від конфліктів тощо.

Ця проблема потребує нагального розв'язання. Україна, як передбачено частиною третьою статті 25 Конституції України, гарантує піклування та захист своїм громадянам, які перебувають за її межами. Така сама норма міститься у статті 8 Закону України «Про громадянство України». Вона спрямована на законодавче забезпечення реалізації зазначеного конституційного положення.

У Законі України «Про основи національної безпеки України» до основних реальних та потенційних загроз національній безпеці України віднесені нелегальна міграція (у воєнній сфері та сфері безпеки державного кордону України) і вплив вчених, фахівців, кваліфікованої робочої сили за межі України (у соціальній та гуманітарній сферах). Нелегальна міграція з України до загроз національній безпеці не включена, і загрозу національній безпеці з боку нелегальної трудової міграції з України органи державної влади та управління як центральні, так і на місцях недооцінюють.

А тому регулювання міграційних процесів на макрорівні має стати вагомим складовою частиною соціально-економічної політики держави. Завдання щодо управління міграцією, особливо її зовнішніми формами, полягає не в тому, щоб зводити бар'єри через систему адміністративно-обмежувальних заходів, які не дають можливості мігрантам проникати в розвинуті країни, а в тому, як на основі дотримання прав людини та гуманних принципів управляти міграційними потоками населення, зокрема постійних переселенців та трудових мігрантів, з урахуванням інтересів держави, приймаючих країн і регіонів.

Заходи міграційної політики полягають у тому, щоб добитися упорядкування міграційного простору країни і контролю тих міграційних процесів, що в ньому протікають.

Серед основних цих завдань і заходів у сучасних умовах є такі:

- активізувати переговорний процес щодо укладання угод про взаємне працевлаштування громадян та їх соціальний захист із країнами, в яких кількість трудових мігрантів – громадян України є найбільшою;
- сприяти прискоренню внесення змін до угод про співробітництво у сфері трудової міграції і соціальний захист трудових мігрантів;
- реалізовувати заходи щодо прийняття проектів угод, які регламентують рух робочої сили з країнами ЄС;
- підготувати комплексну державну програму регулювання міграційних процесів із чітким розподілом повноважень та обов'язків центральних органів виконавчої влади і місцевого самоврядування;

- вжити заходів для зменшення масштабів нелегальної трудової міграції населення за межі країни; провести роботу щодо запровадження аналітичної звітності для здійснення контролю над поверненням до України громадян, яким надавалися туристичні послуги;

- створити дієві механізми легалізації доходів громадян, які працюють за кордоном: опрацювати механізм створення сприятливих умов для переведення в Україну грошових переказів трудових мігрантів – громадян України;

- вивчити систему оподаткування трудових мігрантів інших країн та унормувати режим оподаткування доходів трудових мігрантів – громадян України;

- здійснити практичні заходи з урегулювання освітньої міграції (нині за кордоном навчається понад 60 тис. українських студентів та стільки ж іноземців навчається на Україні) на трьох рівнях: державному, регіональному та рівні ВНЗ як із країнами – донорами, так і з країнами – конкурентами на ринку освітніх послуг.

- розкрити механізми протидії негативним міграційним тенденціям творчих, особливо креативних, осіб, які можуть мати деструктивний вплив на соціально-економічний розвиток окремих територій та держави загалом [15].

Висновки

Становлення України як незалежної держави із власними кордонами та вільним обміном трудовими ресурсами вимагає принципово нового розуміння міграції. Перебудова в структурі економіки, конверсія оборонного комплексу, банкрутство й ліквідація підприємств видобувної й переробної промисловості, об'єктивне, а іноді й штучно викликане припинення виробництва призвели до істотного скорочення сукупного фонду робочого часу та вивільнення різноманітної в регіонально-галузевому й якісно-професійному розрізі робочої сили.

Трансформація українського суспільства потребує ефективного дієвого механізму регулювання суспільних взаємовідносин усіх важливих питань гуманітарної сфери, зокрема це стосується відносин на рівні етнічних чи національних меншин. Проте в Україні досі не розроблена чітка концепція, яка б визначала напрям етнополітики як особливого механізму регулювання відносин, зокрема між українцями та національними, етнічними меншинами. Невизначеність у даній сфері державної політики може призвести до негативних результатів, що можуть вплинути не лише на внутрішню стабільність держави, а й загрози можливої інтервенції з боку іншої держави та посягання та територіальну цілісність.

Вирішальна роль у регулюванні трудових міграційних процесів як загалом в Україні, так і в її регіонах належить управлінню соціально-економічними факторами, тобто такими умовами життя і трудової діяльності людей, які можуть змінюватися в результаті перерозподілу коштів держбюджету, фонду заробітної плати, суспільних форм споживання. За нинішніх умов міграційна політика держави має досить ретельно відстежувати міграційні процеси, їх сучасні тенденції й явища, оперативно реагувати на зміни та контролювати їх для підпорядкування загальнонаціональним і регіональним інтересам, особистим потребам мігрантів та у цілому сприяти забезпеченню національної безпеки України [15].

Таким чином, хоча пріоритети міграційної політики в Україні визначені, її практичне здійснення утруднене, насамперед, через хронічну недостачу

бюджетних засобів. Першочерговими завданнями є скорочення масштабів еміграції, перетворення безповоротної еміграції в поворотну, забезпечення гідних умов прийому іммігрантів і політичних біженців, усунення причин, що штовхають людей до нелегальної міграції.

Список використаних джерел:

1. Офіційний сайт Державної служби статистики України [Електронний ресурс]. – Режим доступу : <http://www.ukrstat.gov.ua>.
2. Міграційний профіль України [Електронний ресурс]. – Режим доступу : <http://dmsu.gov.ua/mihratsiinyi-profil/1077-mihratsiinyi-profil>.
3. Заробітки: не все те золото, що блищить [Електронний ресурс]. – Режим доступу : http://www.dcz.gov.ua/lviv/control/uk/publish/article?art_id=72806&cat_id=1039902.
4. Кто примет украинских мигрантов [Електронний ресурс]. – Режим доступу : <http://rusplt.ru/society/bratskaya-polsha-primi-nas-greshnyih-21272.html>.
5. Мікула Н.А. Транскордонне співробітництво України в контексті євроінтеграції : [монографія] / Н.А. Мікула, В.В. Засадко. – К. : НІСД, 2014. – 316 с.
6. Бербенєць О.В. Проблеми міграції робочої сили та шляхи її вирішення / О.В. Бербенєць // Ефективна економіка. – 2012. – № 10 [Електронний ресурс]. – Режим доступу : <http://www.economy.nayka.com.ua/?op=1&z=4450>.
7. Огляд приватних грошових переказів в Україну, що відображаються в статистиці платіжного балансу [Електронний ресурс]. – Режим доступу : http://www.bank.gov.ua/Publication/econom/Balans/Ogl_grosh_perekaz.Pdf.
8. Огляд приватних грошових переказів в Україну в 2016 році [Електронний ресурс]. – Режим доступу : <https://bank.gov.ua/doccatalog/document?id=19208358>.
9. Малиновська О.А. Політика сусідніх країн щодо співвітчизників як інструмент поповнення людських ресурсів: виклики та уроки для України / О.А. Малиновська // Стратегічні пріоритети. – 2013. – № 3. – С. 138–146 [Електронний ресурс]. – Режим доступу : http://nbuv.gov.ua/UJRN/spa_2013_3_20.
10. Безвізовий діалог між Україною та ЄС. План дій з лібералізації візового режиму [Електронний ресурс]. – Режим доступу : http://www.kmu.gov.ua/document/244813925/...20для%20Укра_ни.pdf.
11. Гайдуцький А.П. Масштаби трудової міграції українців за кордон / А.П. Гайдуцький // Економіка та держава. – 2007. – № 8. – С. 82–86.
12. Звіт щодо методології організації проведення та результатів модульного вибіркового обстеження з питань трудової міграції в Україні / Міжнародна організація праці. Програма технічної підтримки з питань гідної праці та Бюро МОП для країн Центральної та Східної Європи – Будапешт, 2013. – С. 98.
13. Посольство Румунії в Україні [Електронний ресурс]. – Режим доступу : <https://kiev.mae.ro/ua/node/854>.
14. Що буде з малим прикордонним рухом у разі запровадження безвізового режиму з Україною? [Електронний ресурс]. – Режим доступу : <http://kordon.in.ua/article/scho-bude-z-malym-prykordonnym-ruhom-u-razi-zaprovadzhennya-bezvizovoho-rezhymu-z-ukrajinoyu-27865/>.
15. Smutchak Z. Migratory Threats to National Security of Ukraine: Current Challenges and Ways of Regulation / Z. Smutchak, D.Romanjuk // Baltic Journal of Economic Studies – Riga, 2016. – Vol. 2. – № 3. – С. 107–112.

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ОСНОВИ ЕКОНОМІЧНОЇ БЕЗПЕКИ ПІДПРИЄМСТВ ХАРЧОВОЇ ПРОМИСЛОВОСТІ

Анотація

Питання економічної безпеки держави і суспільства є актуальними в усіх країнах світу. Для сучасного соціально-політичного та економічного стану України дуже важливою є цілеспрямована діяльність держави, рівнів законодавчої і виконавчої влади щодо забезпечення економічної безпеки країни та її громадян. Україна одночасно проходить складний історичний шлях державотворення і переходу від централізовано-планової системи управління економікою до соціально спрямованої ринкової економіки. Кризовий стан економіки значно впливає, більше того, безпосередньо загрожує національним інтересам незалежної держави, надзвичайно актуалізує проблему її національної безпеки, передусім такого її складника, як економічний. У сучасних умовах економічна безпека є такою, що визначає національну безпеку в цілому.

Вступ

Трансформування економіки України наприкінці другого тисячоліття і перших років її незалежності залишається вкрай складним. Глобальні аспекти еволюції людства, масштаби і швидкість змін у світогосподарському просторі, революційні перетворення в економіках окремих країн і міждержавних співтовариств, з одного боку, і українські реалії псевдоринкового реформування та нестабільні параметри розвитку вітчизняної економіки – з іншого визначають цей стан. Нині як ніколи зросла проблема забезпечення економічної безпеки України, що є одним із найважливіших національних пріоритетів, гарантом державної незалежності України, умовою її прогресивного, мирного економічного розвитку та добробуту громадян.

Поняття «економічна безпека» пройшло чимало переосмислень в економічній теорії у зв'язку зі зміною умов зовнішнього середовища і з урахуванням факторів, які визначають процеси управління. У сучасній науковій літературі поняття «економічна безпека» досить часто виводять безпосередньо з більш загальної категорії «безпека» (переклад із грецької означає «володіти ситуацією»). У спеціальній літературі наводиться визначення безпеки як стану, за якого будь-який об'єкт знаходиться в положенні надійної захищеності і не піддається негативному впливу будь-яких факторів. У широкому науковому сенсі під безпекою розуміється захищеність природно-фізіологічних, соціально-економічних, ідеально-духовних і ситуативних потреб у ресурсах, технологіях, інформації та моральних ідеалів, необхідних для життєдіяльності та розвитку населення.

Розділ 1. Дефініція поняття «економічна безпека»

Проблема забезпечення безпеки сформувалася паралельно зі становленням держави. Ще стародавні мислителі, усвідомлюючи цю потребу, присвячували їй свої наукові трактати. Наприклад, Жан-Жак Руссо в 1762 р. написав твір «Про суспільний договір, або Принципи політичного права». У ньому зазначалося, що найважливішою турботою держави є самозбереження та безпека. Розглянувши історію розвитку поняття «економічної безпеки» у світовому масштабі, можна виділити найважливіші дати та періоди (табл. 1).

Окремо потрібно зазначити розвиток економічної безпеки в радянські роки. У цей період дане питання було виключно в компетенції державних і громадських інститутів. Концепція забезпечення безпеки будувалася за принципом виявлення потенційних загроз і розроблення спеціальних заходів щодо їх припинення або нейтралізації.

Таблиця 1

Еволюція розуміння сутності поняття «економічна безпека»

Роки	Визначення поняття
1904	Президент США Теодор Рузвельт вводить поняття «національна безпека»
30-ті	Світова криза, економічна безпека стала предметом дослідження
60-ті	Розпад колоніальної системи. Формування концепції економічної безпеки
70-ті	Економічна безпека розглядається як важливий складник національної безпеки
1985	40-ва сесія Генеральної асамблеї ООН, ухвалення резолюції «Міжнародна економічна безпека»
1987 р.	42-га сесія Генеральної асамблеї ООН, прийнято «Концепцію міжнародної економічної безпеки»
90-ті роки	Економічна безпека розглядається як критерій захищеності інформаційних ресурсів підприємства
Сучасні дні	Розгляд економічної безпеки через призму антикризового управління організації

Термін «економічна безпека» широкого вжиття набув у Західній Європі в 70-х роках як спрощене трактування поняття «економічний метод забезпечення національної безпеки». Чисельність трактувань економічної безпеки зумовлене тим, що одночасно воно виступає над системою в розгляді її на рівні держави, регіону, підприємства, а з іншого боку, є складником міжнародної економічної безпеки [2, с. 130].

Із моменту здобуття незалежності Україна налагодила торговельні зв'язки більш ніж із 180 країнами світу. Поступово створюються передумови для інтеграції української економіки у глобальні та європейські економічні процеси. Ураховуючи даний напрям розвитку, найбільш поширене визначення економічної безпеки підприємства в сучасних умовах визначається як стан ефективного використання наявних ресурсів (інформації, персоналу, капіталу, техніки і технології) та наявних ринкових можливостей, що дає змогу запобігати зовнішньому негативному впливу, забезпечувати тривале виживання та сталий розвиток України як на власній території, так і за її межами [3].

Трансформування економіки України наприкінці другого тисячоліття і перших років її незалежності залишається вкрай складним. Глобальні аспекти

еволюції людства, масштаби і швидкість змін у світогосподарському просторі, революційні перетворення в економіках окремих країн і міждержавних співтовариств, з одного боку, і українські реалії псевдоринкового реформування та нестабільні параметри розвитку вітчизняної економіки – з іншого, визначають цей стан.

У спеціальній літературі наведено визначення безпеки як режиму, за якого будь-який суб'єкт знаходиться у статусі надійної захищеності і не підлягає негативному впливу будь-яких факторів (рис. 1) [5].



Рис. 1. Систематизація визначення економічної безпеки підприємства [3]

Визначення безпеки свідчить про ідеологію, яка закладається в теорію безпеки і потім втілюється на практиці. У наукових джерелах, в яких досліджують проблематику безпеки, подано багато визначень як безпеки, так і економічної безпеки підприємств (табл. 2) [6, с. 206–215].

Таким чином, економічна безпека підприємства передбачає стійкий розвиток (тобто збалансований і безупинний), що досягається за допомогою використання усіх видів ресурсів і підприємницьких можливостей, за якими гарантується найбільш ефективно їх використання для стабільного функціонування та динамічного науково-технічного й соціального розвитку, запобігання внутрішнім і зовнішнім негативним впливам (загрозам) [40].

Дефініція поняття «економічна безпека підприємства»

№	Автор	Визначення
1	2	3
1	Геєць В.М., Кизим М.О., Клебанова Т.С., Черняк О.І. та ін. [7]	У більш загальному аспекті економічна безпека – це характеристика, суть якої полягає в нормальному функціонуванні економічної системи взагалі, можливості нормальної роботи внутрішньої економічної системи та безболісного включення в світову економічну систему. Коло суб'єктів економічної безпеки охоплює не тільки державу, а й підприємство та особу, які здійснюють самостійну діяльність і забезпечують власну економічну безпеку. Таким чином, залежно від суб'єкта виділяють економічну безпеку особи, підприємства і держави.
2	Васильців Т.Г. [8]	Економічна безпека підприємства – це такий стан функціонування, за якого підприємство і його продукція є конкурентоспроможними на ринку та одночасно гарантується: найефективніше використання ресурсів, інтелектуального і кадрового потенціалу; стабільність функціонування, стійкість та прогресивність розвитку; можливість протидіяти негативним впливам зовнішнього і внутрішнього середовища його функціонування. Відповідно, головною метою реалізації заходів із забезпечення економічної безпеки підприємства є гарантування його стабільного та максимально ефективного функціонування, а завданнями такої роботи: є досягнення мети функціонування підприємства; забезпечення ефективного використання ресурсів, запобігання руйнівному впливу зовнішнього середовища; здійснення фінансової стійкості і платоспроможності; охорона комерційної таємниці та інформації; досягнення безпеки персоналу підприємства, майна і капіталу.
3	Лисенко Ю.Г., Міщенко С.Г., Руденский Р.А., Спіридонов А.А. [9]	Безпека фірми – це такий стан виробничо-економічної системи, за якого функціонують механізми запобігання або зменшення ступеня впливу загроз стабільності функціонування і розвитку підприємства. Забезпечення економічної безпеки підприємства припускає досягнення високих фінансових результатів діяльності і фінансової стійкості; забезпечення технологічної незалежності і високій конкурентоспроможності технологічного потенціалу; високу ефективність організаційної структури; високий рівень екологічності; якісну правову захищеність усіх аспектів діяльності; захист інформаційного середовища; безпека персоналу, його капітал, майно і комерційних інтересів.
4	Олейніков Е.А. [10]	Економічна безпека підприємства – це стан найбільш ефективного використання корпоративних ресурсів для запобігання загрозам і для забезпечення стабільного функціонування підприємства в даний час і в майбутньому.
5	Клейнер Г.Б. [11]	Економічна безпека підприємства (фірми) – це такий стан господарського суб'єкта, за якого життєво важливі компоненти структури і діяльності підприємства характеризуються високим ступенем захищеності від небажаних змін.

6	Половнев К.С. [12]	Економічна безпека промислового підприємства – це безперервний процес забезпечення на промисловому підприємстві, що перебуває в певному зовнішньому оточенні, стабільності його функціонування, фінансової рівноваги і регулярного витягання прибутку, а також можливості виконання поставлених цілей і завдань, здатності його подальшого розвитку і вдосконалення на різних стадіях життєвого циклу підприємства і в процесі зміни конкурентних ринкових стратегій.
7	Судоплатов А.П., Лекарев С.В. [13]	Безпека підприємства – це такий стан його правових економічних і виробничих відносин, а також матеріальних, інтелектуальних та інформаційних ресурсів, яке виражає здатність підприємства до стабільного функціонування.
8	Бланк І.О. [14]	Фінансова безпека підприємства є основним елементом системи його економічної безпеки. У загальному складі елементів економічної безпеки фінансова компонентна виступає в ролі базового значення рівня і структури фінансового потенціалу підприємства в забезпеченні цілей його економічного розвитку.
9	Матвєєв М.В. [15]	Це стан підприємства, за якого забезпечуються стабільність його функціонування, фінансова рівновага і регулярне одержання прибутку, можливість виконання поставлених цілей і завдань, здатність до подальшого розвитку і вдосконалення.
10	Мак-Мак В.П. [15]	Економічна безпека – це стан найбільш ефективного використання всіх видів ресурсів для запобігання (нейтралізації, ліквідації) загрозам і забезпечення стабільного функціонування підприємства в умовах ринкової економіки.
11	Климочкин О.В. [16]	Економічна безпека підприємства (фірми, корпорації) – це стан захищеності його життєво важливих інтересів у фінансово-економічній, виробничо-господарській, технологічній сферах від різного роду загроз, у першу чергу соціально-економічного плану, яке настає завдяки прийнятій керівництвом і персоналом системи заходів правового, організаційного, соціально-економічного та інженерно-технічного характеру.
12	Ареф'єва О.В. [17]	Планування економічної безпеки підприємства як складовий елемент системи управління підприємством, що містить забезпечувальний та функціональний складники. Перший із них представлений підсистемами організаційного, методичного, нормативного та правового забезпечення. Функціональний складник поєднує функції формування прогнозів і планів, а також комплекс економічних та організаційних методів, що сприяють вирішенню завдань контролю над станом підприємства і своєчасній діагностиці.
13	Козаченко А.В., Пономарьова В.П., Ляшенко А.Н. [18]	Забезпечити достатній для розширеного відтворення капіталу підприємства прибуток, що одержується в результаті дотримання інтересів підприємства, тобто в результаті взаємодії підприємства із суб'єктами зовнішнього середовища.

14	Тамбовцева С.Б. [19]	Під економічною безпекою будь-якої системи необхідно розуміти сукупність властивостей стану її виробничої підсистеми, що забезпечує можливість досягнення цілей усієї системи.
15	Бухвальд Е.М., Головацька Н.Г., Лазуренко С.В. [20]	Розглядають економічну безпеку держави як найважливішу якісну характеристику економічної системи, її визначальну здатність підтримувати нормальні умови життєдіяльності населення, стійке забезпечення ресурсами розвитку народного господарства.
16	Савін В.А. [21]	Система захисту життєвих інтересів країни. При цьому об'єктами захисту виступають: народне господарство країни у цілому, окремі регіони, сфери і галузі господарства, юридичні та фізичні особи як суб'єкти господарської діяльності.
17	Плеханова Г.В. [22]	Це стан, в якому народ (через державу) може суверенно, без утручання і тиску ззовні, визначати шляхи і форми свого економічного розвитку.
18	Ковальова Д.Д., Сухорукова Т.С. [23]	Економічна безпека підприємства – це захищеність його діяльності від негативних впливів зовнішнього середовища, а також здатність швидко усунути різноваріантні загрози або пристосуватися до наявних умов, які не відбиваються негативно на його діяльності.
19	Раздіна О.В. [24]	Економічна безпека підприємства – це комплекс заходів, які сприяють підвищенню фінансової стійкості господарюючих суб'єктів за умов ринкової економіки, які захищають їх комерційні інтереси від впливу негативних ринкових процесів.
20	Капустін М.Ю. [25]	Економічна безпека підприємства як сукупність чинників, які забезпечують незалежність, стійкість, здатність до прогресу в умовах дестабілізуючих факторів.
21	Бендиків М.О. [26]	Економічна безпека підприємства (господарчого суб'єкта) як захищеність його науково-технічного, технологічного, виробничого та кадрового потенціалу від прямих (активних) або непрямих (пасивних) загроз.
22	Шликов В.В. [27]	Економічна безпека підприємства – це стан захищеності його життєво важливих інтересів від реальних і потенційних джерел небезпеки чи економічних загроз.
23	Попович П.Я. [31]	Економічна безпека підприємства – це комплексна система забезпечення і захисту його економічних інтересів від внутрішніх і зовнішніх загроз, створювана і регульована шляхом здійснення комплексу заходів, спрямованих на підтримку стійкості функціонування і можливості розвитку підприємства як незалежного господарюючого суб'єкта.
24	Шлемко В.Т., Бінько І.Ф. [2, с. 8]	Економічна безпека – це стан національної економіки, який дає змогу зберігати стійкість до внутрішніх і зовнішніх загроз і здатний задовольнити потреби особи, сім'ї, суспільства, держави.
25	Мішина І.Г. [1, с. 3]	Економічна безпека – це економічні відносини, горизонтальні і вертикальні, між різними суб'єктами з приводу досягнення такого рівня розвитку економіки, за якого здійснюється ефективне задоволення потреб і гарантований захист інтересів, навіть за несприятливих умов розвитку внутрішніх і зовнішніх процесів.

26	Пастернак-Таранушенко Г.А. [5, с. 29]	Економічна безпека – це стан держави, що забезпечує можливість створення і розвитку умов для плідного життя її населення, перспективного розвитку її економіки в майбутньому та зростання добробуту її мешканців.
27	Єрмошенко М.М. [31, с. 29]	Економічна безпека характеризується збалансованістю і стійкістю до негативного впливу внутрішніх і зовнішніх загроз, здатністю забезпечувати на основі реалізації національних економічних інтересів сталий і ефективний розвиток вітчизняної економіки і соціальної сфери.
28	Ільєнко О.В. [32]	Економічна безпека – це стан, за якого будь-який об'єкт знаходиться в положенні надійної захищеності і не піддається негативному впливу будь-яких факторів.
29	Боброва Є. [33, с. 82]	Економічна безпека розглядається у функціонально-структурному аспекті як сукупність взаємозв'язаних систем безпеки, які відображають функціонування окремих «блоків» або сфер економічної системи держави.
30	Ортинський В.Л. [34]	Положення найбільш ефективного використання ресурсів для запобігання загрозам і забезпечення стабільного функціонування підприємства як сьогодні, так і в майбутньому.
32	Ковальов Д. [35]	Захищеність діяльності суб'єкта господарювання від негативного впливу зовнішнього середовища, а також здатність вчасно усувати різноманітні загрози або пристосуватися до наявних умов, які не позначаються негативно на його діяльності.
33	Покропивний С.Ф. [36, с. 534]	Стан корпоративних ресурсів (ресурсів капіталу, персоналу, інформації та технології) і підприємницьких можливостей, за якого гарантується найефективніше їх використання для забезпечення стабільного функціонування та динамічного науково-технічного і соціального розвитку, запобігання внутрішнім та зовнішнім негативним впливам (загрозам).
34	Ілляшенко С.М., Кузенко Т.Б. [37]	Стан ефективного використання ресурсів і наявних ринкових можливостей, що дають змогу запобігати внутрішнім та зовнішнім загрозам і забезпечувати його тривале виживання і стійкий розвиток на ринку відповідно до обраної місії.
35	Козаченко Г.В., Пономарьов В.П., Ляшенко О.М. [38, с. 87]	Міра гармонізації в часі та просторі економічних інтересів підприємства з інтересами пов'язаних із ним суб'єктів навколишнього середовища, які діють поза межами підприємства.
36	Ляшенко О.М. [37, с. 383]	Міра економічної свободи підприємства, що досягається внаслідок керованого процесу взаємоузгодження економічних інтересів стейкхолдерів як зовнішнього, так і внутрішнього середовища підприємства, який має на меті протистояння загрозам економічній безпеці підприємства та потребує необхідних для такого протистояння ресурсів.
37	Безбожний В.Л. [39]	Стан захищеності підприємства від зовнішніх і внутрішніх загроз, який досягається шляхом гармонізації та взаємоузгодження його інтересів відповідно до інтересів суб'єктів внутрішнього й зовнішнього середовища у часі та просторі.

38	Ладико Л.М. [40]	Безперервний процес досягнення цілей розвитку підприємства за безпосередньої реалізації цілей економічної безпеки підприємства: узгодження інтересів, протистояння загрозам і раціонального використання ресурсів.
39	Мауль Г. [41]	Відсутність серйозної загрози можливостям суспільства діяти в колії своїх основних цінностей.
40	Архипов А., Городецький, А., Михайлов Б. [43]	Не тільки захищеність економічних інтересів, але й готовність і здатність інститутів влади створювати механізми реалізації і захисту даних інтересів для розвитку вітчизняної економіки.
41	Абалкин Л. [42]	Сукупність умов і чинників, що забезпечують незалежність національної економіки, її стабільність і стійкість, здатність до постійного відновлення і самовдосконалення.
43	Шевченко В., Костенко Г. [44]	Стан національної економіки та фінансової системи, який дає можливість: гарантувати розвиток людини, суспільства і держави на базі досягнень НТП; зберігати або швидко відновлювати виробництво в умовах припинення зовнішніх поставок ресурсів або надзвичайних ситуацій внутрішнього характеру; забезпечувати стійке функціонування своєї фінансово-кредитної системи та задоволення потреб суспільства за несприятливих внутрішніх та зовнішніх економічних умов.
44	Задорожний Г.В. [41]	Наука, яка вивчає процес забезпечення нормально-суспільних матеріальних і духовних умов соціально-економічного розвитку людини й інших об'єктів суспільної діяльності.
45	Картавцев В. [26]	Найважливіша якісна характеристика, що визначає її здатність підтримувати нормальні умови життєдіяльності населення, стійке забезпечення ресурсами розвитку народного господарства, а так само послідовну реалізацію національно-державних інтересів.
46	Шлемко В.Т. Бінько І.Ф. [37]	Такий стан економіки, який дає змогу зберегти стійкість до внутрішніх і зовнішніх загроз, а також задовольнити потреби особистості, сім'ї, суспільства, держави.
47	Ковальов Д., Сухорукова Т. [18]	Універсальна категорія, що відображає захищеність суб'єктів соціально-економічних відносин на всіх рівнях, починаючи з держави і закінчуючи кожним його громадянином.
48	Абалкин Л. [20]	Стан економіки, за якого забезпечується стійкий економічний ріст, ефективне задоволення суспільних потреб, висока якість керування, захист економічних інтересів на національному і міжнародному рівнях.
49	Говорушко Т. [29]	Загальнонаціональний комплекс заходів, спрямованих на постійний і стабільний розвиток економіки держави, що включають механізм протидії внутрішнім і зовнішнім загрозам.
50	Амітан В.Н. [11]	Економічна захищеність від зовнішніх і внутрішніх загроз, що дає змогу надійно зберігати і ефективно застосовувати трудовий, матеріальний і фінансовий потенціал держави.

51	Захарченко В. [2]	Комплекс геополітичних, правових, економічних, екологічних й інших умов, що забезпечують: передумови для її виживання в умовах кризи і майбутнього розвитку; захист життєво важливих інтересів країни щодо її ресурсного потенціалу, збалансованості і динаміки росту і розвитку; створення внутрішнього імунітету і зовнішньої захищеності від дестабілізаційних впливів; конкурентоспроможність країни на світових ринках і надійність її фінансового стану; забезпечення відповідних умов життя і стійкого розвитку особистості.
52	Кальман О.Г., Дарнопих Г.Ю. [21]	Сукупність якісних характеристик наявних економічних, соціально-демографічних і технологічних відносин, що відображають, з одного боку, реальний стан життєздатності держави, а з іншого – взаємозв'язок між економікою та політикою держави.
53	Сенчагов В.К. [3]	Такий стан економіки та інститутів влади, за якого забезпечується гарантований захист економічних інтересів, ефективно, соціально спрямований розвиток країни у цілому, достатній економічний потенціал навіть за найбільш несприятливих варіантів розвитку внутрішніх і зовнішніх процесів.
54	Кендюхов А.В. [4]	Стан захищеності соціуму від реальних і потенційних внутрішніх і зовнішніх загроз, що забезпечує баланс інтересів, розвиток і задоволення життєво важливих потреб його індивідуумів.
55	Реверчук Н.Й. [5]	Сукупність умов та чинників, що гарантують незалежність національної економіки, її стабільність і стійкість, здатність до постійного оновлення та вдосконалення.
56	Донець Л.І., Ващенко Н.В. [6]	Такий стан господарського суб'єкта, за якого він, за найбільш ефективного використання корпоративних ресурсів, досягає запобігання, ослаблення захисту від наявних небезпек і загроз їм чи інших непередбачених обставин і переважно забезпечує досягнення цілей бізнесу в умовах конкуренції і господарського ризику.
57	Кашин А.В. [7]	Такий стан його функціонування, який характеризується захищеністю від зовнішніх і внутрішніх загроз, наявністю конкурентних переваг, зумовлених стійким розвитком матеріального, фінансового, кадрового, техніко-технологічного потенціалу, що відповідають стратегічним цілям і завданням підприємства.
58	Реун І.І. [8, с. 91]	Певний стан корпоративних ресурсів (ресурсів капіталу, персоналу, інформації, технології, техніки та устаткування) і підприємницьких можливостей, за якого гарантується найбільш ефективно їхнє використання для стабільного функціонування, динамічного науково-технічного й соціального розвитку, запобігання внутрішнім та зовнішнім негативним впливам (загрозам).
59	Козловський С.В., Жураківський Є.С. [9, с. 37]	Гармонізація в часі і просторі економічних інтересів підприємства з інтересами пов'язаних із ними суб'єктів зовнішнього середовища, що діють поза межами підприємства.

60	Пригунов П.Я. [6, с. 120]	Стан захищеності законних і життєво важливих інтересів підприємства від внутрішніх та зовнішніх негативних факторів і, як наслідок, забезпечення стабільного розвитку відповідно до поставлених цілей.
61	Гнилицька Л.В.	Стан ефективного використання ресурсів підприємства та наявних ринкових можливостей для запобігання внутрішнім та зовнішнім загрозам і забезпечення тривалого виживання та стійкого розвитку на ринку відповідно до обраної господарюючим суб'єктом місії.
62	Караїм М.М. [2, с. 110]	Економічний стан підприємства, сталий до внутрішніх та зовнішніх змін фінансово-господарської діяльності, не пов'язаний із форс-мажорними обставинами, створення таких умов його діяльності, за яких забезпечується надійний захист економічних інтересів від різних загроз.
63	Юхновська Ю.О. [3, с. 127]	Можливість ефективно досягати основної мети діяльності підприємства в ринковій економіці – одержання прибутку за рахунок ефективного виконання підприємством функцій в умовах впливу зовнішніх та внутрішніх загроз його діяльності. При цьому здатність генерувати прибуток розглядається не стільки з погляду одержання короткострокової вигоди, скільки для забезпечення високого потенціалу розвитку й зміцнення відтворювальних можливостей підприємства.
64	Тульчинський Р.В. [4, с. 107]	Система активного захисту від можливих матеріальних, людських і фінансових утрат, у якій наявні чи можливі збитки менш від установлених норм.
65	Закрепа А.В. [5, с. 125]	Система створення механізму мобілізації й найбільш оптимального управління корпоративними ресурсами підприємства для найбільш ефективного їх використання і забезпечення стійкого функціонування, його активної протидії будь-яким негативним чинникам впливу.
66	Штангрет А.М., Котляревський Я.В., Мельников О.В. [6, с. 56]	Стан функціонуючого підприємства, за якого потенційні економічні загрози урівноважені адекватною системою заходів протидії (діючою на підприємстві системою економічної безпеки).
67	Гнилицька Л.В. [7, с. 61]	Здатність суб'єкта господарювання ефективно та безперервно здійснювати свою діяльність на основі вживання сукупності взаємопов'язаних обліково-аналітичних та контрольних процедур, що дадуть змогу оптимізувати використання корпоративних ресурсів підприємства та нівелювати вплив загроз внутрішнього та зовнішнього середовища для збільшення вартості його капіталу.
68	Штангрет А.М., Караїм М.М. [8, с. 42]	Складна багатофакторна категорія, спрямована на ефективне використання наявних ресурсів та ринкових можливостей, забезпечення стійкості та захисту від негативних чинників, реалізації інтересів за умов сталого соціально та економічного розвитку.
69	Отенко І.П., Преображенська О.С. [6, с. 203]	Захищеність потенціалу підприємства (виробничого, організаційно-технічного, фінансово-економічного, соціального) від негативної дії зовнішніх і внутрішніх чинників, прямих або непрямих економічних загроз, а також здатність суб'єкта до відтворення.

Джерело: згруповано автором

Розділ 2. Аспекти формування економічної безпеки підприємств харчової промисловості

Сукупність питань, пов'язаних із забезпеченням економічної безпеки підприємства, потребує від управляючих різних рівнів достатньо глибоких теоретичних знань та практичних навичок управлінських рішень. Забезпечення нормалізованої та ефективної господарської діяльності окремого підприємства є найважливішим аспектом досягнення певного рівня економічної безпеки, тому забезпечення економічної безпеки передбачає також урегулювання:

- 1) фінансової безпеки;
- 2) безпеки праці;
- 3) силової безпеки;
- 4) безпеки інформації та прийняття рішень;
- 5) безпеки менеджменту й кадрів;
- 6) соціальної безпеки й культури управління;
- 7) техніко-технологічної безпеки;
- 8) юридичної безпеки;
- 9) ресурсно-сировинної безпеки;
- 10) енергетичної безпеки;
- 11) екологічної безпеки [2, с. 130].

Під час аналізу безпеки виділяються передусім три основні складники:

1. Економічна незалежність, що означає насамперед можливість здійснення державного контролю над національними ресурсами, спроможність використовувати національні конкурентні переваги для забезпечення рівноправної участі у міжнародній торгівлі.

2. Стійкість і стабільність національної економіки передбачає міцність і надійність усіх елементів економічної системи, захист усіх форм власності, створення гарантій для ефективної підприємницької діяльності, стримування дестабілізуючих факторів.

3. Здатність до саморозвитку і прогресу, тобто спроможність самостійно реалізовувати і захищати національні економічні інтереси, здійснювати постійну модернізацію виробництва, ефективну інвестиційну та інноваційну політику, розвивати інтелектуальний і трудовий потенціал країни [41].

Належний рівень економічної безпеки досягається здійсненням єдиної державної політики, підкріпленої системою скоординованих заходів, адекватних внутрішнім та зовнішнім загрозам. Без такої політики неможливо домогтися виходу з кризи, примусити працювати механізм управління економічною ситуацією, створити ефективні механізми соціального захисту населення.

Сутність економічної безпеки полягає в забезпеченні поступального економічного розвитку суспільства для виробництва необхідних благ та послуг, що задовольняють індивідуальні та суспільні потреби. Раніше всі питання, пов'язані із забезпеченням безпеки, покладалися на державні органи. Останнім часом спостерігається відтворення системи безпеки, в якій провідна роль відводиться державі [31].

Головна мета управління економічною безпекою – забезпечення найефективнішого функціонування, найпродуктивнішої роботи операційної системи та економічного використання ресурсів, забезпечення певного рівня трудового життя персоналу та якості господарських процесів підприємства, а також постійного нарощування наявного потенціалу та його стабільного розвитку.

Розділ 3. Зміцнення економічної безпеки підприємств харчової промисловості

Функціональні складники економічної безпеки підприємства – це сукупність основних напрямів його економічної безпеки, істотно відмінних один від одного за своїм змістом [30].

До основних функціональних цілей економічної безпеки підприємства належать:

- фінансовий складник: забезпечення високої фінансової ефективності роботи, фінансової стійкості та незалежності підприємства, досягнення найбільш ефективного використання корпоративних ресурсів;

- техніко-технологічний складник: забезпечення технологічної незалежності та досягнення високої конкурентоспроможності технічного потенціалу того чи іншого суб'єкта господарювання, ступінь відповідності застосовуваних на підприємстві технологій сучасним світовим аналогам щодо оптимізації витрат ресурсів;

- інтелектуальний та кадровий складники: досягнення (збереження та розвиток) високого рівня кваліфікації персоналу та його інтелектуального потенціалу підприємства, належної ефективності корпоративних рівнів, ефективне управління персоналом, досягнення високої ефективності менеджменту, оптимальної та ефективної організаційної структури управління підприємством;

- екологічний складник: мінімізація руйнівного впливу результатів виробничо-господарської діяльності на стан навколишнього середовища, дотримання чинних екологічних норм, мінімізація втрат від забруднення довкілля;

- політико-правовий складник: якісна правова захищеність усіх аспектів діяльності підприємства, всебічне правове забезпечення діяльності підприємства, дотримання чинного законодавства;

- інформаційний складник: забезпечення захисту інформаційного поля, комерційної таємниці і досягнення необхідного рівня інформаційного забезпечення роботи всіх підрозділів підприємства та відділів організації, ефективне інформаційно-аналітичне забезпечення господарської діяльності підприємства (організації);

- силовий складник: ефективна організація безпеки персоналу підприємства, його капіталу та майна, а також комерційних інтересів [21].

Кожний із наведених функціональних складників економічної безпеки підприємства характеризується власним змістом, набором функціональних критеріїв і способами забезпечення [10].

Належні служби підприємства виконують певні функції, які в сукупності характеризують процес створення та захисту інформаційного складника економічної безпеки підприємства. До таких належать:

1. Збирання усіх видів інформації, що має відношення до діяльності того чи іншого суб'єкта господарювання.

2. Аналіз одержуваної інформації.

3. Прогнозування тенденцій розвитку науково-технологічних, економічних і політичних процесів на підприємстві.

4. Оцінка рівня економічної безпеки за всіма складниками та у цілому, розроблення рекомендацій для підвищення цього рівня на конкретному суб'єкті господарювання.

5. Інші види діяльності з розроблення інформаційного складника економічної безпеки [27].

На підприємство постійно надходять потоки інформації, що розрізняються за джерелами їхнього формування:

- відкрита офіційна інформація;
- вірогідна нетаємна інформація, одержана через неформальні контакти працівників фірми із носіями такої інформації;
- конфіденційна інформація, одержана способом несанкціонованого доступу до неї.

Система економічної безпеки підприємства традиційно включає такі складники, як інтелектуальний і кадровий; інформаційний; техніко-технологічний; фінансовий; політико-правовий, екологічний, силовий.

Суть завдання полягає в процедурі проведення таких розрахунків, які навіть у разі їх неповної адекватності уможлиблювали б отримання достатньо надійних результатів, на які можна спиратися під час вибору господарської альтернативи. Крім цього, слід особливо наголосити, що механізм створення економічної безпеки має базуватися на внутрішньосистемних характеристиках підприємства, тобто сама соціально-економічна система має включати «вбудовані» механізми запобігання зовнішнім і внутрішнім загрозам.

Висновки

Сутність економічної безпеки визначається як стан економіки і інститутів влади, за яким забезпечений гарантований захист національних інтересів, соціальна спрямованість політики, достатній оборонний потенціал навіть за несприятливих умов розвитку внутрішніх і зовнішніх процесів.

Безперечно, проблема забезпечення економічної безпеки держави характеризується найвищим рівнем пріоритетності та складності категорії, великою кількістю функціональних елементів та чинників, які її визначають. У зв'язку із цим обґрунтування теоретичних засад поняття «економічна безпека підприємництва» потребує узгодження із системою економічної безпеки держави, її структурними складниками, а також визначення місця економічної безпеки підприємницької діяльності у цій системі, здійснення ієрархічної декомпозиції рівнів управління безпекою національної економіки.

Потреба у зміцненні економічної безпеки підприємництва (зокрема, як чинника економічної безпеки держави) актуалізується в умовах ринкової системи господарювання, оскільки входить до переліку життєво необхідних елементів ефективного функціонування соціальної та економічної системи суспільства, механізму управління нею, забезпечення її захисту та розвитку. Це, своєю чергою, визначає засади взаємної відповідальності бізнесу та органів державного управління за порушення принципів створення безпечного економічного середовища.

Список використаних джерел:

1. Основи економічної безпеки. (державна, регіон, підприємство, особа) / За ред. Є.А. Олійникова. – М. : Інтел-синтез, 288 с.
2. Гаврилець В.А. Стратегія формування політики управління економічною безпекою суб'єктів господарювання / В.А. Гаврилець // Тези Міжнародної науково-практичної Інтернет-конференції «Організаційно-економічне та фінансово-кредитне забезпечення сталого розвитку підприємництва». – Чернівці. – С. 130–133.

3. Ареф'єва О.В. Суперечності розвитку як основне джерело загрози безпеці рівноваги економічних систем / О.В. Ареф'єва, О.С. Шнирко // Актуальні проблеми економіки. – 2006. – № 3(57). – С. 57–63.
5. Глобалізація і безпека розвитку : монографія / О.Г. Білорус, Д.Г. Лук'яненко [та ін.] ; керівник авт. кол. і наук. ред. О.Г. Білорус. – К., 384 с.
6. Петрина О.Б. Передумови формування та зміст економічної безпеки підприємства / О.Б. Петрина // Науковий вісник НЛТУ України. – 2010. – Вип. 20.3.
7. Моделювання економічної безпеки: держава, регіон, підприємство / В.М. Геєць [та ін.]. – Харків : ІНЖЕК, 2006. – 240 с.
8. Васильців Т.Г. Економічна безпека підприємства України: стратегія та механізм зміцнення : [монографія] / Т.Г. Васильців. – Львів : Арал, 2008. – 386 с.
9. Механизмы управления экономической безопасностью / Ю.Г. Лысенко, С.Г. Мищенко, Р.А. Руденский [и др.] ; под. ред. Ю. Лысенко. – Донецк : ДонНУ, 2002. – 178 с.
10. Половнев К.С. Механизм обеспечения экономической безопасности промышленного предприятия : автореф. дис. ... канд. экон. наук / К.С. Половнев. – Екатеринбург, 2002. – 34 с.
11. Судоплатов А.П. Безопасность предпринимательской деятельности / А.П. Судоплатов, С.В. Лекарп. – М. : ОЛМА – ПРЕСС, 2001. – 312 с.
12. Бланк И.А. Управление финансовой безопасностью предприятия / И.А. Бланк. – К. : Эльга ; Ника-Центр, 2004. – 784 с.
13. Терехов Экономическая безопасность предприятия как успешная составляющая современного бизнеса / Терехов [Электронный ресурс]. – Режим доступа : <http://bre.ru/security/22999.html>.
14. Васильев Г.А., Халикова Э.А. Экономическая безопасность предприятия в современных условиях / Г.А. Васильев, Э.А. Халикова [Электронный ресурс]. – Режим доступа : <http://sibac.info/index.php/2009-07-01-10-21-16/469-2012-01-12-04-16-19>.
15. Економічна безпека підприємства: сутність та механізм забезпечення : монографія / Г.В. Козаченко, В.П. Пономарьов, О.М. Ляшенко. – К. : Лібра, 2003. – 280 с.
16. Тамбовцев В. Экономическая безопасность хозяйственных систем: структура и проблемы / В. Тамбовцев // Вестник МГУ. – 1995. – № 3. – С. 17–24.
17. Бухвальд Е. Макроаспекты экономической безопасности: факторы, критерии и показатели / Е. Бухвальд, Н. Головацкая, С. Лазуренко // Вопросы экономики. – 1994. – № 12. – С. 27–36.
18. Савин В.А. Некоторые аспекты экономической безопасности России / В.А. Савин // Международный бизнес России. – 1995. – № 9. – С. 22–26.
19. Іванюта Т.М., Заїчковський А.О. Економічна безпека підприємства : [навч. посіб. для студ. вищ. навч. закл.] / Т.М. Іванюта, А.О. Заїчковський. – К. : Центр учбової літератури, 2009. – 256 с.
20. Ортинський В.Л. Економічна безпека підприємств, організацій та установ / В.Л. Ортинський, І.С. Керницький, З.Б. Живко. – К. : Правова єдність, 2009. – 544 с.
21. Раздина О.В. Коммерческая информация и экономическая безопасность предприятия / О.В. Раздина // Бизнес Информ. – 1997. – № 24. – С. 63–65.
22. Дейнеко Л.В. Розвиток харчової промисловості України в умовах ринкових перетворень: проблеми теорії і практики / Л.В. Дейнеко. – К. : Знання, 1999. – 331 с.
23. Бендиков М.О. Экономическая безопасность промышленного предприятия (организационно-методический аспект) / М.О. Бендиков // Консультант директора. – 2000. – № 2. – С. 7–13.
24. Єрмошенко М.М. Фінансова безпека держави: національні інтереси, реальні загрози, стратегія забезпечення / М.М. Єрмошенко. – К. : КНТЕУ, 2001. – 309 с.
25. Економічна безпека України: сутність і напрямки забезпечення : [монографія] / В.Т. Шлемко, І.Ф. Бінько. – К. : НІСД, 1997. – 144 с.
26. Мішина І.Г. Економічна безпека в умовах ринкових трансформацій : дис. ... канд. экон. наук : спец. 08.00.01 / І.Г. Мішина. – Донецьк, 2007. – 235 с.
27. Пастернак-Таранушенко Г.А. Економічна безпека держави. Методологія забезпечення : [монографія] / Г.А. Пастернак-Таранушенко. – К. : Київський ек-ний інститут менеджменту, 2003. – 320 с.
28. Фінансово-економічна безпека підприємств України: стратегія та механізми забезпечення / Т.Г. Васильців [та ін.]. – Львів : Вид-во, 2012. – 386 с.

29. Ільєнко О.В. Розвиток теорії «економічна безпека підприємництва» в країнах з трансформаційною економікою / О.В. Ільєнко // Формування ринкових відносин в Україні. – 2013. – № 1. – С. 91–97.
30. Бобров Є. Сучасні підходи до дослідження економічної безпеки / Є. Бобров // Економіка України. – 2012. – № 4. – С. 80–85.
31. Економічна безпека підприємств, організацій та установ : навч. посіб. / В.Л. Ортинський, І.С. Керницький, З.Б. Живко [та ін.]. – К. : Правова єдність, 2009. – 541 с.
32. Система економічної безпеки: держава, регіон, підприємство : [монографія] : у 3-х т. Т. 1 / О.М. Ляшенко, Ю.С. Погорелов, В.Л. Безбожний [та ін.] ; за заг. ред. Г.В. Козаченко. – Луганськ : Елтон-2, 2010. – 282 с.
33. Покропивний С.Ф. Економіка підприємства / С.Ф. Покропивний. – К. : КНЕУ, 2003. – 608 с.
34. Ляшенко О.М. Концептуалізація управління економічною безпекою підприємства : [монографія] / О.М. Ляшенко. – Луганськ : СНУ ім. В. Даля, 2011. – 400 с.
35. Козаченко Г.В. Економічна безпека підприємства : сутність та механізм забезпечення : [монографія] / Г.В. Козаченко, В.П. Пономарьов, О.М. Ляшенко. – К. : Лібра, 2003. – 280 с.
36. Безбожний В.Л. Вибір способу забезпечення соціально-економічної безпеки великих промислових підприємств : дис. ... канд. екон. наук : спец. 08.00.04. – Луганськ : СНУ ім. В. Даля, 2009. – 197 с.
37. Ладыко Л.Н. Обеспечение экономической безопасности предприятия: сущность и содержание / Л.Н. Ладыко // Вісник Східноукраїнського національного університету імені Володимира Даля. – 2012. – № 1(172). – Ч.2. – С. 6–10.
37. Шевченко В. Концепція національної безпеки: методологічний аспект / В. Шевченко, Г. Костенко // Голос України. – 1996. – № 1 – С. 8–12.
38. Задорожний Г.В. Экономическая безопасность: проблемы теории и практики / Г.В. Задорожний // Проблеми і перспективи економічної безпеки регіонів і фірм. – Х. : Ін-т бізнесу і менеджменту, 1997. – 69 с.
39. Картавцев В. До питання розбудови і функціонування системи забезпечення національної безпеки України / В. Картавцев // Право України. – 1998. – № 2. – С. 14–16.
40. Коробчинський О.Л. Організація та функціонування системи економічної безпеки підприємств будівельного холдингу : автореф. дис. ... канд. екон. наук : спец. 21.04.02 «Екон. безпека суб'єктів господарської діяльності, екон. думки» / О.Л. Коробчинський ; Ун-т економіки та права «КРОК». – К., 2010. – 19 с.
41. Ковалев Д. Экономическая безопасность предприятия / Д. Ковалев, Т. Сухорукова // Экономика Украины. – 1998. – № 10. – С. 48–52.
42. Говорушко Т. Економічна безпека України / Т. Говорушко // Економіка. Фінанси. Право. – 2000. – № 12. – С. 3–5.
43. Экономическая энциклопедия / Под ред. Л.И. Абалкина ; Институт экономики РАН. – М. : Экономика, 1999. – 1055 с.
44. Кальман А.Г. Экономическая безопасность государства и пути ее обеспечения в Украине / А.Г. Кальман, Г.Ю. Дардопых // Право и политика. – 2001. – № 7. – С. 6–12.

3. STRATEGIES OF BUSINESS MANAGEMENT

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KEY ASPECTS OF THE CREATIVE MANAGEMENT SYSTEM FORMATION OF THE ENTERPRISE MANAGEMENT

Summary

In the article, the basic concept of creative activity and its activation are examined. The importance of implementing creative approaches, creativity at enterprises and creative system formation are shown. The preconditions are outlined, which are necessary for creating a creative environment at the enterprise; characteristics are specified that define the creative and creative personality; the mechanism of formation of the creative environment at the enterprise is formed. The mechanism of administrative regulation, coordination, and control of the creative process is investigated. Overall estimation of efficiency of management mechanism in creative activities is offered. The current conceptual framework of the creative management strategy formation is formed.

Introduction

The introduction of creative activities in the management of companies and organizations is an urgent issue of the current state of the economy. Now, in terms of oversupply and strong market development as the main method of competition is innovation, only unconventional approach in management and organization as a whole can ensure stable development and increase the domestic enterprises' efficiency.

Ukraine's accession to the European Economic Area is accompanied by increased requirements to the conformity level of future creative professionals as a guarantee of competitiveness in the labour market and improvement of economic achievements. Development of creative management is necessary because there is always the actual issue of the quality improvement in management decisions. One of the reasons for the failure of companies in the market is an unacceptably low quality of management decisions, adopted without thorough study and training concerning the modern management. The decision as the product of administrative work should be the result of the personal potential mobilization of workers and based on the full use of their creative potential. Improvement of creativity involves its increase, however, despite the existence of different methods in scientific and technological activities or by the development of new ideas, now it almost completely is not used to improve management solutions in organizational and economic spheres.

Creative management is a part of innovation management that is why it must be widely used, especially in the enterprise's innovation-oriented management system.

Alternative aspects of management decisions examined such leading domestic and foreign scientists as G.I. Vaniurihin, A.D. Dvoskin, E.E. Kuzmin, A. Maniushys, A. Patyurel, I.I. Svydruk, V.B. Smolianinov, V.K. Tarasov, D.Yu. Homutskii,

A.V. Shevyrev. Foreign researchers in creative management are Alan J. Rowe, Abraham Maslow, Edward de Bono, Michael Michalko. Their research papers are devoted to examining the features of management of creative activities, as well as some intellect management tools by various forms of business organization.

Part 1. The mechanism of formation of creative environment at the enterprise

The creative environment acts as a catalyst for creativity in the organization. To form a creative environment at the enterprise, we must clearly understand the nature of the phenomenon of creativity, the source of creativity in human activity. Creativity (lat. creatio – creation) – a concept that includes the past, related and the following characteristics of the process, in the result of which a person (a group of people) creates something that did not exist before. The phenomenon of «creativity» is examined, as a rule from three points: as a creative process, as its product and as a property of the individual. Several factors influence on creativity, including: personal features; motivation; environment; way of thinking; system; knowledge; culture; intellect.

It is important to say that specialists, seeking to improve the management system through the introduction of creative approaches in the organization, most experts trying to introduce creativity in general, the whole system of the enterprise, applying and requiring the use of creative approaches practically by all workers, are considered as innovators in this sphere. But if you pay attention to deep essence of creativity, it is, firstly, ineffective and, secondly, irrelevant. Besides, the attempt of creativity cultivating in all areas can lead to inefficient use of time and potentially significant losses, increased tension, stress disorder, and irresponsibility in the team.

Why so? Note that the development of creativity has at least two phases. The first phase – the development of «original creativity» as the overall creative ability, unspecialized for the relevant sector of human activity – this phase comes in 3-5 years, i.e. in childhood. At the same time, imitation of the child to the significant adult as a creative pattern formation is the main mechanism of formation creativity. The second phase – adolescence (13 to 20 years). During this period, based on the «original creativity», «specialized creativity» is formed: the ability to work linked with the relevant areas of human activity, as its «downside» – additions and alternative. At this stage, a special, meaningful role is «professional» model, support for family and peers.

So, people of working age have or have not creative abilities. And based on the fact that creativity borders and largely intertwined with the phenomenon of «creativity», so the management and organization of professional activities of the creative person and a person who has no creative abilities should be different and almost diametrically opposed to methods of management. For example, if the creative individual should be given a greater freedom in the choice of organization processes of his or her activities, greater freedom of planning, distribution, and use of time, so he/she could creatively think, generate more creative ideas, if the same approaches apply to others who do not possess by clearly expressed creative abilities – it will lead to chaos in their work or even waste time. In our opinion, based on available knowledge about the flow of creative processes, formation of creative ideas, it is better to encourage the development of creativity in creative personalities in the company, or if they are absent, then it is necessary to find and attach them to the staff. As for the other employees, there can be used methods of motivation of their work but approaches in this process should be both individual and soft, and correct, and mostly well be thought out and justified – in other words, they must be matched

to the situation or individual. Employees who will be able at the plant not only just to perform job responsibilities but will work creatively they will be substantial basis of creative processes «sprouting» in the whole system of management – all this will help the effective implementation of creative ideas created by modern management in the enterprise of creative leaders.

Based on the above, to create a creative environment for the enterprise, we must work in two directions: first – to find a creative personality and create all the necessary conditions to develop the creativity and produce creative ideas in the company and the second – to encourage the development of creativity among personnel and pay more attention to creative personalities.

To estimate the creativity, it is necessary to estimate such individual features:

- productivity – the ability to maximize the production of a large number of ideas. This index is not specific for activity but it is clear: the more ideas, the more possibilities for selecting the most original one;

- flexibility – the ability to move from one class of phenomena to another, often very far from content. Creative people will certainly be able to flexible change and the strategy and tactics of the research;

- originality – the ability to put forward new, unexpected ideas that differ from the general ones;

- the level of idea «development». Creative personalities can be conditionally divided into two categories: some are able to produce original ideas better, others – detail, creatively develop existing ones.

The creative personality – a personality that is characterized by a high level of creativity, extraordinary creativity, and penchant for creativity.

In estimating the creative person, the following main features should be considered:

- for creative personality, conformity is not peculiar, it is quite difficult to «live» in society;

- an eclectic creative person, who has a high level of interest in the environment, all that, to what he/she is involved and wants to be involved, constantly strives to combine data from a variety of disciplines;

- a creative person keeps children's ability to wonder and admire;

- creative people prefer things more difficult than usual and simple. Their perception of the world is continuously renovated (J. Godefroy).

Creativity occurs only in a suitable environment that manifests itself at the macro and micro levels.

We can single out factors of the microenvironment when the expression of creative properties of the individual increases:

- 1) non-regulated behaviour – no rigid schemes, standards of behaviour, sanctions for their violation; any constructive internally motivated behaviour gets social support;

- 2) subject-information saturation – provides the following: physical and social accessibility (object or information); the complexity and diversity, availability of feedback;

- 3) availability of creative behaviour models – a model of creative behaviour produced by someone of the members that form a particular social microenvironment.

The condition for the manifestation of creativity at the enterprise is the team spirit and the spirit of cooperation. In these groups, employees can be freely exchanged by the ideas and discuss new solutions. The groups, which compete for recognition,

cease to share information, and it has a destructive effect since no one in the organization has sufficient information to understand the problem or the solution as a whole.

Incidentally, the confirmation that the process of creativity defies standard mechanism of motivation is the fact that researchers noticed dependence of the creativity level of age and certain gender differences. The dynamics of creativity and intelligence in men and women over a lifetime is significantly different. And if the general trends as they grow older are the same for men and women: creativity – to decrease and intelligence – to increase, then after 45 years, they are diametrically opposed. Women sharply increase creativity – the highest growth of creativity and a splash of creativity begins since 45 years – the researchers suggest that children up to this age have grown, become more independent, experience and level of skills reaches a maximum, and they can devote more time to creative activities, while for men since 35 years old their creativity can significantly decrease. By the way, the intellect of women continues to rise. The intellectual level and the level of creative thinking for men after 45 years are decreasing.

So let us try to create a mechanism of formation of creative environment in the enterprise. It should include the following required steps:

1) Search for a person (persons), who has creative abilities. This can be done directly within the enterprise if the staff has already such personality and through recruitment of the employee – that can be carried out through the institutions of the labour market and independently.

2) Search for creative individuals in a group of workers, and beyond this group, if necessary.

3) Formation of the creative team, led by a creative leader, or in some teams, groups, a creative person with leadership qualities may be.

4) Choose your style of leadership that is to serve not only the slogans of general but the specific task, among which a prominent place occupy tasks of implementing the creative ideas. Such an approach, which focuses not on the style of the leader, the cult of personality, but on the achieving goals, it will enable not only efficient use of the creative potential of the team, its creative abilities but also efficiently and quickly respond to changes in the macro and micro business activity of enterprises. So, we suggest using a flexible style of leadership – in modern terms of progress and development of the world economy, it is very important.

5) Formation of a motivation system, which consists of the principles of group motivation, self-motivation, and motivation regarding persons-generators of creative ideas. Such three-staged system of motivation will help to work effectively and fully use the personal potential of not only individual workers but an entire team of employees.

Part 2. Management mechanism of regulation, coordination, and control of the creative process in business

The creative process is a few sequential steps that lead to success in the implementation of creative ideas, perhaps through significant intervals. G. Wallas (Wallas, 1926) describes the creative process by the following stages: understanding of the problem, preparation to its solution, reflection, clarifying (well-known «Eureka!»), support for the idea by other people.

Management by the creative process requires creativity in modern management control. What is management creativity? Management creativity is a socio-professional competence of stakeholders, providing capacity for productive activity,

the results of which is the formation of new innovative approaches, technologies, methods and management functions by social groups and organizations.

Management mechanism of regulation, coordination, and control of the creative process – is, in fact, the totality of influence means used to achieve a creative approach to work and creativity.

During the introduction to the management process of modern methods of creative management, the attention should be given to all of its components: economic, administrative, moral, and psychological. The important point is the creation of a creative atmosphere in the team, the accumulation of creative ideas and stimulation of the development process of self-realization and self-qualifying of their individual and collective creative development, coordination of internal interests of employees with the objectives of the enterprise.

With the formation of administrative influence on the creative process, three components of creativity should be taken into account: competence, ability to think creatively, and motivation.

The concept of competence covers all the knowledge and skills possessed by workers in their field of activity. Management by the competence on the level of organization involves the performing of the following steps: assessment of available resources (for components of competence) and capabilities and skills of staff of the organization; assessment of firm needs in staff in accordance with the objectives of the company, its chosen strategy for the coming years; comparing resources and needs.

Based on receiving relevant data, it is determined:

- which number of personal corresponds to the chosen strategy and it is not necessary to retrain them:

- which number of staff is needed to retrain due to changes in company strategy;
- how many workers to hire (release) for the successful implementation of tasks.

In order to ensure that the staff of organization has the necessary competence, the leadership of the organization must establish and maintain a «staff development plan» and associate with this processes; they should assist the organization in identifying, obtaining and the development of the organization staff competence.

Creative thinking, as already mentioned, describes the approach to solving problems or the talent to make new combinations from existing ideas. This ability depends largely on the personal qualities of the employee but, at the same time, a significant impact on it is fulfilled by the manner of his thinking and working habits.

Thus, the expert has a chance to be a more creative person if he does not feel himself uncomfortable and when it is necessary, enter into an argument with the staff if it is natural to take up decisions that violate the status quo. His creativity will be even higher if he has a habit of «turn the problem upside down» and combine information from seemingly poorly interconnected spheres of public life, science.

As for the style of work, the employee will more likely to reach the heights of creativity when he aggressively seeks this goal. Indeed, the ability not to despair because of a temporary lack of results and the willingness to continue infinitely weary studies and experiments increase the likelihood of a creative breakthrough. The same can be said about the ability to defer a difficult problem for a period taking the other tasks and then return to this issue and look at it with fresh eyes.

Competence and creative thinking – strategic raw materials of the individuals – their natural resources. On the third factor – motivation – depends how the employee uses the resource.

Note that the specialist can be varied by broad knowledge and ability to find new approaches to old problems but if he has no motivation to perform a particular job, he won't start to do it. His intellectual and creative potential remain untapped, or he will find it used in the other direction.

Researches of scientists say that not all kinds of motivation influence the level of creativity equally. Distinguishing types of internal and external motivation, it is more important for the realization of creative process the intrinsic motivation that is clear, based on the nature of these effects on the personality of these opposing types of motivations.

External motivation – is the impulse to activity by outside forces. So the person considers the reasons for his (her) behaviour as imposed and considers itself just as a pawn. This motivation is regulated by external material and psychological conditions: money, rewards, and even punishment. The inclination for the action is based on incentives arising from the situation.

Internal motivation is due to needs for competence and personal choice, which are leading to the human «I». In this type of motivation, people understand that they are the real cause of fulfilment, and see themselves in the interaction with the environment as an effective agent. These are needs, interests, intentions, goals, desires, self-confidence, the ability of self-realization, a sense of satisfaction from work, which are used in the case of internal motivation.

Money does not necessarily prevent the manifestation of creativity but in many cases, they do not help. Certainly, the most common external stimulation, which is used by heads – money but using money as means of influence, people have the feeling to be manipulated. It is important to understand that money alone cannot be the reason of enthusiasm for work. If a person considers his or her work boring, any remuneration will not make it such that it became exciting for people.

Only enthusiasm, an interest that comes from within, and a desire to do something are in the base of internal motivation. If intrinsic motivation exists, employees do their job for its own sake and pleasure associated with it.

Studying the question of creativity, researchers found many confirmations of the effectiveness of internal motivation regarding incentives for workers to creative, activity, and even formulated the principle of internal motivation creativity: people are most creative when they are driven by interest, satisfaction, and importance of the work as a whole, rather than external action.

The planning process of creative activity is problematic, as we noted above that creativity is almost incompatible with clear regulation processes. But managers can focus on the efficient use of existing creative potential of the company, its development, and creation of conditions for its implementation.

Implementing the function of creative potential during operation of the business includes: the development of strategic and operational plans of current formation and use of creative potential; preparing budgets of implementing strategic and operational plans of current formation and use of creative potential. The logical continuation of planning creative potential is organizing activities of creative activities (media of creative potential) as to the fulfilment of constructed plans, including a budget. Implementation of this function by business leaders usually boils down to: the introduction to the action the organizational structure of management, including management of creative potential; allocation of functions and powers among the subjects of creative activity; creation and implementation of policies and procedures; bring to their subordinates and clarify their duties and responsibilities and so on. There is a very simple law of creativity: quality and uniqueness of ideas at the output

depend on the quality and uniqueness of stimulus at the input. For receiving necessary results, the important task of enterprises' leaders is the correct identifying of media needs of creative potential, identify their skills, capabilities, training level, and promptly apply such methods of influence on them, which will ensure completeness of implementation of fulfilled plans in due time. That is, during the functioning of the enterprise, the realization of the function of motivating creative potential carriers includes: a study of their needs; application of methods of influence on the creative and active employees. As to the function of control in managing by creative potential, its purpose is: to identify the state of implementation of strategic, operational plans of formation and use of creative potential; observing the behaviour of media creative potential; identification of implementing creative potential impact. In its turn, the implementation of regulatory functions of creative potential provides: strategic adjustment, current and tactical plans of the formation and use of creative potential; application of influence methods on subordinates (unlike the methods of motivation in the implementation of regulatory measures to subordinates, we can apply methods of influence that do not take into account their needs and based only on the priorities of the organization, they may take the form of the introduction of certain restrictions, reprimands, dismissals, public conviction, free discussion of the results, which expose incompetence and abuse and so on. In management theory, these methods are called stimulation methods as they encourage management subjects to action without their internal needs); application of measures to improve the results of creative potential use.

As to the coordination of creative processes at the enterprise, we can underline two main trends.

1. Coordination of action between departments, which provides:

- providing maximum possible autonomy of structural units and, at the same time, the most powerful communication flows that permeate the entire organization and accessibility to all required information sources to generators of creative ideas;
- the combination of a clear division of functions with a single target orientation of the entire staff activity – to the creative development of the organization;
- creation of action groups that will synthesize the key ideas of creativity development in the organization.

2. Consistency between departments and services company by establishing efficient connections between them, that is the following activities must be carried out the following activities in the organization:

- determination of the causes of deviations from targets;
- determination of causes of the low level of artistic and creative activities, reasons that prevent personnel initiative;
- determination of additional work and how it is performed;
- determination of reserves allocated by the organization to perform additional work. unscheduled work, creative projects, and developments;
- the redistribution of responsibilities between officials by not only professional but also personal qualities, which are necessary for a particular type of work and specific tasks;
- operational measures to correct deviations from the expected results of the implemented system and overall creative management.

Optimization of creative activity management provides such an organization of economic activity, in which the costs of promotion and regulation of creative activity ultimately provide the best results for a given organizational and economic constraints.

The task of costs optimization for the stimulation of the creative activity of staff is decided on the basis of models, which link the economic interests of employee and employer considering costs and benefits from paying in a leading system creative innovation for the period T:

$$M_o = u(x(z_0)) - z_o \rightarrow \max$$

where M_o – income received by the employer;

$u(x)$ – the result of creative activity;

x – creative efforts of the worker (latent variable);

z_o – the cost for activation of creative potential of employees and introducing creative innovations. For the application of these models, it is necessary to identify the characteristics of the complex and non-linear connection between the subject's desire to achieve this goal by the mobilization of his intellectual and creative resources, results of operations and the given level of stimulation.

Steering influence on its revitalization and efficiency of creative processes flow at the enterprise appears in the creation of creative development concept, business plan implementation of the certain creative product, and technical and economic foundation of forming and implementing creative potential, as well as specifying the quantitative and qualitative requirements for media creative ideas.

As to the control function in managing creative processes at the enterprise, its implementation involves: identifying the state of implementation of strategic and operational plans of current development and use of creativity; observing the behaviour of generators creative ideas and creative development of products; identification of the impact of implementation of existing creative potential. However, the methods of control should be aimed primarily at identifying stocks of activation of creative activities at the enterprise and clarifying the adequacy and completeness of providing all the necessary factors and preconditions of creative spread at the enterprise than at the direct creative activity of employees – creative people work effectively in the atmosphere of trust and respect.

Part 3. Formation of a creative strategy of the enterprise management

The creative management system should be focused on the needs of the organization in new ideas and knowledge. It includes a set of interrelated and mutually co-ordination management tasks:

- formation of organizational structures that support creativity;
- development of organizational systems and procedures, activating creativity and creation of new knowledge;
- organizational culture and creative leadership;
- formation of creative management strategy.

The constituents of creative management system include: creative management objectives, subjects and objects, methods and technology of creative management, creative ideas and creative solutions, information and communication (Fig. 1). The motive force of this system are the subjects of creative management as they set the whole system and influence the creative management objects by choosing methods and technologies of their implementation. Objects of creative management systems are subjects of controlled management subsystem that put forward creative ideas. Based on their analysis, creative management system managers adopt creative solutions.

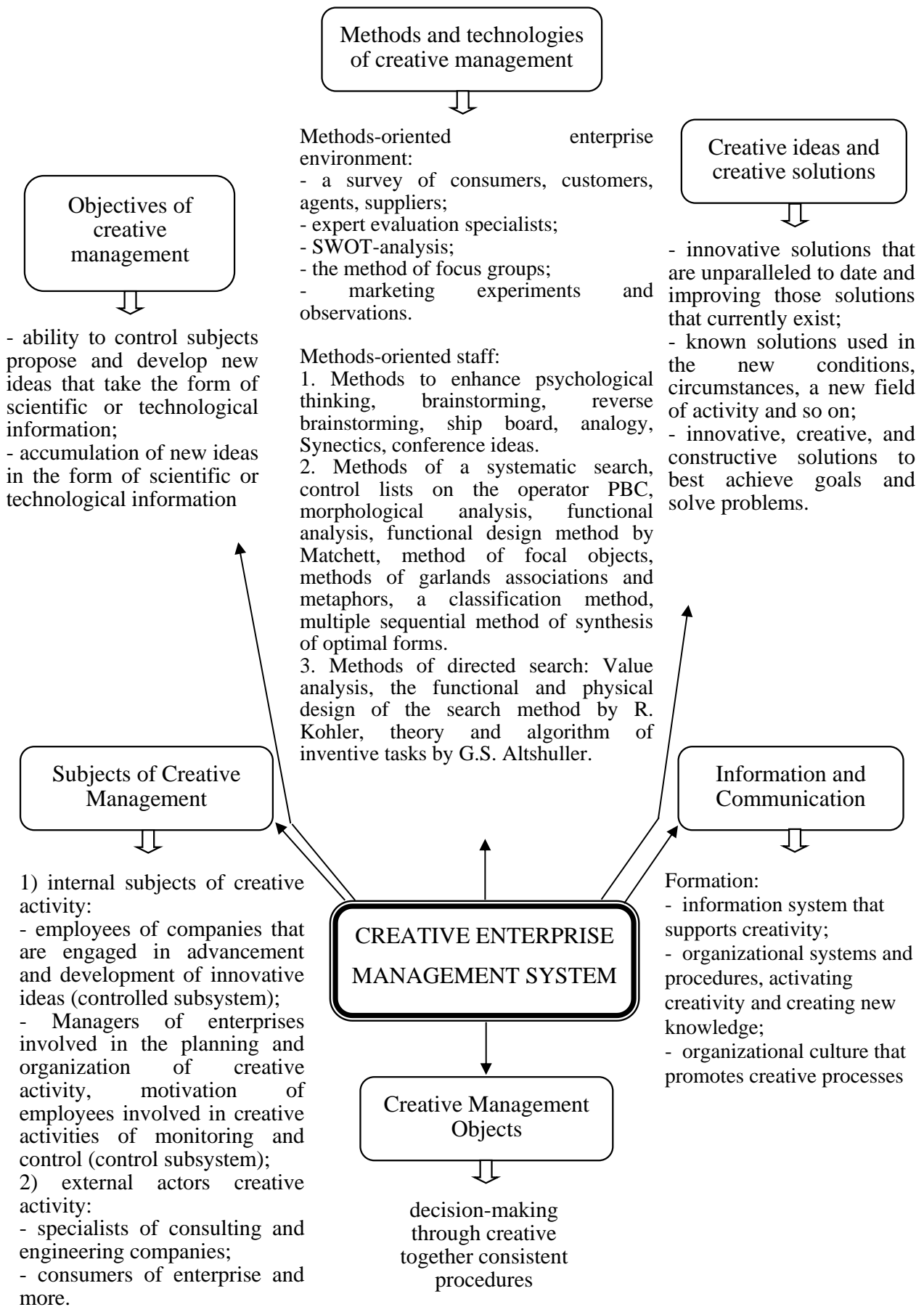


Fig. 1. Creative enterprise management system

The creative strategy is the basis for the development of creative ideas at the enterprise. The process of a creative strategy creation is to develop the creative concept (the system of creative ideas), which express the basic positions of creative management and creative organizations working in the company, proposes well-founded decisions of communicative tasks by creative (creative) means. Exactly the creative strategy sets the direction for the future work of the creative team.

The strategy includes the development of a general creative line that is planned to achieve the goals in forming the image of the creative product and its effectiveness at the enterprise (for internal creative) or in the market (for creative products and services).

It is found that high rates of the creative potential of the company and personal qualities of not only managers but also employees affect the efficiency of management, self-realization. Therefore, to implement creative management strategies, it is needed to ensure availability of all necessary resources, including:

1) Technical Resources: the basis of given ideas; software distribution; electronic bulletin boards; use of external resources;

2) Human resources: the continuous development of competencies within and outside officials; creative problem-solving tools; forums ideas; creative team.

3) Structural resources: horizontal communication; external communications in adjacent areas of activity; career structures; cross-functional project teams; creating opportunities for the solitary work of an expert.

4) Cultural and value base, encouraging individual initiative projects; an example of leaders regarding reasonable risk, an example of enthusiasm; clash of opposing ideas is considered a good thing; right to make mistakes – learn from mistakes; a relationship based on trust; every single employee is valuable for the organization.

Prerequisites for the formation of creative management strategies by the enterprise are:

- the presence of leaders with their knowledge, experience, personal qualities necessary for change, creation creativity;

- availability of the enterprise employees who can initiate and promote change, their support from management;

- independent workers, their willingness to changes, high creativity, skills and knowledge necessary for creative thinking;

- the increase of the flexibility of organizational structures and processes;

- availability of technical, economic, informational, social conditions for the realization of creative abilities of creative workers;

- a high level of creativity of the organization's environment.

The process of formation of creative strategy management now depends on the specifics of the company activity and the target orientation of creativity itself. Let us try to reflect general principles of its formation (Fig. 2).

Formation of a creative strategy of the enterprise management in the company is associated with such a business of the company as knowledge management. Approaches and tools for knowledge management can identify requirements for creative personnel of the enterprise trends and identify its formation.

Strategic goals of creative activities should open up new trends of development for the company through the creation and commercialization of new products, use in its production and sale activities of new energy-saving, resource-saving technologies, implementing new creative ways of management and methods of promoting products and services to market.

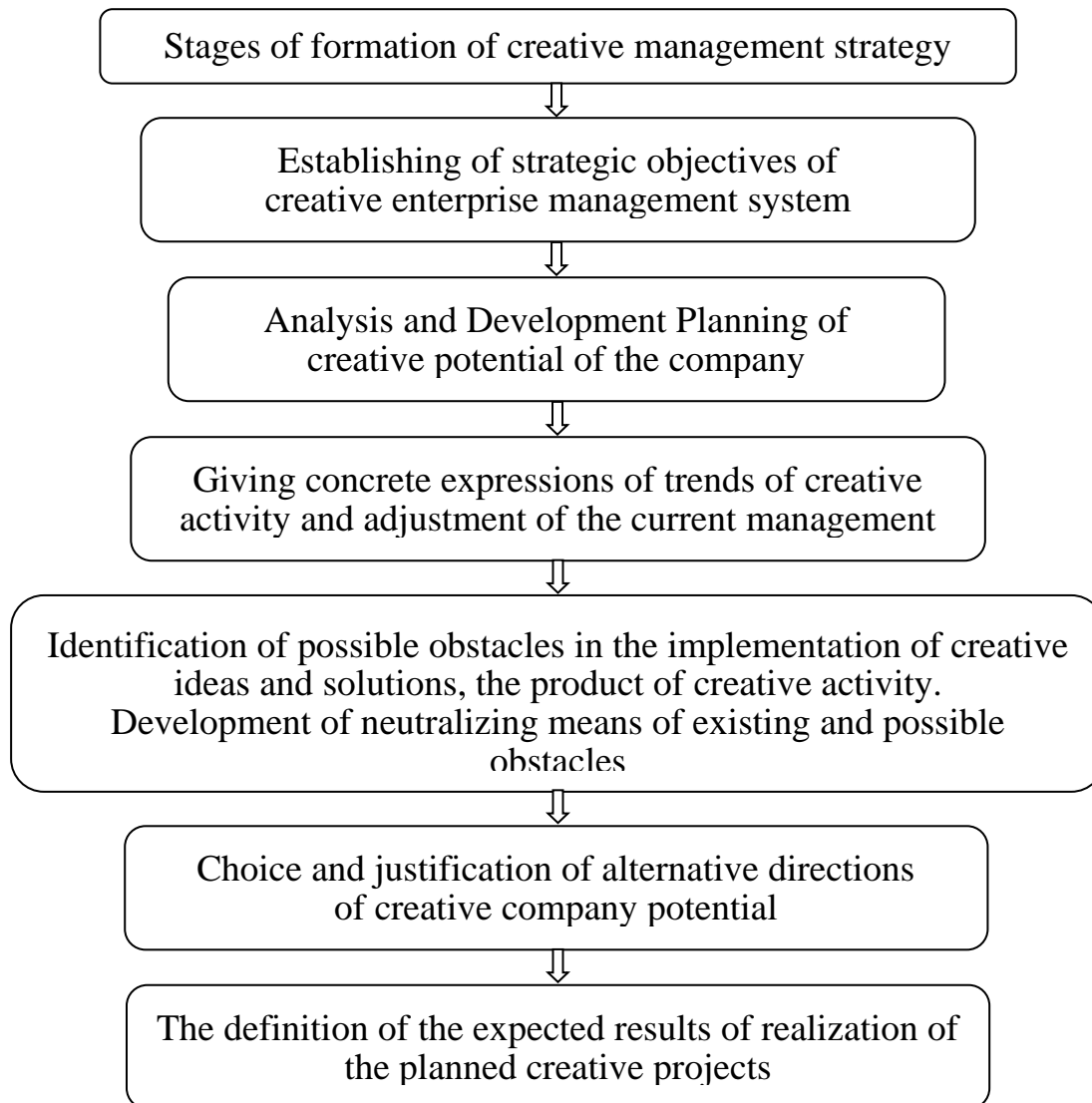


Fig. 2. Formation of a creative strategy of the enterprise management

Analysis and planning of the creative potential development of the company provide an analysis of the determinants of formation and development of the creative potential of enterprise job scheduling, central performers (distributors) of creative projects, terminological harmonization, and resource support for the planned creative process.

Specifying trends of creative activity and adjustment of the current management strategy is needed to clarify the priorities of creative activities trends in the team, improvement, and change, the need of which was identified in a study of the creative potential of creativity and trends of creativity development at the enterprise.

As a part of crisis management, it is mandatory to identify possible obstacles to the implementation of creative ideas and solutions, the product of the creative activity, and the formation of neutralizing means of existing and potential obstacles.

The final stage of formation of the creative management strategy is the selection and justification of alternative directions of creative potential realization of the company, involving the formation of new modern and efficient methods of work at the plant and new methods of management, non-conventional and directed it to the creative teams, which are the main implements of creative potential of the company and prognostic assessment of the implementation of creative solutions.

The main executors of creative strategies are: head of innovative enterprise; knowledge manager; coordinator of knowledge; head of the specialized unit; manager

of the project team; knowledge experts (media); generators of ideas (creative people, innovators); knowledge engineers (facilitators).

When you create a creative strategy, it is important that all parts of it are not developed in isolation but in concert, as a result of work should be one project, each element of which is a continuation of the general idea. It must be technically accessible and realistic.

To create the necessary conditions for the realization of creative strategy, managers should pay attention to the following management tasks:

- to form a strategic policy of creating a creative organization;
- to establish strategic, long- and short-term goals of creative activity;
- to create a creative atmosphere in the team;
- to develop the creative potential of people in the organization;
- to enrich and develop the creative potential of the manager;
- to create an effective creative team and motivate them to productive work;
- to ensure the ability of any company employee to put forward creative ideas;
- to create the possibility of the company various methods use and techniques of creativity for the generation, evaluation, and selection of creative ideas;
- adjust the creative processes in the organization without disrupting the creative atmosphere of creativity generator and group, which is involved in the creative process;
- to stimulate the creativity of staff in the organization, based on individual needs and motivations of each individual creative worker;
- to assess and control by flexible methods creative activity at the enterprise.

Finally, we note that the creative management strategy should be formed on the basis of a mandatory provision of the positive impact of creative ideas and solutions on indicators of economic efficiency, environmental and life safety.

Conclusion

Creativity shows the ability of the subject (individual, group, organization ...) adaptively respond to changes that occur in reality, and generate new knowledge, approaches, products, new solutions, and actions aimed at creative transformation of the natural, social, and spiritual reality.

The creative process is not considered as a prerogative of individuals, endowed with extraordinary talents and abilities to be creative. The creative process takes place in an organizational environment, a team united by common purpose.

In modern management, just creative management becomes a key element, the foundation of efficiency and management improvement, whereby it is intended to operate by creative and artistic processes at the plant, as complementary and interrelated.

The creative control system must be established on the basis of creative technology, introducing a creative environment that will effectively generate and implement creative solutions and focus all activities on the formation and implementation of its creative potential.

New qualities of creative workers cannot be ready achieved «buy in the market», they can be generated, develop and effectively use through the implementation of unique individual capabilities of staff – their knowledge and experience, personal characteristics that are found in the behaviour and attitude to business, in enthusiasm and innovation. Theorists and practitioners of management personnel in the process of experience accumulation of experience of 32 measurement and staff evaluation concluded that high qualifications, extensive experience, and high intelligence are not

a guarantor of effective work of man, because these factors determine only the general professional characteristics of worker (knowledge and some skills) but they do not make it possible to determine how these qualities find expression in certain circumstances, in a particular position, a particular company.

Formation of creative strategy management needs to develop conceptual approaches, the essence of which is expressed in the practical implementation of the concept of a creative enterprise development – a certain way of understanding, interpretation of the phenomena of creativity, creative technologies.

References:

1. Andrievska V. V. Creativity [Text] / VV Andrievska; Head. Ed. VG Kremen; Acad. of ped. Ukraine // Encyclopedia of Science Education. – K.: Yurinkom Inter, 2008. – P. 432.
2. Bozhydarnik T. Formation and development of creative management at the enterprise / Byzhydarnik T., N. Vasylyk // Economist. – 2005. – №3. – P. 37-39.
3. Bushuev S. D Creative technology in management by the projects and programs of organizational enterprise development / NS Bushuev. – K.: Science. World, 2007. – 270 p.
4. Gender differences of intellect and creativity of adults // Psychology of person in the modern world. – Russian Academy of Sciences, 2009. – Access: <http://medbib.in.ua/gendernyie-razlichiya-intellekta-kreativnosti-38689.html>
5. Dyakiv O. J. Formation of optimal solutions in the organization of creative and innovative activities of enterprises / O. J. Dyakiv // Modeling of the regional economy. – 2012. – № 2. – S. 385-396. – Access: http://nbuv.gov.ua/UJRN/Modre_2012_2_42
6. Korotkov E. M. Investigation of management systems: Tutorial and Workshop for Academic bakalavryata / E. M. Korotkov. – 3rd ed., Rev. and add. – Moscow: Publishing Yurayt, 2014. – 226 p.
7. Cook P. Creative brings Money / Peter Cook; Trans. from English. SS Hurynovych. – Minsk: Grevtsov Pablysher. 2007. – 384 p.
8. Osobov I. P. Some Aspects of creativity. Foreign experience of the twentieth century in the evaluation of current research / I. P. Osobov // The humanities researches study. – 2011. – № 2. – [Electronic resource]. URL: <http://human.snauka.ru/2011/10/213> (circulation date: 04.11.2014).
9. Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. Creativity Research Journal, 19, 69-90.
10. Scott, G., Leritz, L.E., Mumford, M.D. The effectiveness of creativity training: A quantitative review // Creativity Research Journal. – 2004. – Vol. 16. – N4. – pp. 361-388.

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БИЗНЕС-ПЛАНИРОВАНИЕ КАК ФАКТОР ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ПРЕДОСТАВЛЕНИЯ РЕСТОРАННЫХ УСЛУГ В ИНДУСТРИИ ГОСТЕПРИИМСТВА

Аннотация

Проанализированы научные источники по вопросам бизнес-планирования и прогнозирования развития ресторанного рынка индустрии гостеприимства. Проведен анализ современного состояния ресторанного бизнеса, определены тенденции изменений под влиянием экономических трансформаций. Осуществлен мониторинг факторов развития ресторанного бизнеса. Проанализированы основные составляющие обеспечения

конкурентоспособности ресторанного бизнеса в Украине. Обоснованы основные тренды развития национального ресторанного рынка. Определены критерии позиционирования предприятий ресторанного бизнеса в индустрии гостеприимства. Разработаны практические рекомендации по усовершенствованию механизма управления развитием ресторанного бизнеса индустрии гостеприимства, направленные на достижение оптимального уровня удовлетворения потребностей в услугах сферы обслуживания и повышение эффективности ее развития.

Вступление

Ресторанное дело в мире является одним из самых прибыльных. По статистике средний оборот средств, вложенных в ресторан, происходит в пять-шесть раз быстрее, чем инвестиции, вложенные в другой бизнес. В странах Западной Европы, США и Японии зафиксировано увеличение расходов клиентов на проведение досуга именно в ресторанах [1].

Ресторанный бизнес является одним из наиболее значимых составляющих индустрии гостеприимства. С одной стороны, он является одним из средств высоколиквидного использования капитала, а с другой – средой с высокой степенью конкурентоспособности. Во всем цивилизованном мире он является одним из наиболее распространенных видов малого бизнеса, поэтому предприятия ведут между собой постоянную борьбу за сегментацию рынка, за поиск новых и за удержание постоянных потребителей их продукции и услуг.

Современный ресторанный бизнес в Украине, как никогда раньше, предлагает широкую номенклатуру услуг потребителям продукции и услуг питания, предлагая блюда кухонь более 30 государств мира [2]. Но в ресторанном деле нет предела совершенству, поэтому и появляются новые их виды, такие как услуги сомелье; часы фортуны и счастливые часы для гостей; гастрономические шоу; торжественная презентация блюд; бар-шоу; кулинарное приготовление в присутствии гостя; караоке; кейтеринг с организацией досуга и широким спектром разнообразных услуг в любой точке города, его садово-парковой зоны и живописных окрестностей; отдых и развлечения на воде, земле и в воздухе и т. п [3].

Состояние ресторанного рынка напрямую зависит от платежеспособности потребителей услуг, а также от менталитета жителей Украины, которые все больше ориентируются на западные стандарты потребления [4]. Расходы украинцев на питание вне семьи стабильно растут (от 3% до 4% за год). В последнее время ресторанный рынок растет, улучшается качество обслуживания, более разнообразными становятся предложения, растут доходы ресторанной составляющей индустрии гостеприимства и занятых в ней работников.

Анализ современного состояния ресторанного бизнеса свидетельствует о наличии значительных количественных и качественных изменений под влиянием экономических трансформаций [4]:

- структурные преобразования в сети ресторанного хозяйства страны (устойчивая тенденция к сокращению закрытой сети, появление на рынке заведений с инновационной ориентацией, тенденция роста количества частных учреждений, что способствует развитию «здоровой» конкуренции, недостаточное наличие предприятий доступного ценового сегмента);

- тенденция роста спроса на квалифицированные кадры;

- смена ценностей и ориентиров потребителей;

- тенденция к сокращению вместимости учреждений;
- рост потока прямых иностранных инвестиций.

Сегодня бизнес-планирование в условиях сложных проблем и увеличенной неопределенности внешней среды становится важнейшей составляющей успеха деятельности предприятий ресторанного бизнеса в индустрии гостеприимства.

Раздел 1. Предприятия ресторанного бизнеса как целеориентированная система

Результатом деятельности предприятий и граждан-предпринимателей по удовлетворению нужд потребителей в питании и проведении досуга можно определить услугу ресторанного бизнеса. Эта услуга сочетает в себе две составляющие продукции заведения ресторанного бизнеса: нематериальной услуги и материального товара. Следует отметить, что ни услуги, ни товара в чистом виде не существует, а преобладающий элемент в составе продукции дает название результату деятельности. В связи с тем, что во многих случаях в продукции заведения ресторанного хозяйства удельный вес услуги больше, чем удельный вес товара, поэтому результат деятельности заведения ресторанного хозяйства называют услугой.

Ресторанная услуга состоит из двух взаимосвязанных элементов, выполнение которых обуславливает ее качество: в первой фазе процесса предоставления услуги создается состояние готовности к ее предоставлению (блюда, напитки и сопутствующие ресторанно-услуги готовятся таким способом, что дает возможность их потребления или сразу, или после недолгого ожидания), вторая фаза происходит с участием потребителя (он выбирает и потребляет блюда, напитки, развлекательные и сопутствующие услуги).

Заведения ресторанного бизнеса предоставляют потребителям комплекс различных услуг, которые по их характеру можно разделить на следующие группы (рис. 1).

Уровень качества ресторанных услуг определяется следующими составляющими функционирования предприятия ресторанного бизнеса:

- ассортиментом блюд, напитков и развлекательных услуг (основной и дополнительный ассортимент блюд и напитков, ассортимент коммерческих товаров, виды и разнообразие развлекательных услуг);
- качеством продуктов питания;
- услугами для потребителей (уровнем услуг, доступностью, наличием, стандартом, гибкостью, дополнительными услугами);
- условиями и атмосферой потребления (размером зала, освещением, цветовой гаммой помещения, оснащением и инвентарем, акустикой, отоплением, санитарным состоянием, декором, столовыми приборами, оформлением и содержанием меню);
- архитектурой заведения (внешним видом, фасадом, подъездом, парковкой, внешними украшениями);
- месторасположением заведения, ориентированным на целевую группу потребителей ресторанных услуг;
- названием заведения ресторанного хозяйства;
- средствами обслуживания (удобствами);
- уровнем стоимости ресторанных услуг;
- персоналом (обслуживающим, производственным);
- стимулированием спроса.

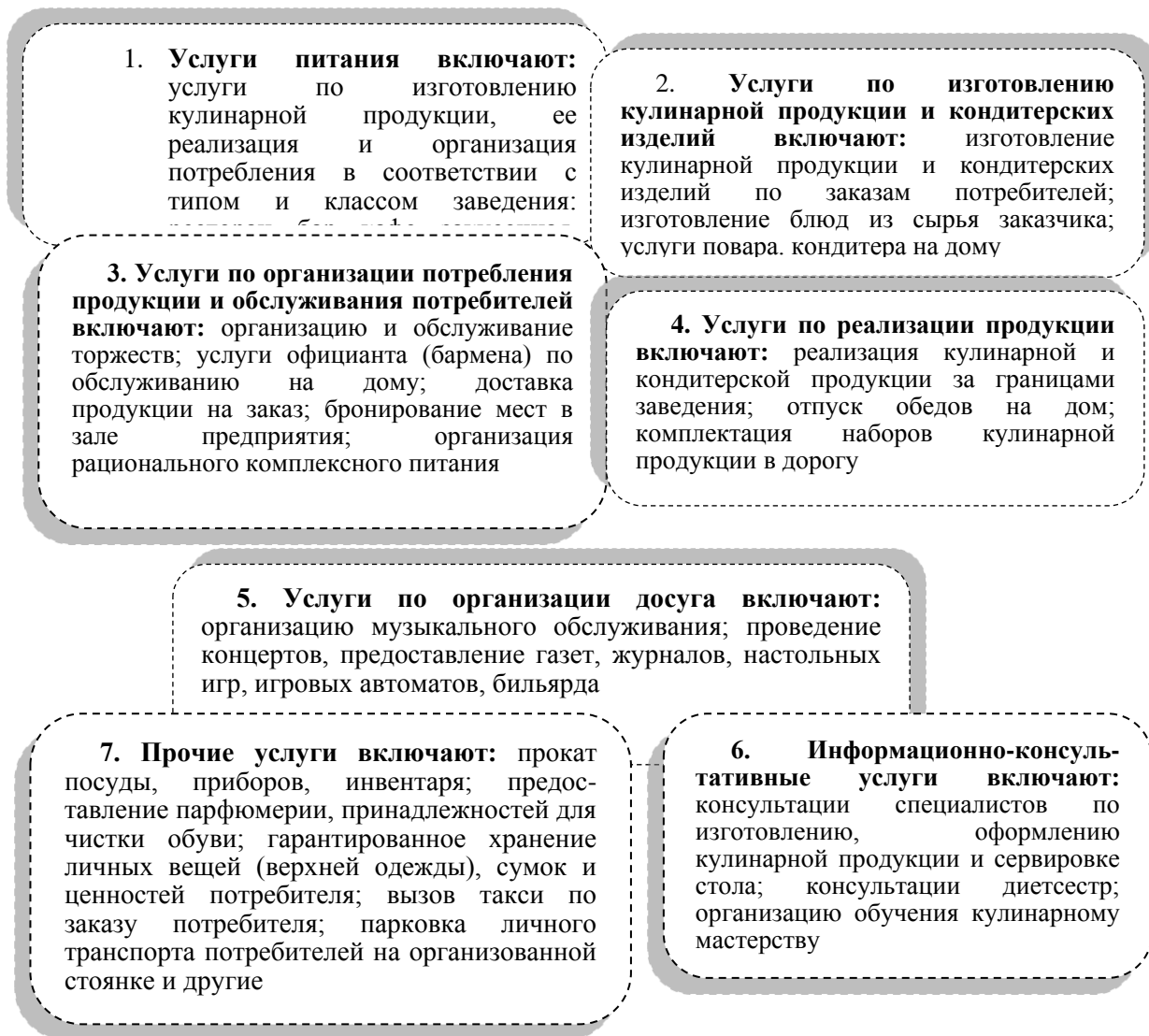


Рис. 1. Классификация услуг предприятий ресторанного бизнеса

Эти составляющие, грамотно разработанные и используемые, способствуют относительной материализации ресторанных услуг и увеличению эффективности их продажи.

Предприятие ресторанного бизнеса может рассматриваться как целенаправленная система, если оно реализует миссию обеспечения качественного обслуживания потребителей и достигает социальных, хозяйственных и финансовых целей развития.

Для того чтобы получить четкое представление об основных социально-экономических параметрах развития сферы ресторанного хозяйства в системе национальной экономики, необходимо провести классификацию предприятий по ряду признаков: по типу заведения; по классу заведения; по месту размещения; по видам экономической деятельности.

Учитывая рекомендации ведущих специалистов-практиков, современные рестораны могут быть классифицированы в соответствии с их местом размещения, сегментной аудиторией, классом и типом питания и сервисом следующим образом [2]:

- городские рестораны (размещены в городах, предлагают различный набор блюд; специализируются в предоставлении обедов и ужинов; работают в определенные часы и имеет численную аудиторию);

- рестораны самообслуживания (вид ресторана связан с быстрым обслуживанием у стойки и относительно низкими ценами за счет того, что в них не предусмотрено обслуживание официантами за столиком. Размещены, как правило в деловых, центральных районах, их посетители – люди, у которых мало времени для принятия пищи. Такие рестораны отличаются особой планировкой, мебелью, особенно декорированы и покрашены);

- вокзальные рестораны (размещены в помещении железнодорожных, автобусных вокзалов, аэропортах и, как правило, работают круглосуточно. У них не очень разнообразное меню и достаточно быстрое обслуживание);

- вегетарианские рестораны (основные продукты – овощи. Мясо или рыба отсутствуют. Данный тип ресторана возник в результате сегментации рынка в силу изменения потребностей населения);

- закусочные рестораны (их можно причислить к тем ресторанам, в которых приготовление блюд не занимает много времени. Посетителям могут подаваться и напитки. Должно быть готовым хоть одно дежурное блюдо);

- выездные рестораны (не классический тип ресторана; обслуживаются особые мероприятия-приемы и вечера, когда в домашних условиях трудно приготовить большое количество пищи);

- этнические рестораны (специализируются на определенном виде национальной кухни: китайской, аргентинской, тайской и т. д.);

- рестораны для вело- и мототуристов, которые не желают выходить из машины. Это разновидность американских ресторанов. Размещены около шоссе или на больших автостоянках. С целью экономии времени клиенты обслуживаются прямо в машине;

- рестораны при гостиницах.

Каждое заведение ресторанного бизнеса может полноценно функционировать, если определены цели, для которых оно создавалось. Для правильного определения целей необходимо определить *миссию* заведения ресторанного хозяйства.

Правильно сформулированная миссия добавляет предприятию уникальности. Миссия также определяет статус заведения, обеспечивает направления и ориентиры в ходе реализации стратегических планов на разных уровнях его развития. Четко сформулированная миссия определяет образ заведения, суть его существования и кардинальные отличия от других предприятий по следующим характеристикам (рис. 2).

Правильно сформулированная миссия предприятия ресторанного бизнеса имеет большое значение для эффективного функционирования заведения как субъекта хозяйственной деятельности.

Во время формулирования миссии необходимо сосредоточить внимание на трех ее основных элементах: определение основной услуги, которая предлагается заведением; обоснование целевого потребительского рынка для реализации услуг; создание технологической схемы производства услуг.

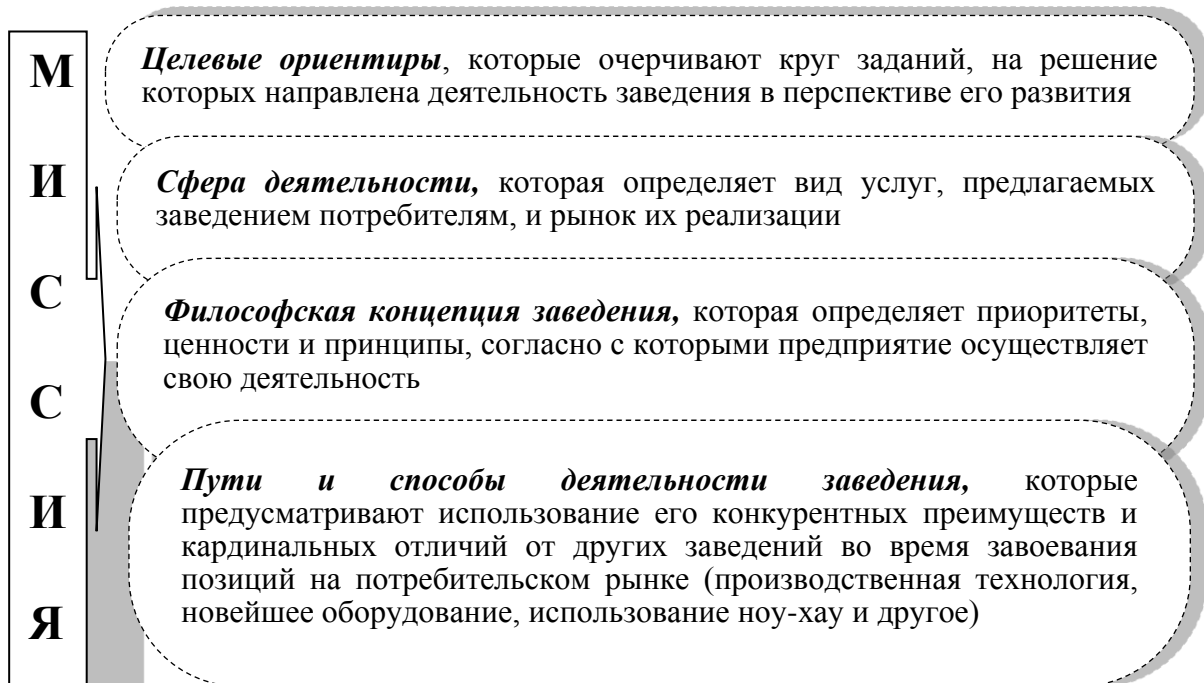


Рис. 2. Основные составляющие миссии предприятия ресторанного бизнеса

Определение цели заведения – это конкретизация его миссии в оптимальной форме с точки зрения управления процессом ее реализации. Объем и разнообразие целей является настолько широким, что без комплексного, системного подхода к определению их состава не может обойтись ни одно заведение независимо от его размеров, специализации, типа и форм собственности.

Предприятия ресторанного бизнеса на современном этапе развития рыночных отношений ставят перед собой такие цели, как [1; 2]:

- 1) стабилизация финансового состояния заведения путем осуществления маркетинговых мероприятий;
- 2) повышение конкурентоспособности предлагаемых услуг на рынке;
- 3) научное исследование рынка сбыта услуг для определения стратегии заведения по сохранению и расширению его деятельности;
- 4) прогнозирование текущих и перспективных потребностей потребителей услуг для определения основных направлений деятельности;
- 5) комплексное маркетинговое воздействие на потребителей услуг на всех этапах обслуживания;
- 6) создание и поддержание имиджа заведения;
- 7) целенаправленность информационно-рекламных мероприятий;
- 8) обеспечение условий для развития творческого потенциала персонала, повышение уровня их материального обеспечения и заинтересованности в карьерном росте.

Таким образом, заведения ресторанного бизнеса не могут функционировать без целевых ориентиров, так как целевое начало в их деятельности зарождается под действием того, что их бизнес находится под воздействием интересов многих субъектов хозяйственной деятельности и общества в целом.

Раздел 2. Основные этапы бизнес-планирования ресторанного бизнеса индустрии гостеприимства

Прежде чем приступить к воплощению своих идей, необходимо тщательно просчитать все шаги реализации будущего проекта, экономические составляющие, источники финансирования.

Для недопущения ошибок при бизнес-планировании необходимо осуществление тщательной работы, предшествующей открытию ресторана заведения. Эта работа состоит из ряда этапов, таких как проведение маркетингового исследования, на основе полученных результатов – разработка концепции предприятия ресторана хозяйства, составление бизнес-плана заведения. И только затем можно приступать к реализации проекта, открытию предприятия и формированию его ресурсной базы.

Первый этап. Проведение маркетингового исследования. Первым шагом при открытии ресторана заведения является проведение масштабного маркетингового исследования. Данное маркетинговое исследование отличается от подобных исследований других отраслей наличием некоторых специфических задач и должно отвечать на ряд важнейших вопросов: с какой целью заведение выходит на рынок; какие инструменты будут использоваться в ее достижении; кто является потенциальным потребителем услуг; каковы запросы рынка; как обеспечить удовлетворенность потребителя более эффективными и более продуктивными, чем у конкурентов, способами; каков уровень конкуренции на рынке и как выделиться из числа конкурентов.

Правильно осуществленное маркетинговое исследование позволит снизить уровень неопределенности и касается всех элементов комплекса маркетинга (рис. 3). Грамотный маркетинг предприятия ресторана бизнеса позволяет найти применение всем возможностям заведения и превратить общую философию гостеприимства в конкретные технологии.

Формы организации маркетинговых исследований могут быть различными. Их можно осуществлять собственными силами предприятия, а также с помощью других организаций, специализирующихся в данной области. На практике выбор формы организации маркетингового исследования обосновывается опытом работы предприятия на рынке; наличием собственного персонала исследователей; профессиональным потенциалом сотрудников; положением предприятия на рынке и его намерениями; стратегией и тактикой рыночной деятельности. Кроме этого, обязательно принимаются во внимание экономическая целесообразность и необходимость сохранения коммерческой тайны.

Принимая решение в области открытия предприятия ресторана бизнеса, необходимо вести долгую и кропотливую работу. Но сколько бы сил, времени и средств ни было потрачено на разработку бизнес-плана нового предприятия, стопроцентная гарантия того, что заведение будет успешно развиваться, всегда исключается. Однако предварительно определить его прибыльность и, следовательно, просчитать срок жизни – задача вполне реальная, если при проектировании максимально предусмотреть все проблемы, с которыми, возможно, придется столкнуться впоследствии.

Для этого необходимо разработать четкую концепцию предприятия. Нужно выбрать тип предприятия питания, его размер, категорию, определить потенциальных клиентов и т. д.

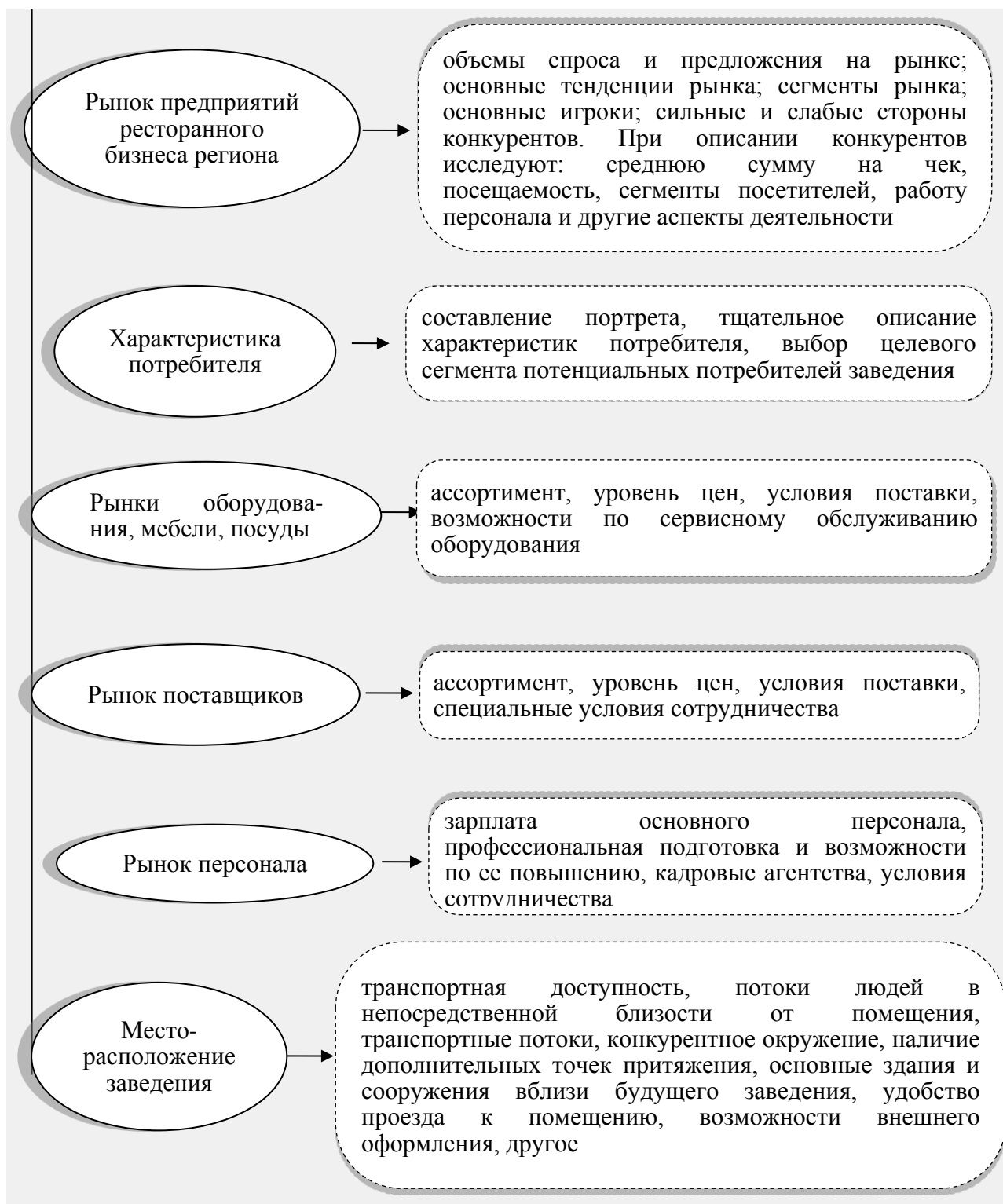


Рис. 3. Параметры проведения маркетингового исследования

Второй этап. Разработка концепции предприятия. Концепция – это индивидуальный подход ресторатора к ресторанному делу. Во-первых, концепция зависит от внутреннего видения хозяином ресторана своего предприятия. Во-вторых, на нее влияют ограничивающие факторы внешней и внутренней среды фирмы. Поэтому, продумывая концепцию заведения, важно с самого начала увидеть ее перспективу: развитие предприятия и неизбежную с течением времени корректировку проекта.

Современная суть ресторанного бизнеса – это не продажа блюд и напитков. Ресторанные заведения предлагают возможность хорошо провести время,

продают эмоции. Переживания, атмосфера, отношения между сотрудниками ресторана и гостями – вот то, что абсолютно необходимо для успеха в этом бизнесе, то, без чего успех просто невозможен. Вот почему дорогие рестораны часто пустуют, хотя в них есть и превосходно приготовленная еда, и дорогой интерьер [5].

Создание предприятия ресторанного бизнеса – процесс творческий от начала до конца. Начинается он всегда с наличия добротной идеи. Базовая идея ресторана должна развиваться, трансформируясь в соответствии с новыми веяниями моды и другими факторами. Но это совсем не означает, что нужно периодически менять название вместе с содержанием ресторана: необходимо иметь свою нишу на рынке и постоянно искать новые идеи, которые бы вписывались в базовую концепцию ресторана. Кроме этого, при разработке концепции очень важно создать специфическую атмосферу, ауру. Именно она сейчас является главным товаром на ресторанном рынке, хотя этот товар не поддается денежной оценке. Этот императив современного ресторанного бизнеса требует органичной увязки интерьера, кухни, музыкального сопровождения, манеры и стиля обслуживания.

В концепцию предприятия ресторанного бизнеса нужно заложить и адресность услуг. Важно заранее просчитать потенциального клиента, который может прийти в заведение. Необходимо определить круг потребителей, которых привлечет идея тематического ресторана, и тех, кто является любителем этнической кухни. Необходимо в первую очередь изучить окружающую среду – ближайший жилой микрорайон, офисные центры, учреждения, предприятия и организации, торговые и развлекательные комплексы.

Также концепция заведения должна содержать так называемую изюминку. Эту проблему легче решить дорогим концептуальным ресторанам, развивающим какой-либо культовый для общества образ. Однако и любое другое предприятие ресторанного бизнеса может найти для себя выразительный штрих, который придаст ему индивидуальность.

Разработать концепцию предприятия ресторанного бизнеса – значит определить и проверить идею заведения, сформировать целостное представление о деятельности всех ресторанных служб. Таким образом, в концепции должны отражаться такие аспекты: требования к разработке торговой марки заведения; принципы организации внешнего оформления, дизайн, стиль ресторана; ассортиментная политика (выбор кухни); система обслуживания, сервис, программа привлечения потребителей; принципы ценообразования; технология производственных процессов; требования к персоналу; логистика; работа с поставщиками; организация рекламно-маркетинговых мероприятий; другие виды деятельности.

Все позиции должны быть проработаны и изучены, так как концепция – это единое целое, все элементы взаимосвязаны между собой.

Третий этап. Разработка бизнес-плана. Ресторатору известна концепция предприятия, он знает, как ее реализовать на практике, и все же целесообразно в последний раз задуматься над правильностью намеченного шага. Для этого на основе полученных результатов маркетингового исследования и при наличии разработанной концепции составляется бизнес-план открытия предприятия ресторанного бизнеса.

Структура бизнес-плана открытия ресторана

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- 9.7. ОТЧЕТ О ПРИБЫЛЯХ И УБЫТКАХ
- 9.8. ПОКАЗАТЕЛИ ЭФФЕКТИВНОСТИ ПРОЕКТА

Раздел 3. Анализ и прогнозирование деятельности предприятий ресторанного бизнеса в Украине

Современный подход к управлению предприятиями ресторанного хозяйства связан с ориентацией производства на потребителей и конкурентов. Это предполагает гибкое приспособление к изменениям рыночной конъюнктуры.

Основными задачами анализа рынка ресторанных услуг являются изучение спроса на продукцию (услуги); анализ рынков сбыта, обоснование планов реализации, анализ ценовой политики; оценка конкурентоспособности; формирование процесса продвижения ресторанных услуг.

Экономический и политический кризис в Украине затронул абсолютно все сферы деятельности, в частности ресторанный бизнес. Рестораторы утверждают, что некоторым небольшим заведениям пришлось закрыться, а вот крупные сети всеми силами стараются удержаться на плаву. Эксперты

отмечают, что за время кризиса прибыль ресторанов в Украине снизилась на 30% [4].

Каждая отрасль украинской экономики по-своему приспосабливается к кризису, который хоть и не закончился, но темпы падения явно (исходя из данных официальной статистики) снижаются или стабилизируются.

Согласно оценкам рестораторов, ситуация на ресторанном рынке не стала за последнее время хуже. При этом предпосылок для существенных улучшений эксперты пока не видят [4; 6].

Посещаемость ресторанов – приблизительно на том же уровне, что и в прошлом году. Помесячно могут быть колебания около 10%, но суммарные показатели остаются на уровне прошлого года. Средний чек за год вырос – порядка 15%. Это связано в первую очередь с вынужденными корректировками цен.

Ресторанный рынок отреагировал на военные действия на востоке Украины и, как следствие, экономический кризис – прогнозируемым спадом всех операционных показателей. Гости стали еще более экономными, и посещение ресторанов для многих пошло под «секвестр». Рестораторы в большинстве своем стремились не утратить оставшуюся часть посетителей, предпринимали всевозможные меры оптимизации, урезали свою маржинальную прибыль. Хотя были и такие, кто практически не ощутил тяжелое дыхание тотальной экономии гостей. Как следует из отчета Euromonitor International, сегмент фастфуда сохранил лидирующие позиции на рынке ресторанного бизнеса, показав 16%-ный рост продаж [4].

По итогам прошлого года элитный сегмент в среднем потерял порядка 50% своего оборота, в дешевом сегменте спад составил до 30–40%. Лучшее дело обстояло в среднем ценовом сегменте, хотя и там падение оборота достигало 25–30%.

Перспективы развития ресторанного бизнеса в Украине тесно переплетаются с туристическим бизнесом [6]. Положительный прогноз вероятен при условии повышения потоков иностранного группового и индивидуального туризма. Эксперты говорят, что Украина имеет высокие оценки и положительные отзывы международных рейтинговых агентств Globe Spots, National Geographic, Trip Advisor, The Lonely Planet, которые после проведения Евро-2012 подняли туристические прогнозы страны с «аутсайдер» до «это необходимо увидеть», изменили восприятие Украины до уровня востребованных туристических направлений.

Привлечь туристов поможет восстановление исторической ценности многих городов, а также модернизация туристической инфраструктуры. Еще одним важным моментом считают проведение различных международных мероприятий, которые лишней раз заявляют об Украине в мире.

Правда, пока основным фактором привлечения туристов в Украину является стабилизация ситуации на востоке. Все-таки это значимый фактор, который уже привлек негативное внимание к нашей стране. Туристы начнут активно посещать Украину, только когда будут уверены в своей безопасности, находясь в стране.

Несмотря на сложную экономическую ситуацию в Украине, ресторанный рынок продолжает развиваться. Все чаще на улицах больших городов появляются заведения разнообразных форматов и концепций. Одни рестораны вскоре закрываются, а другие, наоборот, – процветают.

Так, в Киеве за текущий год количество ресторанов уменьшилось, но выросли продажи. Преимущественно закрывались несетевые заведения: отраслевая статистика свидетельствует, что половину ресторанов открывают новички в этом бизнесе [3; 4].

На ресторанном столичном рынке наблюдается парадоксальная ситуация: количество объектов сокращается, несмотря на рост посещаемости. По данным экспертов, за первые шесть месяцев этого года количество гостей выросло примерно на 10–15%. Наибольшей популярностью в Киеве пользуются «Любимый Дядя», «Собака съела голубя», Klukva & Brukva и др. [5].

Многим заведениям не хватает клиентов, но интерес к ресторанному бизнесу растет. Так, за последние годы количество желающих купить франшизу ресторатора или получить консалтинговые услуги выросло в среднем в два раза по сравнению с показателями прошлых периодов.

Рестораторы прогнозируют, что рынок вернется к показателям докризисного периода в течение двух лет, но такие оптимистичные прогнозы сбудутся только в том случае, если правительству удастся удерживать курс национальной валюты.

Нынешний ресторанный рынок Украины – это большой food court, на котором существует множество разнообразных операторов. Современный ресторанный рынок ориентирован в первую очередь на гостя. Рестораторы должны и дальше искать новые интересные форматы, а гости – заниматься самообразованием в области гастрономии.

Главная идея – избавление от привычной для официальных мероприятий «скуки» и нестандартный подход к событию. Так, в некоторых международных отелях действует специальная программа, в рамках которой профессиональные тренеры проводят мастер-классы на различные темы. В Orlando Resort открыт учебный лагерь бариста, где гости отеля могут узнать, как правильно готовить традиционный эспрессо, ристретто или латте, а также научиться разным способам оформления и презентации кофе.

Для маленьких гостей и их родителей в отелях Four Seasons организованы традиционные чаепития с фирменными десертами, совмещенные с уроками этикета. Отель Grand Bohemian (Чарльстон, Южная Калифорния), который входит в Marriott's Autograph Collection, позволяет гостям смешивать собственные вина под руководством опытных сомелье. «Виночерпии» расскажут о вкусах и ароматах, а после помогут разлить полученный напиток в бутылки с уникальными этикетками, чтобы забрать с собой. Благодаря разнообразию вкусов и ароматов, гости могут создать свое идеальное вино, которое полностью соответствует личным предпочтениям.

Что касается ресторанного бизнеса в Украине, то сейчас набирает популярность масса сервисов, которые предлагают, например, празднование дня рождения на воскресных бранчах в гостинице. Актуальным является street food – течение еще довольно новое для Украины. Еще год-полтора интерес к этому гастрономическому направлению будет расти, а дальше он просто стабилизируется, приобретет какие-то более-менее организованные формы. Конкурентная борьба оставит там определенные форматы, которые будут существовать, остальные будут вынуждены с рынка уйти, потому что с точки зрения доходности это не самое выгодное предприятие.

По мнению экспертов, в перспективе для Украины привлекательными с точки зрения инвестирования станут любые недорогостоящие форматы, в основе которых будет лежать интересная идея [6]. Популярным будет все то,

что касается украинской кухни, монопродуктов, фастфуда и casual food. Еще более активно будут развиваться бары. Уже сейчас существует тенденция, когда на рынке появляется новое интересное заведение, его стиль тут же копируется другими рестораторами, и так появляются десятки клонов. При этом барная культура Украины еще далека от совершенства и насыщенности. Вскоре должны появиться и винные бары. Также популярными станут заведения в азиатском формате, потому что азиатская еда у нас пользуется спросом, и эта ниша практически не занята. Это касается китайских, корейских, вьетнамских ресторанов, которых нет на рынке Украины. Помимо прочего, будут развиваться латиноамериканская тема и мексиканская кухня, которая сейчас в тренде.

Что же является ключевым фактором успешного ресторана? Идеальная формула успешного ресторана – «50% эмоций плюс 50% просчета, умножить все это на постоянный контроль со стороны ресторатора». Успешное планирование продвижения ресторана, а именно разработка плана продвижения ресторана является одним из ключевых звеньев в организации ресторанного бизнеса, поскольку позволяет подготовиться к различным ситуациям и уменьшить количество неожиданных «сюрпризов».

Вкусная еда, привлекательный дизайн интерьера, идеальная чистота, отличная кухня и хорошее обслуживание, конечно, являются основой успешной работы ресторана, но этого недостаточно, чтобы привлечь новых посетителей. Важно разработать и внедрить эффективную концепцию позиционирования ресторанного объекта на рынке услуг.

Позиционирование – это процесс создания образа и ценностей у клиентов целевой аудитории таким образом, чтобы они осознали, почему существует компания или бренд и чем она отличается от конкурентов.

Для того чтобы выбрать успешную концепцию позиционирования, необходимо проанализировать текущее положение дел вашего предприятия, определить сильные и слабые стороны вашего бизнеса, а также возможности и угрозы; провести мониторинг конкурирующих ресторанов и баров; определить целевую аудиторию посетителей; идентифицировать свое заведение; определить свои главные конкурентные преимущества, которые и составят основу концепции позиционирования вашего ресторанного предприятия.

Проанализировав предпочтения постояльцев и возможности своего объекта, важно придумать свой креативный набор «активностей» для привлечения новых и постоянных гостей гостинично-ресторанного комплекса. Правильно разработанная концепция позиционирования и эффективный план продвижения ресторанного продукта станут основой для выбора и обоснования успешной маркетинговой стратегии развития предприятия на перспективу.

Выводы

Мониторинг состояния спроса и предложения ресторанных услуг индустрии гостеприимства позволяет прогнозировать дальнейшее развитие экономических ситуаций на рынке и делать соответствующие выводы о степени удовлетворения потребностей потребителей товаров и услуг.

Сфера ресторанной индустрии Украины ощутила на себе суровые реалии экономических реформ, приватизации и кризиса в стране, что привело к снижению оборотов заведений ресторанного хозяйства вследствие уменьшения посещаемости и суммы среднего чека. На ресторанном рынке Украины происходит постоянная ротация: одни заведения открываются, а другие –

закрываются. Но, несмотря на все экономические трудности, сфера ресторанной индустрии имеет устойчивую тенденцию к росту.

Факторами спроса являются качество предлагаемых ресторанных услуг, их оформление, широта предлагаемого ассортимента, что определяет возможность выбора, повышение качества времени клиента (тайм-маркетинг), характеризующие степень удовлетворенности потребителей услуг предприятий ресторанного бизнеса и определяющие уровень их лояльности.

Ресторанные заведения, которые открываются за последние пять лет в Украине, можно условно разделить на три группы:

- национальные (в полном объеме представлена национальная кухня народов мира; интерьер включает элементы национального декора, этнические предметы потребления);
- с предметной специализацией, быстрого обслуживания;
- тематические (или концептуальные, потому что создавались «под идею», по определенной концепции);
- без четкого направления.

Рестораны Украины предлагают сегодня своим гостям блюда кухонь более 30 государств мира. В последние годы в ресторанном бизнесе наметилась тенденция к синтезу кухонь различных этносов в рамках одного заведения одного меню, что позволяет предложить гостям заведения предприятия ресторанного хозяйства максимум гастрономического разнообразия.

Для того чтобы быть конкурентоспособными на рынке предприятия ресторанного хозяйства, как свидетельствуют практика, сегодня внедряют разные инновационные изменения, которые отвечают запросам и потребностям посетителей данных заведений. Также отслеживается устойчивая тенденция перемещения услуг по организации потребления продукции и обслуживания потребителей из залов заведений ресторанного хозяйства к рабочим местам (офисы, учреждения); местам отдыха; местам празднования юбилеев и других официальных и неофициальных праздничных событий; к дому. В международной индустрии гостеприимства эта услуга получила название catering.

Перспективными считаются следующие направления развития ресторанного бизнеса в Украине:

- 1) сети ресторанов (как способ уменьшить расходы на оптимизацию менеджмента, закупочных цен и затрат на продвижение) и фаст-фудов, но аутентичных, а не скопированных с зарубежных моделей;
- 2) миниатюрные демократические кафе в формате достаточно востребованных в советское время молочных, пирожковых;
- 3) специфические ресторанные заведения. Среди модных тенденций ресторанного бизнеса на ближайшее время специалисты называют «здоровые рестораны», которые, например, предлагают раздельное питание или диетические блюда.

Список использованных источников:

1. Антонова В.А. Регулирование стратегического развития ресторанного хозяйства / В.А. Антонова // Тенденции и перспективы развития туризма и гостеприимства в условиях кризиса. – СПб. : СПИГ, 2015. – С. 62–68.
2. Максимова Т.С. Моніторинг розвитку ринку дозвілля та розваг як інструмент діагностування реалізації стратегії управління маркетинговою діяльністю підприємства / Т.С. Максимова // Маркетинг і менеджмент інновацій. – 2014. – № 2. – С. 114–121.

3. Інновації в ресторанному бізнесі [Електронний ресурс]. – Режим доступу : <http://nippondom.com/innovatsii-v-restorannom-biznese>.
4. Состояние рынка [Електронний ресурс]. – Режим доступу : http://www.franchising.org.ua/page/sostojanie_rynka.
5. 100 кращих ресторанів України: лідирують Київ, Одеса та Львів [Електронний ресурс]. – Режим доступу : <http://organic.ua/ru/lib/1113-100-krashhyh-restoraniv-ukrainy-lidyrujut-kyiv-odesa-ta-lviv>.
6. Количество ресторанов растет [Електронний ресурс]. – Режим доступу : <http://www.kiev-rus.org/?p=944>.

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BUSINESS PROCESS MANAGEMENT IN THE CONTEXT OF INNOVATIVE DEVELOPMENT OF AN ENTERPRISE

Summary

The article focuses on the important problem of business process management in the context of the innovative development of an enterprise. It is proved that unstable external environment creates the need for searching innovative management techniques. It is made clear that the activity of most enterprises is based on the traditional approach to function allocation in the management system and is not capable of ensuring competitiveness in the market. To solve these problems, it is necessary to adopt the process approach as a collection of implemented business processes. The paper presents the interpretation of such concepts as «process approach to managing innovative development» and «business processes»; describes the key elements of a business process; provides major classification categories of business processes. It is established that in order to ensure the business process efficiency, it is necessary to manage business processes by means of using various mechanisms based on flexible technologies that are capable of guaranteeing the adaptability of business processes to changing environment. The article presents the model for business process management of an enterprise and characterizes techniques for business process improvement, which as a whole will allow an enterprise to increase management efficiency and ensure that strategic goals are achieved.

Introduction

The market changes that have recently taken place in the socio-economic system, the high level of competition, the impact of crisis phenomena at the level of the economy, the high unpredictability of changes in the external environment and the course of our country to accessing the EU require domestic enterprises to constantly search for new and more effective management techniques and tools aimed at achieving and strengthening competitive advantages in the market and their stable operation in the long term.

Overcoming the consequences of the financial and economic crisis has become the dominant trend for most enterprises seeking to improve product quality while reducing its cost price, and to ensure a quick response to constant changes in the external environment.

Consequently, the need of an enterprise to pivot to the innovative model of development and improvement of business processes becomes an important task.

One of the principal directions of creating an effective enterprise management system is applying the process approach to the organization and management of financial and economic activities. Fundamentally, the process approach is the identification of business processes in an enterprise and the development of a management system focused on the effective business process management.

It is business process management in an enterprise that allows finding ways to improving and achieving certain flexibility in business. Therefore, it is important and urgent to study theoretical aspects of business process management with the purpose of deepening research and methodological provisions and their subsequent use in practical activities, as it is aimed at increasing the efficiency and ensuring the competitiveness of domestic enterprises in dynamic business market conditions.

Part 1. Business processes of innovative development of an enterprise: Overview and classification

Under the conditions of unstable external environment, adverse conjuncture, and fierce competition among domestic industrial enterprises, there is a growing need to search for innovative management techniques and tools.

Enterprises are objectively reacting to the dynamics of socio-economic changes by adopting the process approach to management, the main determinant of which is the focus on business processes as a collection of mutually agreed activities aimed at achieving business goals.

The main prerequisites for effective business process management include the use of management concepts and techniques synthesis, which provide preventive levelling of the adverse effects of background and business environment factors and is a powerful tool for strengthening competitive positions of enterprises, expressed in increasing economic benefits and growth of market share [1].

Essentially, many enterprises were functionally oriented for a long period. It was only in the late nineties when the enterprises started shifting to process management. Such a transition was caused by specific conditions determined by the market environment, in particular: informatization of society, globalization processes development, fierce competition with the best world producers, consumer orientation, more developed consumer needs, and a significant reduction in the life cycle of products. It was these conditions that gave birth to a new approach to management – process management [2].

In general, we define «process approach to managing innovative development» as a targeted impact on a system of interrelated processes for the development and implementation of innovations and innovative projects aimed at achieving strategic goals, competitiveness and enterprise image leading to meeting the consumers' needs and yielding effective results at an enterprise.

The process approach is characterized by:

- the broad delegation of authority and responsibility to executors;
- the decrease in the number of decision-making levels;
- the increased attention to the quality of products (services);

- formalization of business process technologies with the purpose of their automatization [3].

The use of the process approach is reflected most fully through managing an enterprise as a collection of implemented business processes, which in turn are determined by the enterprise goals and objectives and ensure the implementation of all its activities [4].

There is no generally accepted definition of the term «business process» in the scientific literature; approaches to its interpretation vary depending on a particular type of activity a business process belongs to. While some authors provide a general definition of a business process, they do not associate it with the entrepreneurial sphere. Let us examine in more detail the scientific approaches to defining a business process with a view to their critical evaluation and the identification of key characteristics that reflect the essence of a business process as an economic category.

Hammer M. defines business process as a collection of different types of activities, within which one or more types of resources are used as «input», and which produce a specified «output» that has value for a particular customer [5]. D. Harrington argues that a business process is a logical, consistent, interrelated collection of activities. It consumes resources, creating value for the consumer [6]. B. Andersen points out that a business process is a sequence of logically interrelated, repetitive actions that result in using the company's resources for processing the object (physically or virtually) in order to achieve certain measurable results or products to satisfy internal or external consumers [7].

In the definition of A. Masalovich [8], a business process is a stream of actions (functions) having value for customers that pass from one executor to another, and with regards to relatively large business processes – from one structural unit to another.

H. Kalyanov [9] argues that a business process is an interrelated set of functions, in the course of which certain resources are consumed and a product that has value for the consumer is created.

In our opinion, A. Vinogradova [10] has suggested the broadest definition of the concept of a business process. She characterizes it as a cyclic collection of interrelated tasks (actions), having certain inputs (necessary resources) and outputs (result) that are of value for the consumer (internal or external).

For the purpose of an in-depth analysis of the approaches to defining the essence of a business process and the formulation of a generalized definition of this term, we will use the method of semantic analysis suggested by K. Bezhin [11]. The key elements of definitions commonly found in the works of a vast majority of authors will serve as a basis of the analytical:

1. A collection of sequential interrelated activities (functions, procedures, operations).
2. Transformation of resources into results (product, service).
3. The existence of an input and an output.
4. Repeatability in time (periodicity, cyclicity).
5. Creation of value for a consumer.
6. The goal is to meet the needs of a consumer.
7. The goal is to meet the needs of an enterprise [1].

Table 1 shows the approaches of scholars to the interpretation of the term «business process».

Approaches to defining the term «business process»

Author(s)	Definition of the term «business process»
Standard ISO 9000:2000 [12]	A business process is a collection of different types of activities, within which one or more types of resources are used as «input», and which produce a specified «output» that has value for a particular customer
Bortnik A. M. [13]	A business process is a stable, results-oriented collection of interrelated actions that with the help of certain technologies and as soon as practicable, transforms the inputs (resources) into outputs (results) that have value for internal and external consumers (customers) and ultimately contribute to the growth of the enterprise value
Yevdokymenko V. [14]	A business process is the implementation of the function in the course of time, the way to solve a business problem. A business process describes how the function is performed, in what order and in what variants, and also how the functions interact with each other in the work of the company
Kozachenko A. [15]	A business process is a sequential set of actions for the implementation of activities, that transforms resources received as an «input» in order to obtain a result that has value for a particular consumer
Medynskyi V. [16]	A business process is a collection of work stages that start with a few initial steps and end with the creation of a product that a client needs. It is the workflow that passes from one specialist to another, or from one department to another
Oikhman E. H., Popov E. M. [17]	A business process is a set of internal steps (kinds) of activity, starting with one or more «inputs» and ending with the creation of products that a client needs, which satisfy him/her in terms of cost, durability, service, and quality. Or – it is a complete flow of events in the system, which shows how a client starts, leads and completes the business
Polinkevych O. M. [18]	A business process of an enterprise is a collection of regulated and managed activities that use innovative resources and technologies that have consumer value, function in a new economy and are based on the latest scientific and technological developments, effective and efficient management
Riepin V. V. [19]	A business process is a structured sequence of actions aimed at performing a particular type of activity at all stages of the life cycle of the business profile
Rubtsov S. [20]	A business process is an operation included in the system of operations, the purpose of which is producing and delivering services/goods to operations entering the system, as well as to other systems
Sheyer A. V. [21]	A business process is a correlated set of repetitive actions (functions) that transform input material and/or information into an end product (service) in accordance with pre-established rules

Thus, based on the analysed scientific approaches to defining the term «business process», we suggest understanding it as a collection of interrelated operations in the economic activity of an enterprise, which uses innovative resources to receive an output in the form of a product (service) to satisfy consumer needs in the context of the innovative development of an enterprise.

It is important to identify the business process elements to ensure favourable conditions for their functioning at an enterprise (Figure 1).

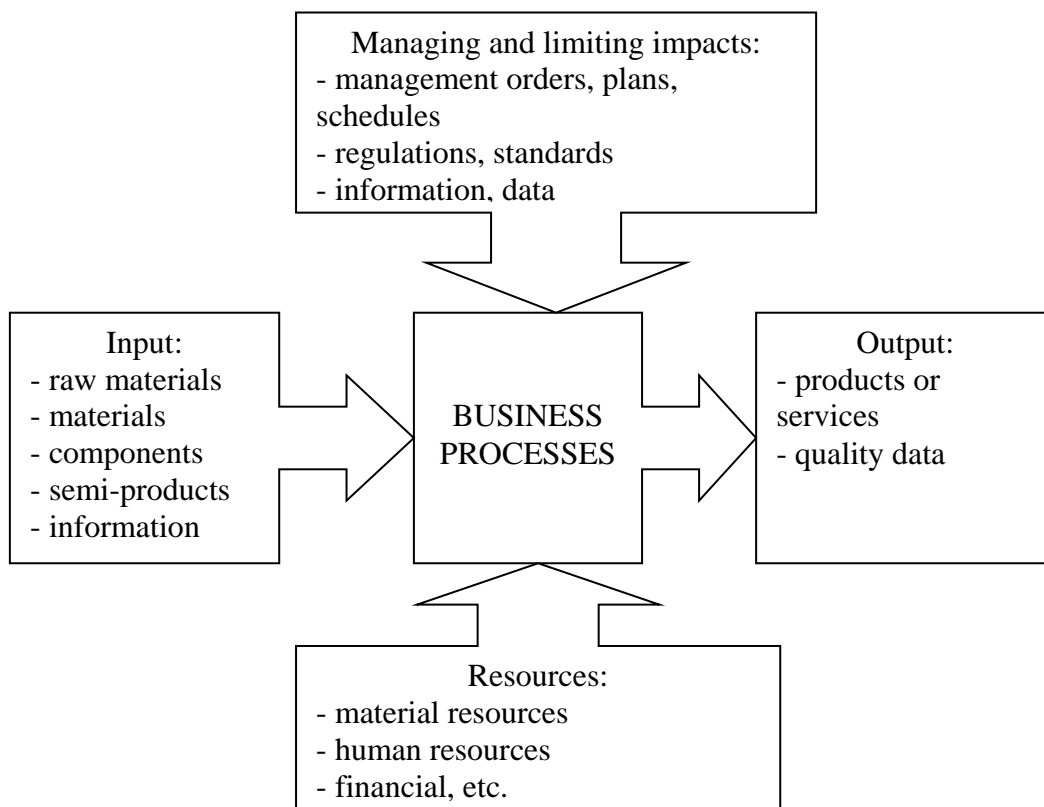


Fig. 1. Key elements of a business process [2]

As the key elements in Fig. 1 suggest, in order for the enterprise activity to function as a process, it is necessary to determine the requirements for «inputs» and «resources» (what quality and what criteria they must meet in order to achieve the effectiveness and efficiency of a business process); all regulatory acts that limit these activities, approved documents which describe this process (regulations, standards, methodologies, documentary procedures, etc.) must be identified; as well as requirements for the business process results and measurement indicators (output) [2].

One of the initial stages of the enterprise transition to the principles of process management is the classification of business processes. It allows us to subsequently identify the composition of individual business processes that are characteristic of enterprises in the economic sector being studied. Therefore, all business processes that occur are heterogeneous and have their inherent characteristics, depending on the type of activities of each enterprise. Classification of business processes is presented in Table. 2.

Basic classification categories of business processes

Category of business processes	Description
1	2
1. Based on results orientation (on the level of influence on the formation of added value) [22, 23]	
Primary business processes	<ul style="list-style-type: none"> - result in the main product (service) creation; - provide income for an organization; - add value – consumption value; - results are obtained by external customers (consumers) - are inherently horizontal processes.
Supporting business processes	<ul style="list-style-type: none"> - result in the creation of the conditions necessary for the flow of the primary processes; - provide resources for all business processes of an organization.
Administration business processes	<ul style="list-style-type: none"> - manage activities of an entire organization, both at the level of each business process and the business system as a whole; - ensure the increase in effectiveness and efficiency of the primary and supporting processes.
Development business processes	<ul style="list-style-type: none"> - create a value chain at a new measurement level; - ensure the profit in the long term by means of transforming or improving company's activities.
2. Based on the impact on the success of an organization [3]	
Key business processes	The processes that have the most influence on an organization achieving its main goal and reflect the actions external to an organization (results). These processes can be determined by ranking processes by the degree of their impact on performance through analysing customer satisfaction factors, influence on the shareholder value of an organization, increased sales, expansion of the product market, cost reduction, etc.
Critical business processes	The processes, improper performance of which may constitute an actual or potential danger to quality assurance, which is reflecting internal actions of an organization
3. Based on the orientation of business processes [24, 12]	
Customer-Oriented Processes	These are the processes of product execution, which determine the requirements of customers (inputs of these processes): design requirements, mode of production, delivery, and service. These processes as a whole have the greatest level of interaction with external consumers. COP's group of processes includes marketing and sales, design and development, production, delivery, product packaging, service and guarantees, consumer value creation processes.
Support-Oriented Processes	The processes in this group provide the necessary resources for client-oriented processes. They have the highest level of interaction with the operational level of client-oriented processes. Support-oriented processes combine labour resources, information technology, raw materials procurement, laboratory research, support for key processes, manufacturing of supply parts, management of warehouse infrastructure and the like.

1	2
Management-Oriented Processes	The processes of forming commitments, leadership, management resources, monitoring and decision-making at the top management level. Management-oriented processes include business planning, monitoring of management decisions, quality planning, resource planning, communications and the like.
4. Based on implementation level of business processes [25]	
Business process engineering	The set of processes, which are at the stage of their implementation and debugging, as well as those already implemented, which can be characterized as flexible (able to quickly change the configuration without loss of efficiency).
Operational business processes	Developed and implemented processes that can be characterized as productive and debugged. The peculiarity of this type of business processes is the value chain development, the outputs of the previous business processes correspond to the resource requirements of the following processes.
Business process reengineering	The need to distinguish this type of business processes is due to the fact that reengineering is not a spontaneous and transitory action. It lasts a certain time and causes the need to manage these processes in a specific way – to get the maximum performance for a given process organization and to perform «defrost», which precedes the subsequent changes.
5. Based on the stability of business processes [25]	
Innovative (dynamic) business processes	The efficiency of the business processes of this group does not depend on a strictly regulated sequence of actions but is the result of a creative, unregulated process. The key factor in the efficiency of the given business processes is the professionalism and skills of the executor/executors (know-how). The business processes efficiency depends on the human factor.
Programmable (static) business processes	A group of business processes, the adjustment and regulation of which is of paramount importance for their effective implementation. Processes reach the maximum efficiency through often-performed repetition of procedures and operations, which form it. At the same time, at the stage of engineering such processes, the best possible option should be chosen among the array of possible production technology options.

The given classification of business processes is very convenient for the use by managers of an enterprise since it gives an opportunity to observe the processes of the enterprise's activity and introduce effective management. Each of the groups of business processes plays its important role and contributes its share to the formation of an enterprise value.

Part 2. Business process management techniques and modelling in the context of innovative development of an enterprise

With the aim of providing for the business process effectiveness, they need to be controlled through using various mechanisms, and management should be based on flexible technologies that can ensure that business processes adapt to changing operating conditions.

We suggest that business process management is defined as a targeted activity of the management entities towards controlled objects through employing techniques and tools and with the purpose of achieving the set strategic goals, i.e. creating competitive products (services, works) capable of satisfying external and internal consumers and ensuring a stable development of an enterprise in a dynamic market environment. At the same time, business process management is a complex process of developing and implementing managerial decisions to guarantee a high level of business process efficiency, which is reflected in the enterprise performance and customer satisfaction [4].

Summarizing current theoretical and applied research on the challenges of business process management, it is worth highlighting their main characteristics:

- business process technology – the subject matter and sequence of work;
- process boundaries – operations characterizing its beginning and completion;
- the process owner – an employee of an enterprise who is responsible for the process results;
- process resources – a collection of material, financial, information, personnel and other resources for the implementation of a process;
- process parameters – characteristics that allow evaluating the efficiency and effectiveness of a process;
- the process results' consumer – an external or internal subject receiving the result of a process;
- process inputs – a set of input objects in the form of raw materials, goods, information, turned into outputs as a result of a process;
- process outputs – products, goods, services, resulting from a process [5].

Using this model will allow an enterprise to improve management efficiency and ensure the achievement of strategic goals based on building long-term relations with consumers and comprehensive identification and satisfaction of their needs.

Modelling of business processes plays an important part in a business process management of an enterprise. The main tasks of modelling are:

- 1) to provide an understanding of the enterprise structure and the process dynamics;
- 2) to provide an understanding of the current problems in an organization and the possibilities for their solution;
- 3) to make sure that customers, users, and developers alike understand the goals and objectives of an enterprise;
- 4) to create a basis for the formation of software requirements, which automates business processes of an enterprise.

Several different techniques, based on both structural and object-oriented approaches, are used for business process modelling. One can single out the following basic techniques of the business process development [26]:

- 1) the technique for the rapid analysis is based on the identification, with the assistance of a group of experts, of problems arising from implementing individual business processes, the search and analysis of possible solutions for the identified problem areas and the rapid implementation of measures to improve them;
- 2) the technique of idealizing business processes is based on the ideal system technique that is widely used within the system approach. It consists of trying to develop ideal business processes. After they are developed, it is necessary to identify only those areas in them that cannot be directly implemented in practice;

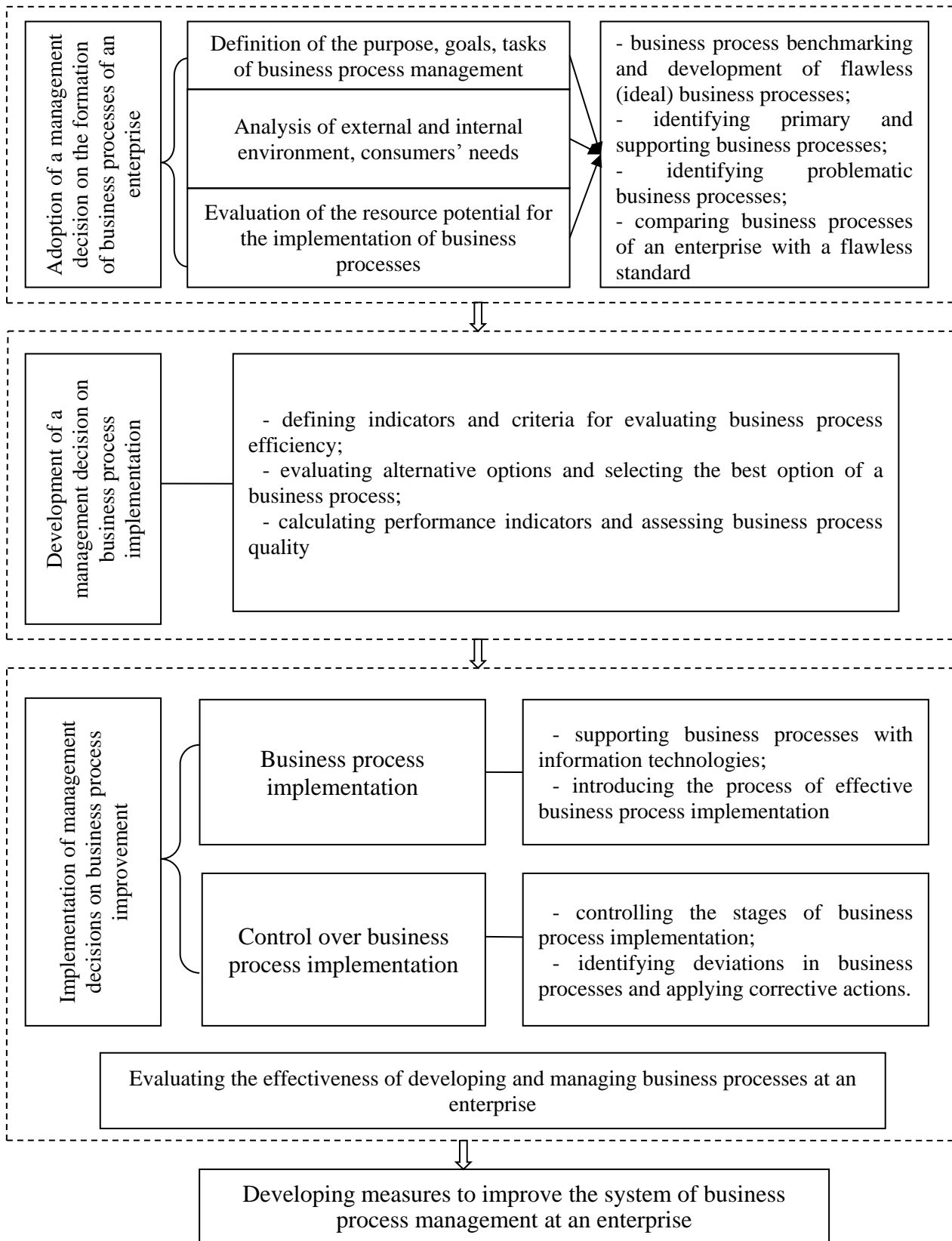


Fig. 2. Model for business process management at an enterprise

3) the main purpose of statistical business process control is to identify the factors that affect its effectiveness and classify them into two groups: factors that cause a chronic variation in a business process; factors that cause sporadic variation;

4) the methodology of Quality Function Deployment (QFD) allows to determine the interrelations between the requirements and means of their satisfaction and to conduct an analysis of the identified relationships. The technique is implemented by

constructing a special table (the so-called «house of quality»), which contains the results of a business process;

5) the technique of operating unit analysis aims at clearly defining the technical requirements for a product or service that are necessary for an internal or external consumer;

6) Business Processes Redesign is an improvement technique based on the detailed analysis of existing business processes and which does not assume creating a fundamentally new version of this business process but aims at improving the existing process so that it matches the strategic objectives of an enterprise. O. Honcharova [27, p. 80] indicated: 1) redesigning is applied to those processes that function quite successfully and take place at the moment; 2) this approach is advisable to use if improving the performance of an enterprise by 30-60% can provide it with competitive advantages.

The following means of improvement may be used for the redesign:

- 1) elimination of bureaucracy
- 2) analysis of added value;
- 3) elimination of duplication;
- 4) simplification of methods;
- 5) reduction in cycle;
- 6) restructuring of the organization;
- 7) standardization;
- 8) automation of the process, application of information technologies [28];

7) benchmarking is a systematic technique for identifying, understanding, and creative development of projects, processes and procedures of higher quality to improve the current activity of an organization by examining how different organizations perform the same or similar operations.

Benchmarking costs less and is less risky but it can only be used when an enterprise has a free access to information about the activities of third-party enterprises, which in practice is not always possible. When using business process benchmarking, the key processes are identified and compared with the best equivalent processes to determine undesirable differences. Typically, benchmarking is defined by several organizations that function better than the organization that conducts the study;

8) Facial Affect Scoring Technique – FAST is the latest approach designed to quickly improve the business process. The FAST approach is based on a one- or two-day analysis, during which the sources of the problem are identified. A typical improvement provided this approach is applied, involves reduction of costs, cycle time and error rates by 5-15% [28];

9) business process reengineering is the most drastic of all techniques because it is based on a completely new view of the process goals and the final results that must be achieved. In fact, business process reengineering does not involve its improvement but its development.

According to the definition of M. Hammer and J. Champy in their paper [5], the business process reengineering is «the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service, and speed.»

The goal of business process reengineering is to integrate and systemize the modelling and reorganization of material, financial, information flows, aimed at simplifying the organizational structure, redistributing and minimizing the use of

various resources, reducing the time needed to fulfil clients' needs, and improving the quality of their services [27].

It is possible to single out the main goals of business process reengineering:

- 1) a significant reduction in the time required to perform functions;
- 2) a significant reduction in the number of employees and the cost of performing functions;
- 3) globalization of business;
- 4) work for the future needs of a client;
- 5) accelerated advancement of new technologies [28].

Considering this, when implementing business process reengineering at an enterprise, positive results are expected:

- detailed description and formalization of business processes will avoid unnecessary procedures, simplify the document flow, minimize labour costs;
- the introduction of the information and analytical support system makes it possible to effectively manage business processes and an enterprise as a whole;
- management receives prompt and reliable information for taking management decisions, the ability to monitor the activities of structural units, groups of business processes;
- the job depth is growing, which motivates employees to work efficiently;
- the responsibility and initiative of employees within the limits of the mandate given is increasing;
- the importance of the workers' competence is growing, resulting in the need for the training of workers, transition to continuing professional education;
- the organization of labour remuneration is changing – according to the results of the work, which is easier to assess within the limits of a business process;
- the performance criteria is changing: the goal becomes to satisfy the needs of a client, not the management;
- the functions of supervisory managers are shifting from controlling to coordinating, the main role is to help solve problems arising in the course of a business process;
- the number of hierarchical levels in an enterprise organizational structure is decreasing, the orientation is shifting from a function to the processes, and reduction of management levels brings the leadership closer to immediate executors [29, p. 240].

Thus, under the current economic conditions for the establishment and development of enterprises, there are objective reasons that indicate and justify the need for a transition to adopting and implementing a process-oriented model of enterprise management. Today, the functioning of an organization and the modern production process should be viewed as a collection of separate interrelated business processes, the definition and grouping of methods for their improvement and timely implementation, depending on changes in the production relations and external environment. The identification of business processes, their analysis, and further improvement are a significant reserve for increasing the competitiveness of an enterprise and efficiency of its activities.

Conclusion

The management systems at most enterprises have long failed to comply with the current requirements of a dynamic market environment, which is constantly changing as a result of adapting to inconsistent needs of consumers and to competitors. In order to increase the efficiency of industrial enterprises and achieve strategic goals, it is

necessary to reorganize the management system based on the process approach that is understood as a collection of business processes aimed at achieving the goals of business entities and increasing competitiveness.

At the same time, business process management should be connected with the enterprise development strategy, take into account the basic needs of consumers, be flexible and adapt to the changing conditions of the market environment.

In addition, to achieve the enterprise objectives, the management needs to pay a special attention to solving the issues of improving business processes. Identification and modelling of the business process system ensure transparency of management, detection of problems, and their further solution, all of which leads to an increase in the enterprise efficiency. The timely diagnosis of business processes is an important condition for their management, as it makes it possible to adequately and quickly respond to changes in both the external and internal environment of the company's operation.

One of the most promising areas for improving the management system of the enterprise economic activity includes using modern methods of business process modelling that create ample functional opportunities.

Thus, the rational business process management allows implementing the set strategic goals, which results are in increasing the economic efficiency of production and competitiveness of products.

References:

1. Melnychenko S. V. Business process management in tourism: monograph / S. V. Melnychenko, K. A. Sheyenkova. – K. : Kyiv National University of Trade and Economics, 2015. – 264 p.
2. Urba S. Key elements of business process management / S. Urba // Bulletin of Lviv University. Economics series. – 2014. – Issue 51. – pp. 215-221.
3. Yelifierov V. H.: Business processes: regulation and management / V. H. Yelifyerov, V. V. Riepin. – M. : Scientific and Publishing centre INFRA-M, 2013. – 319 p.
4. Morshchenok T. S. Theoretical aspects of business process management in the context of implementing developmental strategy of an enterprise / T. S. Morshchenok // Business Inform. – 2014. – No. 11. – pp. 295-302.
5. Hammer M. Reengineering the corporation: a manifesto for business revolution: transl. from English / M. Hammer, J. Champy. – SPb.: Publishing House of SPbSU, 1997. – 332 p.
6. Harrington H.J. Business process improvement – documentation, analysis, design and management of business process improvement / H.J. Harrington, E.C. Esseling, H. Van Nimwegen. – SPb.: Azbuka, 2002. – 238 p.
7. Andersen B. Root cause analysis: simplified tools and techniques / B. Andersen, T. Fagerhaug. – ASQ Quality Press, 1999. – 156 p.
8. Masalovych A. Increasing enterprise competitiveness through operational and strategic management tools [On-line]. – Available at : http://www.marketing.spb.ru/conf/2002-12-ram/rozn_6.htm.
9. Kalyanov H. N. The foundations of consulting in the automatization of the enterprises and establishments / H. N. Kalyanov. – IT Academy, 1998.
10. Vynohradova O. V. Reengineering of the trading enterprises: theory and methodology: dissertation, Ph. D. in Economics: 08.06.01 / O. V. Vynohradova. – Donetsk National University of Economics and Trade named after M. Tugan-Baranowski. – Donetsk, 2006. – 435 p.
11. Bezhin K. S. Managing the quality of business processes in an enterprise: dissertation, Ph.D in Economics: 08.00.04 / K. S. Bezhin. – Pryazovya State Technical University – Mariupol, 2009. – 196 p.
12. ISO. The ISO 9000:2000 guidance modules – Guidance on the Terminology used in ISO 9001:2000 [On-line]. – Available at: <http://www.iso.org/>.
13. Bortnik A. M. Business process management: details and implementation advantages [On-line] / A. M. Bortnik // Scientific Bulletin of the National University of the State Tax Service of

Ukraine (Economics, Law). – 2013. – No. 3. – pp. 30-36. – Available at : http://nbuv.gov.ua/UJRN/Nvnudpsu_2013_3_5

14. Yevdokymenko V. Business processes, process management and efficiency / V. Yevdokymenko // Human resources management. – 2004. – No. 3. – pp. 33–35.

15. Kozachenko A. V. Practical approaches to improving business processes: CASE – tools for marketing modeling / A. V. Kozachenko [On-line]. – Available at : <http://easy-code.com.ua>.

16. Medynskiy V. H. Reengineering of innovational enterprise / V. H. Medynskiy, S. V. Ildemenov. – M. : Unity, 1999. – 414 p.

17. Oikhman Ye. H. Business reengineering, organizational reengineering and information technologies / Ye. H. Oikhman, E. M. Popov. – M.: Finance and statistics, 1997. – 333 p.

18. Polinkevych O. M. Business process management in the system of innovational development of an enterprise: dissertation, Ph. D. in Economics: 08.00.04 / O. M. Polinkevych. – Khmelnytskyi National University. – Khmelnytsyi, 2015. – 41 p.

19. Riepin V. V. Business processes of a company: development, analysis, regulation / V. V. Riepin. – M.: RIA Publishing house «Standards and quality», 2007. – 240 p.

20. Rubtsov V. Corporate target management / [On-line] / S. V. Rubin. – Available at : <http://www.orrsv.narod.ru/htm> – 2001.

21. Sheyer A. V. Business processes: key definitions, theory, methods / A. V. Sheyer / Transl. from English by N. A. Myhailova – M.: Viest-Metatechnologiya, 1999. – 151 p.

22. Arefyeva, O. V. Business processes of service enterprises: factors, formation, competitiveness [Text]: [monograph] / O. V. Arefyeva, T. V. Lutska; European University. – K. : European university Publishing, 2009. – 96 p.

23. Yefimov, V. V. Description and improvement of business processes [Text]: textbook / V. V. Yefimov ; ed. by N. A. Yevdokimova; Ulyanovsk State Technical University. – Ulyanovsk : USTU Publishing, 2005. – 84 p.

24. Elliott, J. J. Design of a product-focused customer-oriented process [Text] / J. J. Elliott // Information and Software Technology: 42(14), 2000. – P. 973-981.

25. Chernobai, L. I. Business processes of an enterprise: classification and structural and hierarchical model [Text] / L. I. Chernobai, O. I. Duma // Economic analysis: collection of scientific papers / Ternopil National Economic University; editorial board : V. A. Deriy (editor in chief) and others. – Ternopil : Publishing and printing center TNEU «Economic thought», 2015. – Vol. 22. – No. 2. – Pp. 171-182.

26. Komandrovskaya V. Ye. Business processes of an enterprise: essence and tools for improvement [On-line] / V. Ye. Komandrovskaya, O. Yu. Morozenko. – Available at : <http://jrn1.nau.edu.ua/index.php/PPEI/article/view/325/314>

27. Honcharova O. M. Business process reengineering as a technique of process management / O. M. Honcharova // Bulletin of Kyiv National Taras Shevchenko University. – 2013. – No. 10 (151). – Pp. 78-82.

28. Shulhina L. M. Innovational development of the enterprises: strategy formation [Text] : monograph / L. M. Shulhina, V. V. Yukhymenko; National Technical University of Ukraine «Kyiv Polytechnic University». – K. : Univest PrePress, 2015. – 212 p.

29. Cherchyk L. M. Business process reengineering as a tool of strategic changes management / L. M. Cherchyk // Collection of scientific papers of Lutsk National Technical University. – 2013. – Issue 10 (38). – Pp. 233-241.

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ВИКОРИСТАННЯ СУЧАСНИХ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ В УПРАВЛІННІ ТРАНСПОРТНО-ЛОГІСТИЧНИМИ КОМПАНІЯМИ

Анотація

Глобалізація, розвиток ринкових відносин, орієнтація економіки України на світове співробітництво та постійно зростаюча конкуренція на ринку транспортно-логістичних послуг вимагають від підприємств галузі суттєвих змін, спрямованих на підвищення ефективності їх функціонування та посилення конкурентних позицій на ринку. Аналіз спектру транспортно-логістичних послуг українських та зарубіжних компаній дав можливість визначити перспективні послуги, які можуть розширити їх ринкову нішу та збільшити доходи. Виділено такі головні напрями: розширення та покращення ІТ-компетенцій, консультаційних послуг, повне забезпечення логістики для клієнтів (аутсорсинг). Для швидкого та економічно обґрунтованого розв'язання складних завдань управління компанією необхідно використовувати комплекс сучасних інформаційних програм та технологій, які забезпечать ефективну інформаційну систему. Аналіз програмного забезпечення Diamant/3, яке використовує низка провідних німецьких транспортно-логістичних компаній, показав вагомість упровадження логістичного контролінгу для оптимізації логістичних процесів та зниження логістичних витрат на основі Web-базованих та ІТ-технологій. Поширеним є програмне забезпечення «ІС: Підприємство 8.2». Проведено порівняльну характеристику програмних продуктів «ІС: Підприємство 8.2» та Diamant/3 з огляду на те, які можливості вони дають для прийняття управлінських рішень. Успішне впровадження контролінгу потребує такого програмного забезпечення, яке інтегрує в собі різносторонні, широкі та зручні для користувача функції. Такими елементами системи контролінгу є: динамічний аналіз, динамічний звіт, інтелектуальні інформаційні панелі, ілюстрація сценаріїв розвитку, інформація про події.

Вступ

Розвиток сегменту ринку ІТ-технологій, включаючи програмне забезпечення, розвивається особливо швидко, що спричинено досягненнями в галузі нових глобальних мережних технологій та посиленими вимогами до оптимізації систем управління в сучасних умовах господарювання. Зараз на ринку є безліч зарубіжних та вітчизняних програмних продуктів, які спрямовані на автоматизацію бізнес-процесів. Сучасні інформаційні системи, які використовуються транспортно-логістичними компаніями, повинні відображати всі бізнес-процеси, містити в собі елементи контролінгу та забезпечувати необхідною інформацією про їх зміну в часі та просторі. Саме автоматизація всіх логістичних процесів та їх повне відображення в інформаційній системі дадуть можливість швидко приймати оптимальні

рішення в управлінні логістичною діяльністю, а також реалізовувати комплексні проекти, що сприятимуть росту прибутковості, результативності та конкурентоспроможності.

Параметри та умови логістичної діяльності визначаються такими основними характеристиками логістичних послуг, як: взаємозв'язок із джерелом, варіативність якості, цілеспрямованість послуг, винятковість, послуги логістичного характеру, як і будь-які інші послуги, не можна зробити «про запас», еластичність попиту на послуги, оперативність [1, с. 108]. Нині в ціні продукції витрати на логістичні операції становлять значну частину. Сучасний бізнес висуває високі вимоги до якості, обсягу і доступності логістичних послуг. Лібералізація міжнародної торгівлі сприяє зростанню ринку цієї специфічної продукції, тому їх слід сприймати як комплекс послуг із виконання замовлення споживача на проведення роботи з організації та управління потоковими процесами для їх оптимізації.

Розділ 1. Спектр транспортно-логістичних послуг українських компаній: наявні та пріоритетні напрями

Розширення спектру логістичних послуг пов'язане передусім із приходом міжнародних компаній в Україну. Контроль ринку логістичних послуг із боку іноземних операторів вимагає підвищення якості послуг, набуття гнучкості структури, розвитку систем надання інтегрованих логістичних послуг. Із цією метою для українських підприємств важливим є опанування сучасних методів управління, впровадження кращого досвіду європейських партнерів, які є лідерами на даному ринку.

Для підвищення конкурентоспроможності транспортно-логістичних компаній в Україні потрібно постійно оптимізувати всі бізнес-процеси та розширювати спектр послуг для комплексного забезпечення потреб клієнтів. Аналіз успішних компаній, а саме ТОВ «Транссервіс-М», «ТИР ГРУПП», УВК Україна, «ГалТранс-Логістик», «Транс-Сервіс-1», «Аврора Транс», SAT, TM-TRANS, «Овертранс», «ІСТ-Захід», «YarTrans Logistic», ПАТ «КВК «РАПІД», дав можливість визначити наявні та пріоритетні напрями розширення видів транспортно-логістичних послуг. Наприклад, ПАТ «КВК «РАПІД» виконує традиційний спектр послуг, пов'язаний із транспортуванням та складуванням, елементами контрактної логістики та тенденцією до аутсорсингу логістичних послуг (сама проста форма аутсорсингу), що визначає підприємство як оператора 2PL (Second Party Logistics) рівня.

Для поглибленого порівняльного аналізу було використано зарубіжний досвід транспортно-логістичних компаній. Великий обсяг експортно-імпорتنих операцій проаналізованих транспортно-логістичних компаній в Україні здійснюється з підприємствами Німеччини. Наприклад, замовниками виступають такі німецькі підприємства, як Dachser France CARGOPLUS, LIQUI MOLY GMBH, RHENUS Revival GmbH, SCHENKER Deutschland AG, VTG Rail Logistics Deutschland GmbH, ASSTRA Associated Traffic AG, LIM TRUCK LTD.

Для визначення можливості адаптації успішного досвіду був проведений аналіз діяльності німецької фірми Hartmann International. Фірма є постачальником 3PL-сервісу, що надає широкий спектр послуг і управляє всіма процесами – від вантажного відправлення до пункту призначення. Компанія організовує потік товарів та відповідний інформаційний потік для своїх клієнтів, бере на себе всі аспекти логістики і деякі елементи фінансових та інформаційних послуг. Hartmann International пропонує своїм клієнтам

комплексні пакети послуг, які додатково включають (окрім перерахованих вище) послуги з доданою вартістю (Value Added Services). Для цієї форми співпраці існує довгострокове партнерство між постачальником послуг і замовником. На рис. 1 визначено місце Hartmann International та ПАТ «КВК «РАПІД» у піраміді транспортно-логістичних послуг.

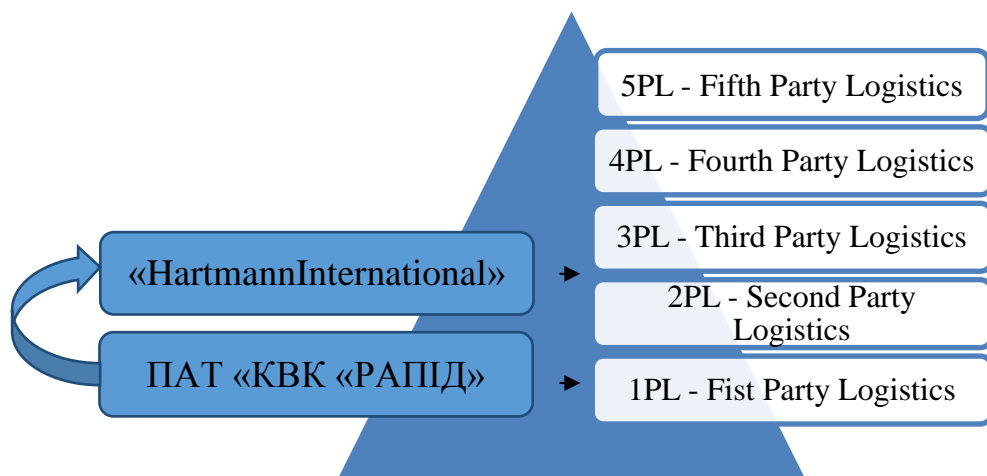


Рис. 1. Місце аналізованих підприємств у піраміді транспортно-логістичних послуг

Клієнтами Hartmann International є середні та великі підприємства, що зумовлено великою мережею взаємозв'язків між підприємствами за допомогою сучасних ІТ-технологій. Усі послуги Hartmann International базуються на системі стандартів якості, сертифікації та менеджменті навколишнього середовища (екологічний менеджмент). Ці системи закладено в основу всіх процесів підприємства, які забезпечують високу якість та професійну співпрацю. Одним із головних завдань Hartmann International є забезпечення індивідуальних транспортних рішень для кожного клієнта.

Головною метою підприємства є забезпечення швидкого та надійного постачання товарів споживачам «у потрібний час у потрібному місці». За допомогою наявних систем спостереження доставки вантажів у клієнта є можливість відслідковувати (простежувати) весь процес. На всіх етапах (інтерфейсах) штрихові коди товарів скануються, а отримана інформація вводиться у центральну інформаційну систему і активний ресурс електронної пошти повідомляє клієнта про статус доставки вантажу.

Нині Hartmann International є визнаним експертом у сфері транспортної логістики і самостійно аналізує усі свої процеси і проблеми за допомогою ефективних методів та програмного забезпечення. Логістичні послуги мають великий спектр, це: складська логістика, ІТ-компетенція, сервіс для логістики клієнта, консалтингові послуги (консультативні), контрактна (договірна) логістика (рис. 2).

У рамках консалтингових послуг і пошуку індивідуальних логістичних рішень для клієнта спеціалісти компанії Hartmann International переслідують цілі оптимізації логістичних структур підприємства, генерації нових рішень та їх реалізації. При цьому на підприємстві клієнта є постійна особа, яка в процесі розроблення рішень прослідковує їх реалізацію. Для компанії важливо, щоб клієнти повністю концентрувалися на своєму бізнесі та своїх основних компетенціях. І тоді Hartmann International оптимально узгоджує побажання клієнта з можливостями системи інформаційних технологій, щоб з'єднати всіх

учасників ланцюга постачання між собою. Для компанії дуже важлива повна інтеграція в інформаційні процеси своїх клієнтів.

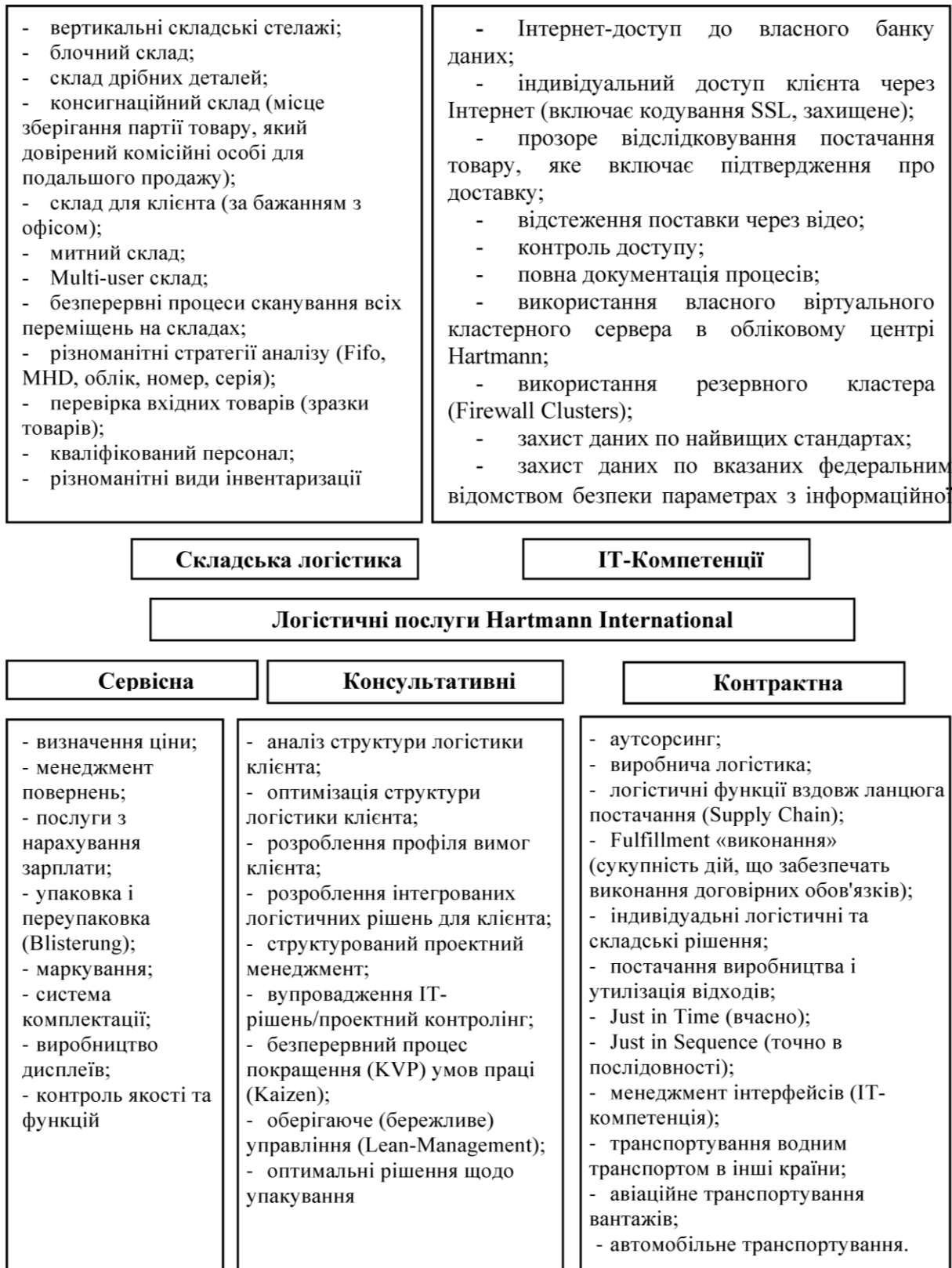


Рис. 2. Логістичні послуги Hartmann International

Для цього в інформаційні процеси і для комунікації зі своїми клієнтами підприємство використовує такі формати: EDIFACT Messages, FORTRAS Release 6, FORTRAS Release 100, CSV, EXCEL, DB access, SAP Konnektor, XML тощо [3]. Для підрозділу, що здійснює експедиторські послуги, розроблено портал для реєстрації товарів та відслідковування (простежування) процесу транспортування. Для клієнтів Hartmann International розроблена інформаційна система інвентаризації (наявність товарів на складах), завдяки якій споживач сам може управляти своїми поставками.

Клієнти Hartmann International отримують такі переваги: економія витрат, зростання швидкості поставок, професійний обмін щодо логістичних питань, концентрація на власних компетенціях (логістику підприємства забезпечує Hartmann International), підвищення конкурентоспроможності, ефективніше використання виробничих ресурсів за рахунок оптимізації матеріальних потоків; індивідуальні логістичні рішення.

У країнах ЄС захист навколишнього середовища має велике значення. Це проявляється в упровадженні енергозберігаючих технологій. Для Hartmann International є важливим зменшення навантаження на навколишнє середовище: підприємство організовує регулярні тренінги для своїх водіїв для зменшення використання палива. Важливим моментом є й використання відновлюваних джерел енергії: вітрової енергії, енергії Сонця (встановлено 10 тис. м² сонячних батарей) для власних потреб. Компанія одна з перших серед середніх підприємств отримала сертифікат DIN ISO 14001 (менеджмент навколишнього середовища).

Класифікація логістичних послуг необхідна для визначення підходів до їх реалізації, оптимізації та оцінки, що дасть змогу підвищити їх ефективність і якість [1, с. 108]. Аналіз транспортно-логістичних послуг був проведений із використанням їх класифікації за двома ознаками: функціональні послуги та послуги управлінського характеру (рис. 3). На аналізованих підприємствах значно переважає спектр функціональних послуг, частка послуг управлінського характеру є незначною, що характерно для ринку транспортно-логістичних послуг України. Отримані результати є вагомими під час розроблення стратегії розвитку підприємств, що сприятиме підвищенню їх конкурентоспроможності. Ринковий попит диктує розширення портфеля логістичних послуг, але, як показує практика, не всі послуги користуються попитом на постійній основі. Фахівці ринку логістичних послуг визначають, що найбільш затребуваними на ринку логістичних послуг є транспортування, внутрішньоскладська обробка товарних потоків, експедитування та послуги митних брокерів.

Також на ринку є стійкий попит на такі послуги, як управління товарними запасами, управління циклом замовлення. І найменш затребувані логістичні послуги з нестійким попитом – послуги інформаційного забезпечення [1, с. 108–109].

Розширення спектру транспортно-логістичних послуг дасть можливість розширити ринкову нішу та збільшити доходи підприємства, зокрема можна виділити такі головні напрями: розширення ІТ-компетенцій, консультаційних послуг, повне забезпечення логістики для клієнтів (аутсорсинг). Підприємства повинні сфокусуватися на підвищенні параметрів якості обслуговування, на розвитку довгострокових відносин із клієнтами, на посиленні інтеграційних процесів, що належать до спектру перспективних логістичних послуг.



Рис. 3. Наявні та перспективні транспортно-логістичні послуги для українських підприємств

Важливим завданням для підприємств є, з одного боку, збалансування запитів клієнтів транспортно-логістичних послуг із необхідним рівнем прибутку, з іншого – підтримка комплексу транспортно-логістичних послуг, які забезпечують належну їх конкурентоспроможність, надавання максимально повного комплексу послуг (логістичний сервіс) клієнтам у рамках ланцюжка поставок. Процес координації логістичних операцій, необхідних для надання послуг, повинен задовольняти потреби клієнтів та здійснюватися найбільш ефективним способом із погляду витрат. Логістичний ланцюжок повинен бути побудований так, щоб максимально ефективно задовольняти вимоги клієнтів до рівня обслуговування.

Перспективним напрямом для вітчизняних транспортно-логістичних компаній також визначено поглиблення інтеграції з їх клієнтами. Однією з можливостей такої інтеграції є контрактна логістика. При цьому бізнес-модель формується в контексті управління ланцюгами поставок, яка базується на довгостроковій співпраці між виробником і постачальником логістичних послуг. Контракт (договір) регулює взаємовідносини між учасниками процесу та обсягом послуг, які повинні бути виконані логістичним оператором. Постачальники транспортно-логістичних послуг повинні активно інтегруватися в систему виробничо-збутового ланцюга клієнта. До переваг контрактної логістики належать не тільки основні транспортно-логістичні послуги, такі як транспортування, пакування, зберігання, а й логістичні функції в пакет послуг із підвищеною складністю і навичками вирішення проблем, які спрямовані на створення доданої вартості для клієнта (обробка замовлень, відстеження відвантаження, складальні операції, контроль якості тощо). Можливі етапи поглиблення інтеграції з клієнтами для компаній представлено на рис. 4.

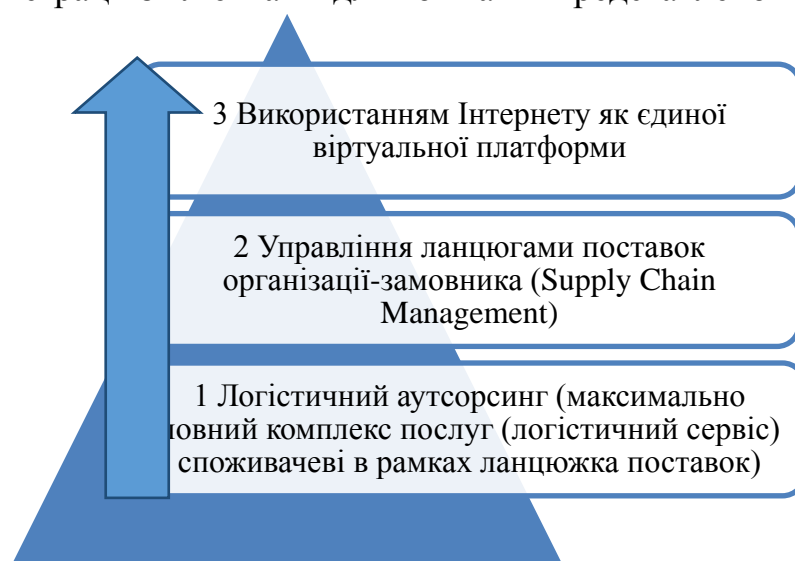


Рис. 4. Етапи поглиблення інтеграції з клієнтами

Поглиблення інтеграції з клієнтами надасть такі нові можливості:

- комплексність логістичної послуги, що є відображенням інтегрованих процесів у логістиці;
- мобільність у взаємодії учасників логістичного ланцюга;
- доступність логістичної послуги – зниження значущості географічного чинника, а також тимчасових обмежень в отриманні доступу до послуг;
- надійність і безперервність поставок із використанням клієнтоорієнтованих технологій у взаєминах зі споживачами, постачальниками і посередниками;

- синхронізація у виконанні операцій із надання послуг за рахунок упорядкування бізнес-процесів та їх стандартизації. Це може бути можливим тільки за допомогою сучасних інформаційних систем. При цьому важливим є відкриті інтерфейси для підвищення функціональної сумісності між різними системами і визначення стандартів. Для клієнта і логістичного оператора потрібно вирішити проблему сумісності програмних систем один з одним [1, с. 110].

Використання web-базованих рішень дає можливість гнучкого надання послуг усім зацікавленим сторонам у ланцюжку поставок так, що виробники, логістичні провайдери та клієнти отримують додаткові функціональні можливості. У цьому контексті великі можливості відкриває використання «хмарних технологій» (Cloud Computing). У будь-якому разі, транспортно-логістичні компанії та їх клієнти повинні відкривати можливості «хмарних технологій». Це дає змогу створити гнучку інфраструктуру, якої потребує логістика.

Перспективним напрямом розвитку для транспортно-логістичних компаній є аутсорсинг. Це означає, що підприємство-клієнт делегує виконання частини своїх бізнес-процесів транспортно-логістичній компанії (зокрема, своїх логістичних процесів). Воно дає можливість підприємству-клієнту концентруватися на пріоритетних видах бізнесу й операціях і тим самим забезпечує йому конкурентні переваги [2, с. 273].

Затребуваність логістичного аутсорсингу підтверджується світовим досвідом: в європейських країнах у структурі логістичних послуг частка аутсорсингу досягає 60–80%. В умовах сучасного розвитку ринку логістичні оператори більшою мірою орієнтуються на вимоги клієнтів, а логістичні послуги характеризуються високою клієнтоорієнтованістю [2, с. 273].

Для цього транспортно-логістичним компаніям потрібно шукати розширення форматів інтеграції інформаційних систем з їхніми клієнтами для того, щоб з'єднати всіх учасників ланцюга постачання між собою. Аналізовані підприємства для управління всіма бізнес-процесами використовують спеціальне програмне забезпечення, яке дає їм змогу працювати на ринку транспортно-логістичних послуг.

Розділ 2. Імплементация контролінгу на основі інформаційних технологій для підвищення ефективності управління підприємствами

Удосконалення наявних та впровадження сучасних інформаційних технологій є основним завданням для управління логістичними процесами, переведення логістичних послуг підприємства на новий рівень та інтеграції бізнес-процесів із клієнтами. Для їх досягнення потрібно провести аналіз програмного забезпечення на транспортно-логістичних підприємствах порівняно з тим, яке забезпечує логістичний контролінг та інтеграцію з клієнтами на підприємстві. Це дасть можливість виділити основні функціональні елементи логістичного контролінгу, що має забезпечувати інформаційна система підприємства. Для цього розглянемо програмне забезпечення «1С: Підприємство 8.2». Програма забезпечує комплексну підтримку бізнес-процесів підприємства та його підрозділів, облік, дає змогу отримувати і використовувати інформацію, необхідну для прийняття управлінських рішень. Основа системи програми «1С: Підприємство 8.2» – єдина технологічна платформа, фундамент для побудови всіх прикладних рішень, зокрема «1С: Управління автотранспортом Стандарт», «1С: Бухгалтерія

підприємства», «1С: Зарплата і управління персоналом». «1С: Підприємство 8.2 Управління автотранспортом для України», забезпечує такі рішення: чітка взаємодія між службами підприємства, підвищення рентабельності експлуатації транспортних засобів, посилений контроль витрат, точний складський облік, контрольована витрата паливно-мастильних матеріалів, своєчасний ремонт транспортних засобів, раціональне використання працівниками робочого часу та підвищення ефективності роботи підприємства загалом.

Для управління всіма бізнес-процесами компанії Hartmann International, Müller – Die lila Logistik, Obermann Unternehmensgruppe, Ullrich, Schwank Spedition, Internationale Spedition Dörrenhaus, Koch international, Eberl internationale Spedition використовують програмне забезпечення Diamant/3. Воно забезпечує вирішення комплексного обліку і професійного корпоративного контролю, комплексу вимог для здійснення всіх потреб клієнтів, автоматизує на підприємстві всі можливі бізнес-процеси, що повторюються. За допомогою Diamant/3 економиться час, який може бути використаний для виконання більш важливих завдань, таких як корпоративне планування чи аналіз витрат. Програма надає швидко, доступну і зорієнтовану на потреби підприємства інформацію, що забезпечує йому значну долю успіху. Diamant/3 являє собою програмне забезпечення, яке вносить порядок і прозорість у систему показників підприємства. Програма інтегрується в систему підприємства, автоматизує процеси, має модульну конструкцію, дуже зручна для користувачів та значно збільшує продуктивність діяльності підприємства. Diamant/3 охоплює фінансовий облік, калькуляцію витрат, облік основних і оборотних засобів, центр прибутку й управління підприємством, контролінг (Business Intelligence), а також планування (рис. 5).

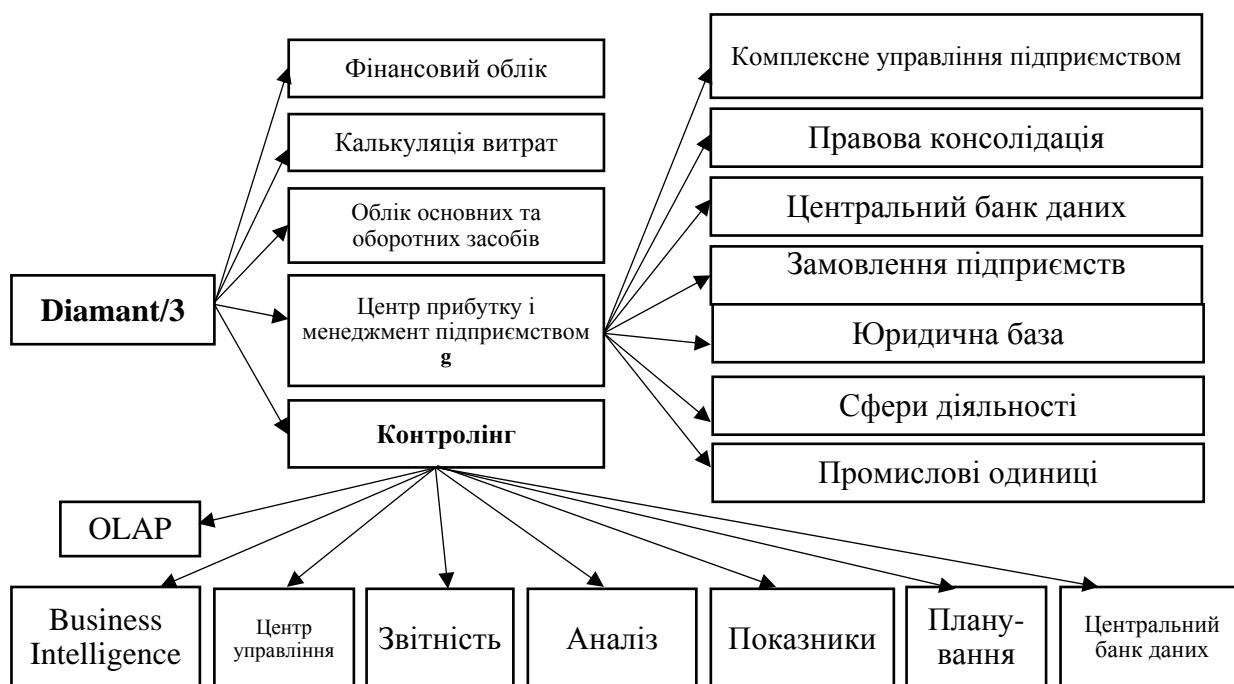


Рис. 5. Основні елементи програмного забезпечення Diamant/3

Система Business Intelligence, яка є основою Diamant/3, використовує сучасну технологію OLAP. Таким чином, основні елементи програми, зокрема фінансовий облік, калькуляція витрат, контролінг, забезпечують менеджерів необхідною інформацією в часі та просторі на різних рівнях: регіону, ринку,

окремого продукту тощо. Зручні для користувача інструменти допомагають контролювати всі ключові параметри та показники і оптимізувати їх.

Проаналізоване програмне забезпечення Diamant/3 дає великі можливості прийняття ефективних рішень для транспортно-логістичних підприємств. Отримані дані візуалізуються у вигляді динамічних таблиць, діаграм, графіків – і все це за допомогою декількох кліків мишкою. Diamant/3 дає змогу організувати контролінг як систему раннього попередження, яка показує найважливіші параметри і показники у графічній формі та дає можливість розпізнати відхилення в розвитку. Швидкість надання інформації є важливою основою для прийняття ефективних управлінських рішень. Порівняльна характеристика програмних продуктів «1С: Підприємство 8.2» та Diamant/3 з огляду на те, які можливості вони дають для прийняття управлінських рішень, представлено в табл. 1.

На основі розглянутої порівняльної характеристики можна зробити висновки, що кожне програмне забезпечення призначене для автоматизації процесу обліку, планування та контролю, дає можливість економити підприємству час та кошти. Кожна програма має свої особливості ведення бухгалтерського обліку та автоматизації виконання різного роду завдань, а також свої переваги та недоліки. Однак у них єдина мета – спростити роботу персоналу шляхом її автоматизації.

Головною перевагою програмного забезпечення Diamant/3 є дієва система контролінгу, що забезпечує інформацією та переводить управління на якісно новий рівень, даючи змогу своєчасно приймати ефективні управлінські рішення. Майбутнє за таким програмним забезпеченням, як Diamant/3 чи іншими SAP-рішеннями, які мають можливість забезпечити найповніший спектр для ведення обліку, планування та контролінгу на транспортно-логістичних підприємствах.

Для підвищення рівня логістичного контролінгу та глибини використання його інструментів визначено, які основні елементи повинно забезпечувати діюче на підприємстві програмне забезпечення (рис. 6).

Таблиця 1

Порівняльна характеристика програмних продуктів

Параметри порівняння	1С: Підприємство 8.2	Diamant/3
1	2	3
Можливості системи обліку	<ul style="list-style-type: none"> • автоматизація управлінського, бухгалтерського та податкового обліку; • ведення обліку відповідно до актуальних вимог законодавства; • автоматизація трудомістких розрахунків полегшує повсякденну роботу бухгалтерів, дає змогу уникнути помилок і заощадити час; • дає змогу одночасно відображати кожну 	<ul style="list-style-type: none"> • повна прозорість фінансового становища; • детальний облік всіх витрат; • фінансовий облік Diamant/3 відповідає міжнародним стандартам та вимогам; • бухгалтерська експертиза на всіх рівнях; • гнучка система звітності (більше ніж 200 варіантів звітів); • пряма інтеграція обліку та системи архівування; • автоматичний імпорт банківських виписок; • поточна інформація про статус

	<ul style="list-style-type: none"> • господарську операцію як по рахунках бухгалтерського обліку, так і по необхідних розрізах аналітичного, кількісного і валютного обліку; • виконання широкого спектру завдань, наприклад: розрахунок заробітної плати, основних засобів та нематеріальних активів, амортизації, складання звітної документації тощо; • забезпечує настройку довідників та преїскурантів; • розрахунок тарифів, формування рахунків тощо 	<ul style="list-style-type: none"> • обробки кожного рахунку-фактури; • повідомлення і нагадування для дотримання термінів виконання замовлень та знижок; • електронна форма розрахунків між підприємством та споживачами, всі рахунки-фактури переводяться в електронну форму; • точний розрахунок амортизації; • автоматизована система розрахунку заробітної плати; • поточний щоденний огляд операційних витрат та інвестиційного статусу здійснюється на основі Міжнародних стандартів фінансової звітності (МСФЗ) та згідно з умовами Міжнародного комітету зі стандартів бухгалтерського обліку (IASB)
Можливості системи планування	<ul style="list-style-type: none"> • дає можливість широкого аналітичного планування й аналізу діяльності підприємства; • планування місячного та річного бюджетів; • планування кадрового забезпечення; • довідник «Сценарії планування» призначений для здійснення планування за довільною ознакою; • передбачення обсягів робіт, формування планів роботи за даними підсистеми планування і фактичними даними суміжних підсистем; • планування роботи та ресурсів транспортного відділу, технічного обслуговування та ремонту транспортних засобів тощо 	<ul style="list-style-type: none"> • планування спрямоване на формування майбутнього згідно зі своїми ідеями та цілями; • Excel – широко поширений і залишається підтримкою програмного забезпечення Diamant/3 на сьогоднішній день – використовується для простого, гнучкого і комплексного планування; • планування використання ресурсів підприємства; • планування бюджету компанії (щомісячного, річного); планування всіх проектів у деталях; • поточні порівняння цільової ефективності та використання диференційованих сценаріїв планування, що дають змогу використовувати системи раннього попередження для бізнес-рішень; • система надає можливість альтернативним варіантам планування, що забезпечує розроблення декількох варіантів сценаріїв планування; • програмне забезпечення дає змогу реагувати на зміни виробничих параметрів, аналізувати альтернативи планування; • програма підтримує різноманітні методи планування: планування зверху вниз, знизу вгору, бюджетування

<p>Можливості системи контролінгу</p>	<ul style="list-style-type: none"> • доступний широкий спектр звітів за різними модулями програми; • модулі програми взаємопов'язані між собою; • отримання потрібної документації за допомогою типових форм із мінімальними затратами часу; • дають змогу ефективно управляти бізнесом і бачити картину у цілому з необхідною для прийняття рішень оперативністю; • комплексна система прикладних рішень, які побудовані за єдиними принципами і на загальній технологічній платформі; • проводиться моніторинг бізнес-процесів у різних розрізах тощо 	<ul style="list-style-type: none"> • програмне забезпечення надає можливість отримання готових звітів із близько 40 показників. Ці стандартизовані показники і відповідні звіти дають працівникам змогу мати миттєвий доступ до контролінгу; • програмне забезпечення дає можливість негайно виявляти відхилення у звітності; • під час аналізу відхилень порівнюються фактичні витрати в певний період часу з плановими та цільовими витратами; • інформація візуально підтверджується численними графіками, таблицями та використовується система відображення небезпеки по конкретних показниках діяльності підприємства за трьома кольорами світлофора (використання палива автомобілями); • системи бізнес-аналізу дає змогу протягом дуже короткого часу перейти від аналізу та спостереження до дій; • працівники мають можливість аналізувати звіти в будь-який час та формувати їх відносно потреби; • Dashboard-панелі пропонують огляд діяльності компанії за допомогою інтерактивних інструментів вимірювання з інтегрованим (вмонтованим) інтелектом; • програмне забезпечення надає можливість ілюстрації сценаріїв розвитку управлінських рішень та проектів на великих екранах; • кожен користувач може виконувати аналіз, створювати спеціальні звіти та обмінюватися інформацією з іншими з мінімумом кліків; • програмне забезпечення інтегрує всю інформацію для аналізу в усіх сферах починаючи від персоналу і закупівель до контролю перевезень і можливих ризиків; • постійний моніторинг діяльності підприємства, зокрема проектів, регулярні звіти забезпечують якісне та успішне управління тощо
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<p>Можливості інформаційної системи</p>	<ul style="list-style-type: none"> • дає можливість користувачу підключатися через Інтернет та в online-режимі працювати з інформаційною базою; • розмежовано права доступу до інформації для користувачів як на рівні об'єктів, так і обмеження за можливістю роботи в програмі; • надійне зберігання інформації під час роботи користувачів; • програма забезпечує швидкий пошук і доступ до необхідних документів, створює структуроване сховище документів та їх архів; • налагоджено взаємодію всіх служб підприємства; • підсистема CRM призначена для роботи з клієнтами (з електронними листами, подіями, нагадуваннями); • програмне забезпечення включає механізм зміни функціональних опцій (без зміни самого прикладного рішення); • дає можливості створювати і модифікувати найрізноманітніші бізнес-додатки, на платформі «1С: Підприємство 8.2» взаємодіють «1С: Управління автотранспортом Стандарт», «1С: Бухгалтерія підприємства», «1С: Зарплата і управління персоналом»; • можливе рішення побудови індивідуального інтерфейсу для кожного користувача; 	<ul style="list-style-type: none"> • інформація є легкодоступною, так що керівництво на всіх рівнях може швидко і надійно отримати до неї доступ; • програмне забезпечення постійно розвивається, особливо у зв'язку зі змінами в законодавстві; • дані бухгалтерського обліку, інформація та інші дані автоматично переносяться із системи входу в основну систему; • потік інформації вільно і без будь-яких додаткових зусиль переміщується між різними програмами (100% інтеграція); • програмне забезпечення пропонує налаштування інтерфейсу до ваших потреб і вимог, • Diamant/3 поєднує в собі всі принципи бізнес-аналітики, сховищ даних, аналізу даних, Інтернет і бездротових технологій у систему, яка забезпечує миттєвий огляд бізнес-процесів і гарантує, що особи, які приймають рішення, можуть знайти інформацію з різних джерел та поділитися з іншими користувачами; • підтримка високих стандартів інформаційної безпеки, які задані федеральним відомством безпеки у сфері інформаційних технологій Німеччини; • основані на філософії CALM (Computer Aided Leadership and Management): для людини на підприємстві кожний бізнес-процес являє собою цикл зі спостереження, орієнтації, прийняття рішень і дії. У процесі спостереження та орієнтації працівники отримують уявлення про фактичну ситуацію, що їм необхідно для прийняття рішень у майбутньому, реалізація рішень проявляється у фазі дії; • Diamant/3 забезпечує прозорість інформації; • забезпечує простий пошук; • веб-служби забезпечують обмін даними в режимі реального часу за допомогою синхронних інтерфейсів
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	<ul style="list-style-type: none"> • вбудовані засоби захисту інформації від несанкціонованого доступу; • налаштування, впровадження і запуск повинні здійснюватися кваліфікованим ІС-програмістом; • має у своєму складі модуль для експорту-імпорту даних; • інтерфейс програми є простим у користуванні; • підтримка системи управління базою даних в п'ятьох різних варіантах: файловий, MS SQL Server, Postgre SQL, IBM DB2, Oracle Database тощо 	<p>програмування незалежно від операційної системи, бази даних та мов програмування; можливості бізнес-аналітики</p> <ul style="list-style-type: none"> • доступ до інформації бухгалтерського обліку можливий тільки після реєстрації, усі зміни доступу до системи і дані записуються в журнал; • під час адаптації програмного забезпечення розробники враховують особливості всіх бізнес-процесів клієнта; • інтерфейс програми є зрозумілим та простим у використанні; • Diamant/3 забезпечує зворотний зв'язок з клієнтами для подальшого розвитку програмного забезпечення (бізнес-процеси клієнта вдосконалюються постійно, для цього потрібна адаптація програмного забезпечення до потреб клієнта) тощо
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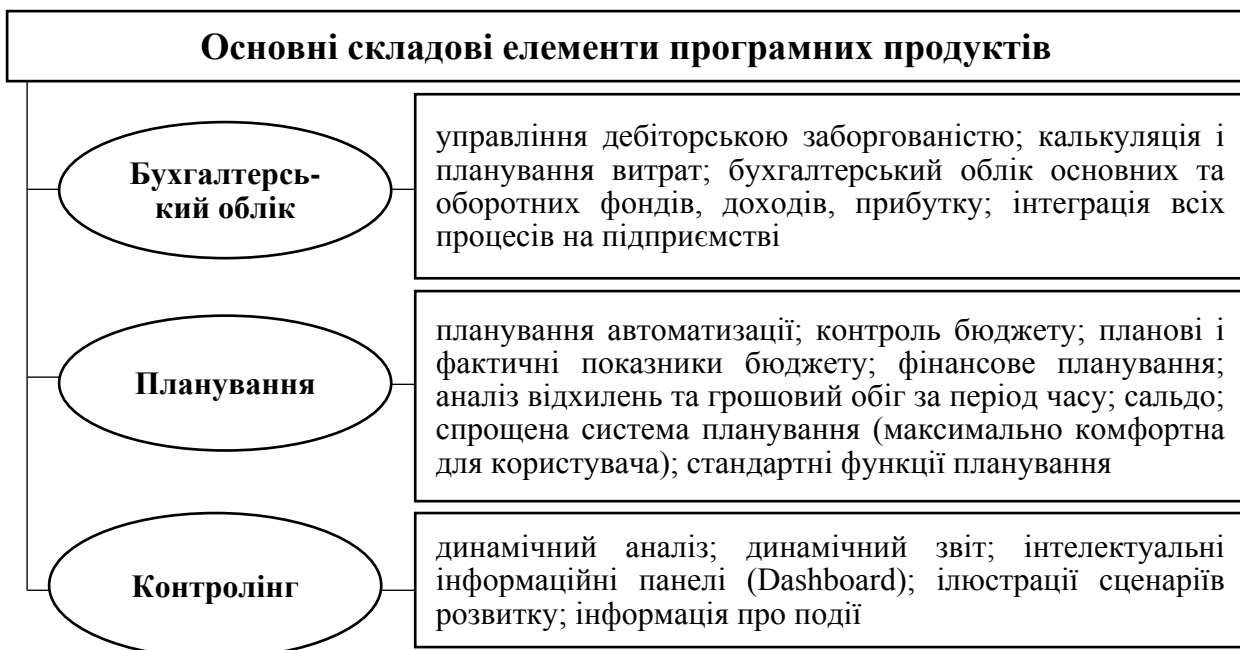


Рис. 6. Основні складові елементи програмних продуктів в інформаційній системі автотранспортного підприємства

Важливо підкреслити значення практичних інструментів програмного забезпечення, які містять широкі, різносторонні та зручні функції для логістичного контролінгу (рис. 7).

Використання динамічного аналізу дає можливість побачити економічні дані компанії (економічні змінні) з урахуванням впливу часу на відміну від

статичного аналізу. Всі об'єкти аналізу динамічно пов'язані між собою. Модель здатна відобразити сповільнену реакцію деяких економічних змінних у співвідношенні з попередніми періодами, коли фактор часу враховується в тому сенсі, що розглянуті в моделі змінні у взаємодії не визначені в той же день або часовий період. Використання диференціальних рівнянь дає змогу визначити поведінку змінних у проміжку часу. Також можуть бути визначені умови, за яких система досягає нової рівноваги та стабільності.

Статичний звіт – витяг із бази даних, який створюється один раз і більше не буде змінюватися. Звіт включає в себе фіксовані (статичні) дані. Порівняно зі статичним звітом динамічний звіт кожного разу, коли його відкривають чи створюють, відтворюється з вихідних даних. Якщо дані постійно змінюються, то звіти кожного разу також виглядають по-різному.

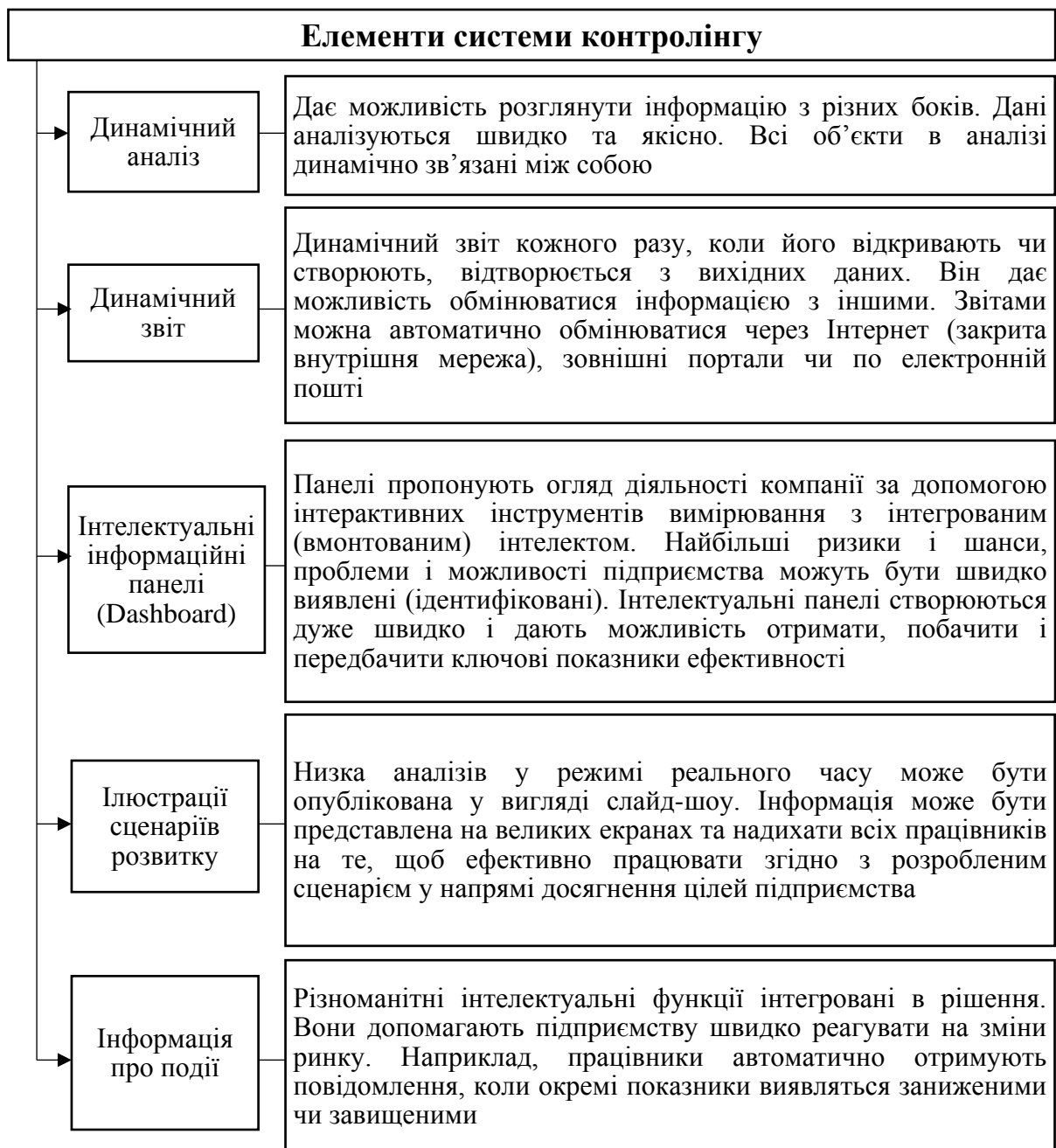


Рис. 7. Елементи системи контролінгу в програмному забезпеченні

Це найбільш поширений і зручний спосіб виконання звітів, тому що з використанням зібраних даних у базі даних можна відстежувати всі зміни під час зміни даних. Контролінг дає можливість обмінюватися інформацією з іншими. Звіти можуть бути автоматично розподілені через Інтернет, зовнішні портали або по електронній пошті. Таким чином, окремі працівники, відділи або всі співробітники компанії чи партнерських компаній можуть отримувати відповідні звіти.

Інтелектуальні інформаційні панелі (Dashboard) забезпечують огляд діяльності компанії за допомогою інтерактивних засобів вимірювання і за допомогою вбудованого інтелекту. Бізнес-аналітична панель управління являє собою інструмент для візуалізації даних, що вказує на актуальній стан логістично-контролінгових показників та ключових показників ефективності компанії. Проблеми та можливості, з якими стикається компанія, можуть бути швидко ідентифіковані, а також можливо побачити тренд і загальний огляд ключових показників ефективності. Панель об'єднує на одному екрані результати системи оцінки основних показників підприємства, а також «світлофори» або системи індексації для ідентифікації основних проблемних напрямів у діяльності компанії.

Ілюстрацією сценаріїв розвитку (Storyboards) є графічна інтерпретація сценарію або візуалізація концепції чи ідеї. Розкадрування є графічним організатором у вигляді ілюстрацій або зображень, що відображаються в певній послідовності для попередньої візуалізації рухомого зображення, анімації, графіки руху або інтерактивної послідовності медіа. Процес розкадровки розвивався в Walt Disney Productions на початку 1930-х років. Розкадрування як елемент системи контролінгу являє собою серію аналізів в режимі реального часу, які можуть бути опубліковані у вигляді слайд-шоу. Дані можуть бути представлені на великих екранах і надихати всіх співробітників компанії, щоб діяти відповідно до корпоративних цілей.

Різноманітні інтелектуальні функції інтегровані в рішення у формі інформації про події. Це допомагає підприємству швидко реагувати на зміни зовнішнього середовища. Наприклад, працівники підприємства автоматично отримують по електронній пошті повідомлення, коли певні цілі або не досягнуті або перевищені. Працівники швидко отримують інформацію про важливі події для компаній чи різного роду оголошення.

Висновки

Використання на підприємствах web-базованих та ІТ-технологій та їх інтеграція з контролінгом створюють ґрунтовну основу для генерації та прийняття гнучких та ефективних управлінських рішень на підприємстві. Широкий спектр функцій контролінгу дає компаніям можливість отримати: актуальні дані на даний момент про фактичні витрати і доходи; фінансову звітність; інтегровані планові показники, що дають змогу аналізувати відхилення; відображення структури витрат і розподільних автоматизованих механізмів залежно від бізнес-моделі. Наприклад, розрахунок витрат для кожного вантажного автомобіля чи підрозділу; ефективне рішення розрахунків за поточними рахунками; відображення умов договорів діючих проектів (замовлень); перевірка рентабельності вантажного автомобіля, групи вантажних автомобілів, замовлення клієнта, місця виробництва, майстерні тощо; ефективно інтегрований облік активів полегшує управління основними засобами. Наприклад, натисканням на кнопку отримати інформацію про

знецінення основних активів; простий доступ до всіх центрів виробництва, а також зручне адміністрування на основі веб-технологій.

Удосконалення управління на основі впровадження сучасних підходів, методів та інформаційних технологій має значні резерви підвищення ефективності діяльності транспортно-логістичних компаній. Як наслідок, важливого значення набуває досвід зарубіжних транспортно-логістичних компаній, які в стратегічному та оперативному управлінні використовують контролінг. Значення контролінгу полягає у тому, щоб постійно формувати і надавати необхідну інформацію про внутрішнє та зовнішнє середовище підприємства, щоб заздалегідь передбачити, розпізнати відхилення в розвитку, «вузькі місця», ризики і можливості та бути в змозі подолати чи уникнути їх.

Список використаних джерел:

1. Якунина Ю.С. Логистические услуги: особенности и специфика в условиях российского рынка / Ю.С. Якунина // Вестник Удмуртского университета. – 2014. – Т. 24. – Вып. 4. – С. 107–112 [Електронний ресурс]. – Режим доступу : <http://cyberleninka.ru/article/n/logisticheskie-uslugi-osobennosti-i-spetsifika-v-usloviyah-rossiyskogo-rynka>.
2. Леженко В.О. Перспективи розвитку логістичного аутсорсингу в Україні / В.О. Леженко, С.С. Шаповал // Праці Одеського політехнічного університету, 2011. – Вип. 1(35). – С. 273–278.
3. Hartmann International [Електронний ресурс]. – Режим доступу : <http://www.hartmann-international.de>.

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ENFORCING MARKET POSITIONS OF UKRAINIAN ORGANIC PRODUCERS IN THE EUROPEAN MARKET

Summary

The study addresses the problem of the formation of Ukrainian producers' competitive positions in the European market of organic products and the development of their marketing strategies. The main trends of the development of the European organic product markets are distinguished, the competitive positions of the Ukrainian producers of organic agricultural production with using the SWOT-analysis are determined. The following benefits that domestic producers of such products have in foreign markets can be identified: high level of competitive prices for organic products; the increase in the number of export-oriented producers of organic production; the proximity to the countries of the European Union that is a major importer of domestic organic agricultural products; a high level of environmental safety of organic products; a positive image of Ukrainian producers of organic products in the European market. The specific features of consumer

motivation are analysed on the basis of market researches undertaken by the authors in the European market of organic products. The classification of consumer motivations, the hierarchy of the needs of European consumers, and profiles of the target segments in the study are compiled. The special features of selling goods in researched market are distinguished and the benefits and challenges of different channels of selling organic food are identified. There are proposed the recommendations towards product competitive positioning of Ukrainian producers in the European market and found out the most attractive distribution channels with the focus on a target segment.

Introduction

Nowadays the production of ecologically pure products is becoming the mandatory component of the developed country economies. The results of the transformation process in the traditional economic model that is observed today affect all spheres of human activity and contribute to the emergence of new trends and the formation of new consumption patterns. First, modern people pay more attention to their own health, tend to lead a healthy lifestyle, which in its turn transform their view of nutrition, contribute to the growth of demand on healthy and savourous food and organic products in particular. Second, people start to refuse the model of mass consumption in order to take on the individualized one, which consequently increases the demand for «special» products, the production dimensions of which are limited and the cost of which is higher in comparison to the same mass-oriented products. Third, the level of person's social responsibility grows significantly and there is the more careful perception of a person to the surrounding nature and environment. This fact brings into light social aspects of motivation to consume organic products. Today the global market of organic products is estimated to amount over 72 billion euro, its growth is projected at a rapid pace taking into account the global trends in agriculture and transformations in the social sphere as well as in consumption patterns.

Ukraine has a particularly great potential for the development of organic production. Given the high natural soil fertility, Ukrainian producers of organic food have the opportunity to receive relatively high yields of crops without the use of fertilizers and agrochemicals. It means that Ukrainian manufactures have a possibility to produce organic products at a relatively lower cost than European countries, in which because of the low natural fertility, the transition to organic farming is accompanied by a significant increase in the cost of organic production. Thus, Ukrainian organic products have potentially higher competitiveness from the point of view of the key factor restraining the development of the European market. At the same time, taking into account the aspirations of Ukraine – especially in creating a free trade zone – organic farming can become one of the factors of economic ties strengthening with the European Union, with the simultaneous introduction of resource saving technologies.

Theoretical and methodological study of organizational and economic principles of the development of agricultural production is reflected in the studies of the majority of national and foreign researchers: V. Geits, I. Vinichenko, V. Dudar, R. Bezus, O. Dovgan, O. Borodina, and others. Among foreign researchers, these issues are covered in the works by S. Bellon, H. Willer, V. Hamilton, V. Kasper, W. Mitchell, L. Connolly, D. MacDannel, K. Lamìn, and others. At the current level of the economy development, there is a tendency of the market globalization, which, on the one hand, opens up great prospects, and on the other hand, makes the competition even fiercer. Many scientific works are dedicated to the marketing activity of organic

food manufactories and to the development of marketing strategies in these markets. Noting the value of the research results of these scientists and modern scientific developments for the theory and practice of formation of organizational-economic foundations for the development of the production of organic products, it should be mentioned that certain aspects of the specified problem remain insufficiently revealed and need further research and development. First of all, it concerns the formation of a positive image of Ukrainian producers of organic products in the European market, identifying the mechanism of forming competitive advantages in the international markets of organic products, defining the ways of establishing partnerships in the management field in European organic market in the long term prospect, development of effective market and product strategies of producers when they enter the foreign markets.

The purpose of the article is to reveal competitive positions of Ukrainian organic producers in the European market, determine the most appropriate distribution channels for national producers entering the EU market, and consider the specific features of consumer's motivation in the researched market. To achieve this aim it is necessary to: distinguish the trends of the development of the European organic product markets; determine the competitiveness of Ukrainian producers of organic products in the researched market; identify the special features of selling goods in the EU market of organic products and determine the most attractive distribution channels for Ukrainian producers; investigate the directions of motive sphere development of organic products consumers, and identify the key features of the profile target segments.

Part 1. Competitive positions of Ukrainian organic producers in the European market

The organic products are the result of organic manufacturing of the agricultural products, producing, storing, transporting, processing, and selling of which are regulated by the approved standards that foresee using definite fertilizers, the means of animal and plant protection, artificial food additives, and the production of which facilitates the protection of environment and the social infrastructure of rural territories. Organic farming reflects such an agricultural process, which does not allow using synthetic agrochemicals and genetically modified organisms. However, in the world market, the certified organic products are divided into four categories depending on the share of the components certified according to the organic standards (tab. 1.1).

The generalization of the scientific approaches to the interpretation of the concept of «organic production» has allowed the revealing of its content and determining that a specified kind of activity, in addition to the economic one, performs a number of additional functions, namely: *ecological* function (careful using resources and ensuring the preservation of biodiversity); *medical* and *biological* functions (health care); *social* function (contributes to preserving the rural infrastructure and helps keep the traditions of production technology with the use of local natural components). Thus, the experts grouped the benefits of the organic production as for the following directions:

- economic – production costs reduction in view of the rejection of the expensive chemicals use and the reduction of energy consumption in the course of production; increasing the product competitiveness;

Kinds of organic products and their characteristics

Kind of organic product	Description	Products labelling	Adaptation of categories to the agricultural production
100% organic	100% of certified ingredients are required	100 % organic product	Made of 100 % of organic resources, chemical ingredients are not used in the process of storing
Organic	More than 95% of organic ingredients are required. There are restrictions as for using 5% of non-organic substances in the production	Organic	Made with the use of resources having over 95% of organic ingredients; chemical ingredients are not used in the process of storing
Made of organic ingredients	More than 70% of organic ingredients are required. Restrictions in production correspond to 30% of non-organic substances	Made of organic ingredients	Made with the use of resources having more than 70% of organic ingredients; chemical ingredients are not used in the process of storing
Less than 70% organic	May have only a certain percent of organic substances in a product	The list of organic substances is available	Applying technologies involving the use of organic ingredients during growing. The use of chemical elements is allowed during storing with their indicating on the product

Source: compiled by the authors on the basis of [1, p. 27-33]

- environmental – minimization of the production processes impact on the environment; promoting the conservation and restoration of biodiversity in agro-landscapes; promoting the preservation and reproduction of soil fertility; preventing the pollution of water resources;

- social – creating additional jobs in the countryside; creating new prospects for small and medium-sized agricultural businesses; increasing the vital capacity of rural communities.

The above-mentioned directions should be complemented by the fourth paragraph, which reflects the socio-economic character of the organic production, which provides a social focus on economic interests of businesses. Their production, economic and market activity is a subject of consumer needs satisfaction as for balanced, nutritious, and savory food. Nowadays the market of organic products is actively developing. The global retail sales of organic food and beverages reached 80 million US dollars in 2014 and are forecast to reach 200-250 billion USD in 2020. The greatest demand for the organic products is noticed in the countries of North America and Europe. These two regions accounted for more than 90% of all sales [2, p. 59]. Over the last decade, the number of organic farms in the EU has increased by 57%, while in Europe it has increased by 81%. The number of operators and importers is growing at 1-5% every year in almost all European countries. At the

beginning of 2015, there were almost 50 thousand operators and nearly 1700 importers in the EU countries. Of these, almost 76% were found in the most developed markets in 10 countries with the largest retail sale markets, such as Italy, France, Germany, Spain, and the United Kingdom [2].

Experts identify the following factors that lead to the accelerated growth of the demand for organic products throughout the world:

- the negative consequences of the industrial model of economy development, the influence on the resource potential, the environment, and consumer food quality;
- the policy of the sustainable development of agriculture in developed countries, which aims at the careful attitude to the resource potential of the Earth;
- the climate changes in certain regions of the planet;
- the tendencies of food consumption of the population, such as arising the positive consumer awareness of their own health and buying foods of higher quality but in substantial quantities, the existence of reluctance to accept genetically modified food farming.

On the basis of the defined characteristic features of the organic farming, it is possible to investigate the European consumer market of organic products. The markets in Europe, which is still experiencing the consequences of the debt crisis, demonstrate the mixed growth rates. Some countries, such as Germany, France, the Netherlands, and Finland, continue to report the increased sales of organic foods. The others, such as Spain, the United Kingdom, and Greece, show a slow or a minimal growth. The largest market of the organic products with the turnover totalling 7.9 billion euro in 2014 was in Germany, followed by France (4.8 billion euro) and the United Kingdom (2.3 billion euro) moving back the last-year leaders such as Denmark, Switzerland, and Austria. The present distribution of markets is illustrated in Figure 1.1.

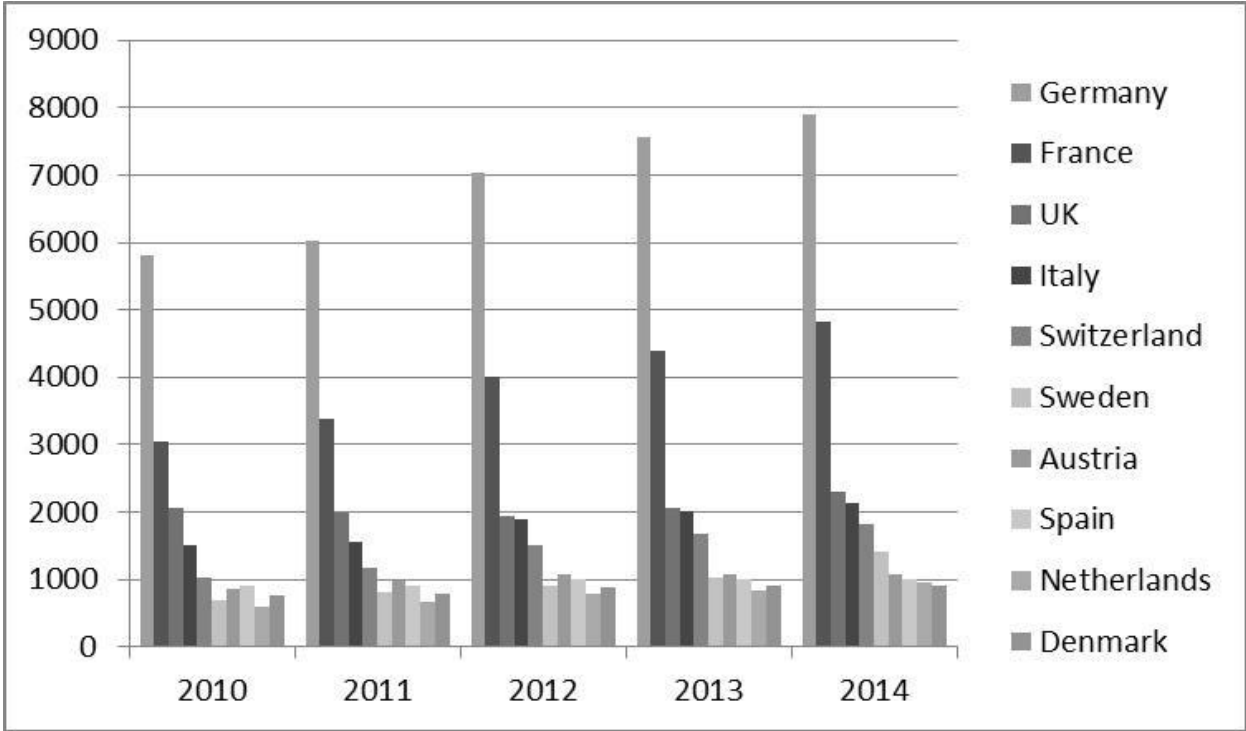


Fig. 1.1. Retail sale of organic products in the European countries, 2010-2014
Sources: [2; 3]

The largest organic food consumption per capita in 2014 is observed in Switzerland (221 euros), Luxembourg (164 euros), and Denmark (163 euros) [2, p. 206-210]. In particular, the Italian market is characterized by a large consumption of organic beverages (including wine), dairy products, groceries, and oils. A characteristic feature of this retail market is that most of the products are purchased packed and ready to use.

Another feature is the support of the national manufacturer and the dominance of the organic products of the local origin in the grocery baskets. Owing to the fact that different countries have different climatic conditions, the food habits and possibilities of cultivating agricultural products, it should be noted that certain groups of goods may differ significantly by the market share in a particular country rather than by a group of these products as a whole (the information below the authors summarize on the basis):

- organic fruits and vegetables account for 9% and up to one-third of all the vegetables sold in Switzerland, Austria, Germany, and Italy;

- organic eggs make up more than 20% of the eggs market in Switzerland and France. In many countries, organic eggs are one of the most successful products within the total retail market;

- animal foods, especially milk and dairy products account for up to 20% of all organic products in Northern Europe;

- meat and meat products make up about 10% of the organic market in Belgium, the Netherlands, Finland, and France. However, the organic animal production remains limited compared with the overall production of livestock in the EU (from 0.5 to 4% depending on the type of the animal);

- beverages (mainly wine) make up a significant portion of the market (more than 10%) in France and Croatia;

- hot drinks (coffee, tea, and cocoa) make up from 3% to 5% of the general consumption in the EU;

- bakery products reached about 10% in the organic range in the Netherlands, France, Czech Republic, Sweden, Finland, and Germany;

- organic baby foodstuffs make over 40% in Germany, organic meat substitutes account for 60% in Germany.

Thus, Ukraine, having a considerable potential for the production of organic agricultural products, their export, and the consumption in the domestic market, has reached the certain results concerning the development of its own organic production. It should be noted that Ukraine takes the 22nd place in the world in areas occupied by organic production. In 2015, there were 210 households in the Ukrainian market that grow bio-products on over 410 thousand hectares. Although the Ukrainian market remains very small, the country is the leader among its neighbours in the exports of organic products to the EU countries and the United States. The favourable climate and the fertile soil attract foreign investors who want to invest money in small farms growing organic products. Taking into consideration the availability of large areas of fertile and eco-friendly soils, in the face of growing demand for organic products in the European Union and other countries, Ukraine has prospects of its export potential development, economic ties strengthening with simultaneous use of technologies that contribute to the preservation and restoration of the qualitative soil characteristics and the improvement of the economic, social, and environmental situation in the country.

Ukraine occupies the first place in the world by the traditional production of sunflower seeds. At the same time, in 2007–2009, 75 thousand tons of organic sunflower seeds (for 2010–2015, the data have not been published) were annually

produced for export. In most cases, it is exported in the non-processed state due to the fact that the country lacks a sufficient number of certified oil plants. In addition, the producers of organic products grow canola seeds (30 thousand tons), soybeans (10 thousand tons), and flax seeds (2 thousand tons) as well as poppy, pumpkin seeds, safflower, and mustard. Some businesses in the south of Ukraine specialize in organic processing of aromatic plants, first of all, lavender, sage, and coriander. That is why the prospects of the Ukrainian processing companies are connected with manufacturing oil from flax seed due to a high demand of it from the EU [4].

For products to be exported in the future, it is necessary to adhere to the same standards during the cultivation of organic products. This is accomplished by keeping to both the state legislation and to the international standards. One of the main and the most powerful components of the system of the organic farming is certification. The process of certification of organic production is a procedure that allows the manufacturer to confirm the compliance of the methods implemented on the farm with the organic standards and to get an access to the organic product market at the premium price. To gain access to the European organic market, the manufacturers must comply with the new rules of the EU Council Regulation 834/2007 that became effective on January 2009. This new directive replaced the old rules and established a comprehensive set of goals, principles and basic rules for the organic production, processing, and labelling, as well as the import of organic products from the third countries. In any case, the organic standards and legislative requirements of the EU create barriers for foreign exporters of organic products to prevent the collapse of the category «organic products». The transition of agricultural enterprises to the organic model of management is possible in case of understanding the benefits of the organic production compared to traditional technologies. The largest importing countries of organic raw materials from Ukraine are the Netherlands, Germany, Switzerland, Canada, Greece, and Israel. The research organization «EkoConnect» showed that each year in Ukraine for export, there were produced around 80 thousand tons of organic corn, 5 thousand tons of organic wheat, and 6 thousand tons of organic buckwheat.

The generalization of the existing requirements for being engaged in the organic production in the agricultural sector gives grounds for distinguishing its characteristic features:

- firstly, the availability of the normative-legal base of the activity regulation of organic products producers;
- secondly, the mandatory compliance with regulated standards (rules, norms) of the production process;
- thirdly, the need for the certification of production processes, processing, packaging, storage, and the quality and standards control by independent specialized institutions;
- fourthly, the controllability on the compliance by the producers with the basic principles of organic agricultural production approved by IFOAM;
- fifthly, the importance of labelling the organic products and food stuff according to the standards (rules, norms) for distinguishing the assortment positions.

What makes local Ukrainian farmers turn to producing organic products, despite the lack of temporary facilities due to farmlands being in the transition state, significant capital investments, etc. is the high profitability of the organic products production, which is attributed to a higher selling price. If in the EU, the price for organic manufacturing is 20-30% more expensive than for regular ones, in Ukraine, the prices for some products are up to 10 times as high. These excessive prices for

organic products are explained by the market demand, the significant production costs, certification and the delivery to the final consumer as well as a very limited range of domestic organic products. So, the following benefits that domestic producers of such products have in foreign markets can be identified: high level of competitive prices for organic products; the increase in the number of export-oriented producers of organic production; the proximity to the countries of the European Union that is a major importer of domestic organic agricultural products; a high level of environmental safety of organic products; a positive image of Ukrainian producers of organic products in the European market; the emergence of private advisory agencies that provide advice on export of organic products. In general, Ukrainian producers of organic products have favourable conditions for the development of their export potential. But there are many problems related to threats and weaknesses which should be distinguished such as:

- *Threats*: growing international competition; continuing negative impacts of the financial and economic crisis; political instability in Ukraine and decreased attractiveness for investments; negative demographic processes; regulatory barriers for the export of organic products to the EU (the need to double-check products for compliance with export standards-before crossing the border and in the country of destination); the rising costs of export operations; ineffective use of EU funding in rural areas; the lack of state support for export operation of manufacturers of agricultural organic products; unattractive investment climate, namely, insufficient state regulation of this sphere; low development of processing industry in Ukraine; significant differences in social and economic development of the different regions; negative impact of climatic changes; improper use of natural resources;

- *Weaknesses*: the difficulty in finding reliable partners and customers and establishing trade relations with them; low financial abilities of the enterprises – producers of organic products; low local and foreign investments; difficulties in establishing the sale channels of organic production; the lack of experience in managing the enterprises for conducting export-import operations, search for dealers; high fragmentariness of arable agricultural land; the lack of experience of working with international standards for the production of organic products.

The analysis and monitoring of the competitive position of the producers of organic products involves the continuous observation of the results of national producers in the agricultural market, the business processes, the state and the changing factors of the external and internal environment, which add to the competitive position of enterprises in the EU market and to the process of the organizational and economic maintenance of their activity. The base for entering the market is the certification process, which affects the price of the final product and the competitiveness of products greatly. In this market, the availability of the certificate «bio» or «environmentally friendly» should be complemented by the fulfilment of the mandatory requirements and terms of storage of organic products, which are short. This means that the delivery of products from the place of their production to the counter must be very fast and the products must be sold quickly, and otherwise – subject to recycling. All this involves considerable financial costs. Due to this fact, organic food becomes even more expensive. So the main limitation for organic sector growth is accepted to be the high price for organic food. The level of prices of organic products in Europe suggests the presence of a price competitive advantage for Ukrainian producers. However, given the need for the payment of duties and other customs payments, the Ukrainian exporters' price level increases, which by some positions weakens a price competitive advantage. Fig 1.2 gives us a visual illustration

of the difference in prices, from which we can see that the majority of products differ in prices twice as much. The specific feature of the market for organic products is a constant increase in price by 20–50% on the background of growing demand, unlike the traditional market.

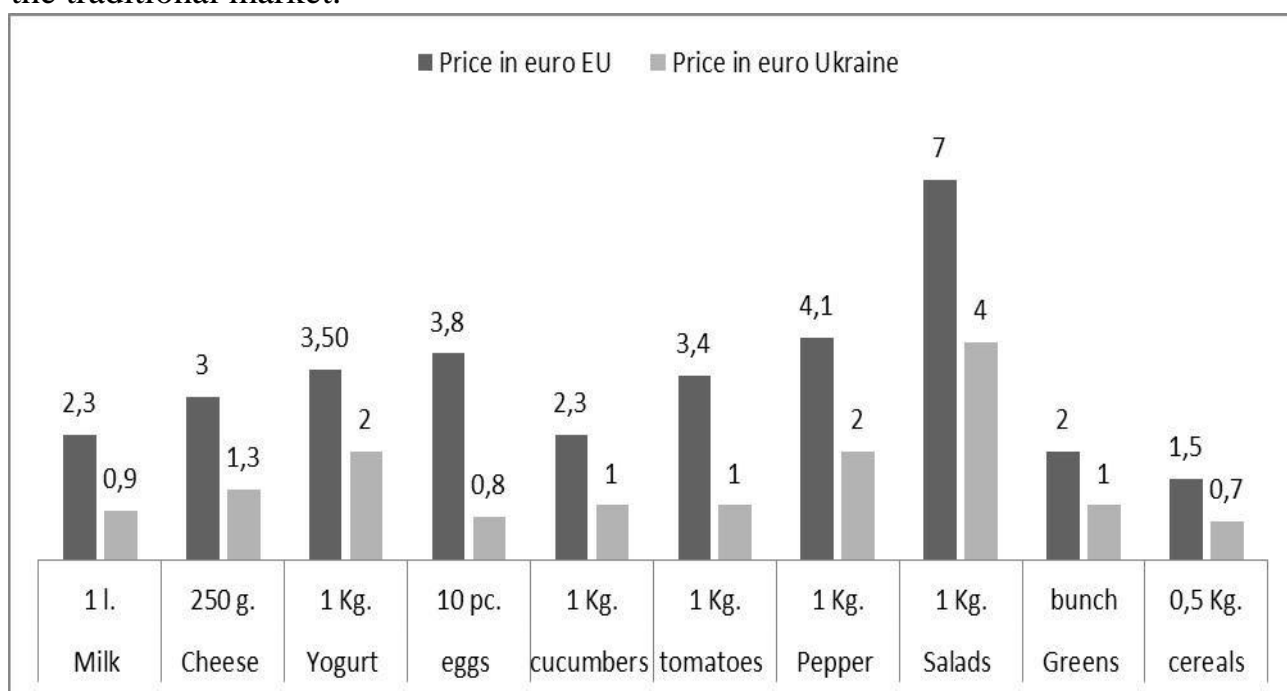


Fig. 1.2. Comparison of prices for organic products

Source: compiled by the authors on the base of supermarkets proposals

The competitive positions of the Ukrainian producers of organic agricultural production can be characterized using the SWOT-analysis (Fig. 1.3).

Having made the SWOT-analysis of the competitive positions of producers of organic products in the agricultural market of European countries, we can conclude that there are many weaknesses. Those are weaknesses that complicate the realization of the potential of organic agriculture of Ukraine greatly and have a negative impact on the competitive position of producers of organic products. The objects of the competitive position of producers of organic products on the agricultural market, the advancement of which may enhance or improve the competitive position, are:

- keeping competitive prices on organic products;
- the expansion of the organic products range;
- storage technologies development for efficient product transportation;
- advertising organic products and taking active participation in exhibitions, fairs, «healthy food» festivals;
- forming brand image;
- distribution channels for organic products;
- the level of innovation in the agricultural sector (including packing products);
- product upgrading.

Thus, from the analysis conducted, we can argue that the Ukrainian producers of organic products have all the necessary opportunities to enter the market of organics in the EU and they are quite competitive. For this, it is necessary to establish the strategy of the entrance clearly and track the market changes constantly.

	SWOT-analysis elements	Expectations
External factors	<p>Opportunities:</p> <ul style="list-style-type: none"> –growing demand for healthy products and organic food; –making direct future contracts for organic product effectiveness in delivery with producers; –the adoption of the state program of subsidies for agricultural producers; –developing regional collaboration programs; –promising cluster formation and state support for clusters; –the development of logistics and construction of new transport corridors; –entering new markets; –tourism development; –comparatively good infrastructure and key position of the country; –natural and cultural heritage 	<p>Strengths + Opportunities: entering the new segments of internal and external market <i>Strategy:</i> diversification</p>
	<p>Threats:</p> <ul style="list-style-type: none"> – lack of legal regulation of organic production; – lack of state programs of organic production development; – lack of a clear organic production certification system approved at the state level; – regulatory barriers for the export of organic products to the EU; – the growth of the intensive agricultural business in developed European countries; – inflation processes development and reduction of purchasing power of the population; – the rising costs of export operations; –ineffective use of the EU funding in rural areas 	<p>Weaknesses + Threats: stimulating the demand for the organic products with the selecting and targeting on separate segments (child foodstuffs, Vegetarians etc.) <i>Strategy:</i> taking up market niches</p>
Internal factors	<p>Strengths:</p> <ul style="list-style-type: none"> – manufacturing high-quality products, – using up-to-date production technologies; – change of the production costs structure due to the absence of costs at artificially synthesized mineral fertilizers; – high competitive prices; – the concentration of activities not only on the production of organic raw materials but on the production of organic upgraded; – a wide range of biodiversity; – high export potential; – human resources and skills 	<p>Strengths + Threats: the development of the institutional environment and forming sales channels <i>Strategy:</i> focusing</p>
	<p>Weaknesses:</p> <ul style="list-style-type: none"> – the complexity of technical upgrading; – special conditions of organic product transportation; – deficiency in the marketing experience in entering new markets; – lack of distribution channels for organic products; – the low level of storage facilities development for the organic products storage; – lack of investments 	<p>Weaknesses + Opportunities: expansion of the market, entering the international markets, development of primary demand <i>Strategy:</i> market development</p>

Fig. 1. 3. SWOT-analysis of competitive positions of Ukrainian organic producers in the agricultural market

Source: compiled by the authors

Part 2. The marketing strategies of Ukrainian organic food producers in the European market

Marketing strategy development assumes decision making in the direction of the enterprise behaviour in the market, for instance, market strategy formation and solution of strategic questions concerning marketing complex elements. Marketing strategies are implemented by the enterprise in order to realize its own economic interests, reach definite market positions and support customer's loyalty. But it should be noted that on the current development level of the marketing activity concept, in circumstances where consumer has a high importance, being the key link in market relations, the elaboration of positioning strategy appears to be a determining factor in the formation of product strategies of the company, and marketing strategy in particular. The importance of the prioritized definition of the competitive position of company's production in the consciousness of its target consumers is conditioned by the fact that in course of positioning strategy development, the general concept of market positioning of the product/brand is being defined. That in its turn influences the formation of product strategy and becomes the basis of functional strategies development. Positioning concept defines the image of some product or trademark, which the company is trying to create in the consciousness of the target segment. Once image formed, it must have a clear position in comparison to the main competitive goods and a special value for a target consumer. That is why market and product strategies unite in a general marketing strategy according to the general concept that lies within positioning strategy.

On the other hand, strategic decisions on marketing strategies are significantly influenced by the distribution channel that is chosen by the producer entering the foreign market. Thus, first of all, we consider and analyse possible critical points of distribution sale channels in the European market for Ukrainian producers of organic products. The traditional distribution channels in the market of organic products are wholesalers, large-scale retail (LSR), catering/restaurants, direct selling to the consumer (includes a variety of forms that are discussed below). The culture of consumption and purchasing of the organic products, which has been historically formed, led to the emergence of the substantial differences between the channels of distribution in the European countries. Thus, small shops that specialize in selling organic products used to dominate in Germany. Today there should be noted the prevalence of the sales through the supermarket networks including five large retailers, which cover more than 70% of the market. Nowadays the vast majority of Europeans buy organic products in specialized stores (67%) and supermarkets (65%) (Fig. 2.1). As follows, a part of the supermarkets had a clear upward trend in most countries (for example, in Austria, Denmark, Great Britain) but the financial crisis has slowed down the sales growth through these sales channels, having re-established the positions of the specialized organic food shops.

As the world practice shows, the main marketing channels of organic food sales are: direct sales from the manufacturer to the consumer through markets; direct sales from the manufacturer to the consumer through shops that belong to the manufacturer; sales through specialized stores; and finally, since the 1980s – sales through supermarkets. It is obvious that the effective way of selling products for organic manufacturer is to use at least three of these channels. From the foreign experience of the organic goods implementation in retail, it can be concluded that the choice of channels depends on the level of development of this market segment. In emerging markets, the majority of sales are carried out through specialized stores of organic products.

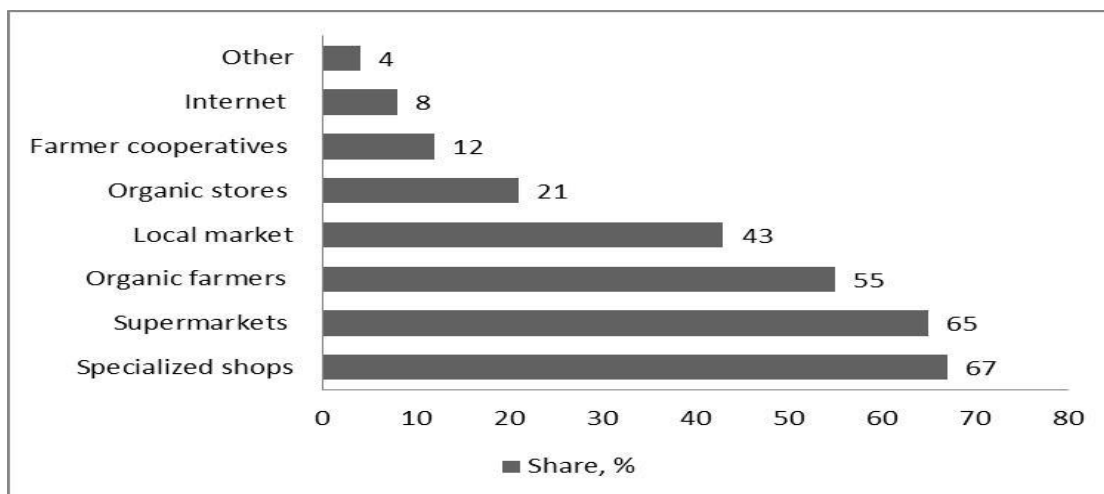


Fig. 2.1. Places of purchasing organic products by European customers

Source: [5]

Later, when the market becomes more mature, the share of supermarkets in the total number of the sales outlets is increasing and reaches some 60%. Usually, there are a number of supermarket chains that dominate the market of each country. In Europe, the main supermarket networks where the customer can buy organic products are Ahold, Billa, Carrefour, Coop, and Tesco. Each sales channel has its characteristic features, benefits, and challenges; while being engaged in the market activity (Tab. 2.1).

We also need to pay attention to the sales channels used by direct marketing, which provide a direct connection between the manufacturer and the end consumer. It is necessary to distinguish such specific channels of the organic products sale, in which cooperatives of both producers and consumers are the main participants. The Community Supported Agriculture (CSA) is an alternative model to the production and marketing of organic products, by which consumers act as equal partners in growing and marketing organic products and partially share the risks with farmers. Initiators are usually customers' cooperatives that establish direct contacts with farmers and partially finance their agricultural activity with the purpose of obtaining suitable quality products at low prices proportionally to current funding. CSA customers buy shares for a season by paying a fee in advance and receive a regular (in most cases weekly) selection of food. The regular supply of food grown on the farm provides nutritional security and a sense of community for customers. It should be taken into account that managing a CSA requires excellent crop management skills to offer attractive and diverse weekly food baskets, as well as good customer service. Unfortunately, this type of selling channel is not suitable for Ukrainian producers due to the remoteness of production from European consumers; this type is possible to form only in the country of farm location.

The next type is traditional markets of organic agricultural products, which exists and operates effectively in many European countries. A farmers' market is a place where a number of growers assemble on a particular day to sell farm products directly to consumers from the «stalls» that may consist of the back of a farm truck or a simple tabletop and attractively covered displays. Cash sales and the possibility of selling under or oversize units that cannot be marketed through other marketing channels are the main benefits of this system for farmers. For consumers, it provides an opportunity to buy fresh produce or homemade products and to interact with producers in an informal environment.

Table 2.1

Benefits and challenges of different channels of selling organic products

Type of sales channel	Benefits	Challenges
Selling to wholesaler	<ul style="list-style-type: none"> - market expansion; - providing easy access to the market; - increasing the sales volumes; - reducing the administrative responsibilities; - low operating costs 	<ul style="list-style-type: none"> - low profitability; - low cash flow and long-term payments; - high volumes required by wholesalers need a supply concentration, which is infeasible (small size of market); - entail the goods being rebranded under the wholesaler's own umbrella.
Selling to large-scale retail	<ul style="list-style-type: none"> - expand farm's customer base; - retail outlets typically move through large quantities of a broad range of products every week, and are open for long hours on most days; - growing or producing on contract for retail outlets can guarantee sales well before harvest or delivery and provide a stable, year-round market; - long-term, stable sales accounts can result from strong, professional relationships; - reducing expending for marketing, delivery, sorting, packaging, labours; - customers are drawn to the convenience of the «one stop shop»; - gain flexibility; - retail stores can be willing outlets for overabundant harvests. 	<ul style="list-style-type: none"> - high volumes required by supermarket chains may exclude small-scale farmers as suppliers; - retail outlets expect to pay producers wholesale prices, which can range from 25% to 60% less than retail prices; - there may be a need to both educate buyers on the marketability of various farm products, and provide information and tools to help sell those products; - because of asymmetrical demand, retail outlets want to meet the seasonal demands and they are interested in cuts; - loss of control over farm brand; - product grading and packaging requirements; - some retail outlets can require certain food safety standards - the difficulty of expanding the market through targeting new segments of consumers;
Direct supplies to the specialized stores / Organic shops	<ul style="list-style-type: none"> - known potential consumer (orientation to a target segments); - close connections and interaction between the producer and the seller; - opportunity for the customer to taste food before purchase; - the self-service system and the traditional personal service are the two main types of marketing methods; - forming a high level of consumers' trust and loyalty to the place of buying in case of satisfaction; - loyalty can also be built thanks to the good quality provided, freshness, and reasonable prices combined with good service and friendliness. 	<ul style="list-style-type: none"> - less control of how organic products are marketed and sold – from price, placement to quality control; - lack of spontaneous purchases out of interest; - the necessity to track the trends in customer preferences; - merchandising techniques are important to increase the visibility of the product; - a wide range of products should be offered; - visiting the shops for monitoring how the products are handled and sold.

Ending of Table 2.1

Stores belonging to the producer	<ul style="list-style-type: none"> - control over the product sales is maintained; - product prices have minimal extra charge; - close connections between a consumer and a producer; - consumers prefer direct contact with the producer/seller compared to an impersonal service; - flexibility in meeting the changing needs of consumers. 	<ul style="list-style-type: none"> - investments are required; - the coverage of market segments is limited; - average sales volumes are small; - a wide range of products should be offered; - market covering at the regional level; - high costs for packaging, logistic, sorting, marketing, labour; - difficulties with selecting a location, which requests: good visibility, accessibility, proximity to buyers, street or road crossings, high volume of passenger traffic; - the layout and organization of the retail store may help customers to make a purchase, thereby increasing sales; - acceptance of regulatory municipal ordinances.
Direct supplies to the restaurants / Catering	<ul style="list-style-type: none"> - steady all-year-round demand; - reduction of marketing costs and adding the value to the product; - higher consumer awareness of the organic products; - forming a high level of consumer loyalty; - the opportunity of adding value to the product by washing, peeling, pitting, slicing, portioning, etc.; - cooperation can be profitable provided quality produce is supplied according to specification and timely delivery. 	<ul style="list-style-type: none"> - decrease of control over sales; - the difficulty of satisfying steady demand with seasonal products; - prices can vary significantly; - limited storage space in restaurants; - regular deliveries of small volume orders vastly increase operational costs; - spending hours preparing for sorting, packaging and invoicing products to sell to multiple restaurants in a day.
Online Marketing (Internet sales)	<ul style="list-style-type: none"> - a potentially large market for specialty farm products; - competitive prices (prices are attractive to consumers); - a convenient method to advertise the farm business; - provides direct communication with the customer; - farm homepages are an effective means for informing customers of products the farm grows, when they are available, and how to obtain them. 	<ul style="list-style-type: none"> - limited and non-timely-constant sales volumes; - for the exporting company, there is a need to organize the storage of products for the maintenance of orders, so that, there is no possibility to offer products that have a short shelf life; - virtual contacts of the customer with actual goods.
Cooperatives for selling organic products by a common brand	<ul style="list-style-type: none"> - considerable opportunities for developing and expanding the activity of businesses due to joining experience; - application of experience, knowledge, and skills of the cooperative participants; - consolidation of investments for the development of the brand; - taking up a greater market segment; - small possibility of having additional certification of products; - increasing number of potential customers. 	<ul style="list-style-type: none"> - uneven supporting the interests of all participants; - loss of control over farm brand; - continuity of product supply is required.
Selling to processing enterprises	<ul style="list-style-type: none"> - additional sales channel; - lower selling and distribution costs; - steady each season demand on some product category. 	<ul style="list-style-type: none"> - continuity of product supply is required; - there is a preference for taking product from producers that have completed the Quality Assurance; - lack of connection between a consumer and a producer.

Source: compiled by the authors

Because the start-up costs for becoming involved in a farmers' market can be very low, the prices for the organic products are usually retail or a little bit higher. Also, the market of organic agricultural products is a good place for establishing a direct relationship with the target consumers, the formation of customer loyalty as well as advertising the farm and the product range. Another type is farm stands, which can range significantly from a stand with some types of products to a building with refrigerated storage and several employees. They tend to be located on the farm directly, often on a well-travelled road with good access and parking.

Another type that is becoming more popular at the European market is U-pick or Pick-your-own farms, which grow crops specifically to be harvested by customers. Usually, the target customers of these farms are families that do home canning and are ready to harvest the crops themselves involving their children in this process. Since harvesting is a high-cost part of the production process for the producers, the prices for organic products, in this case, are attractive to the customers. It should be mentioned one more direct market channel of which is agritourism. Agritourism is offered for customers who have a desire to visit a farm, to see the whole process of production and get some experience in farms activities. For more interest and fun of visitors, entertainment activities and events related to rural life are organized by farmers. Visiting farms on holidays such as Christmas, Easter, and others is the most popular. Note that the considered forms of direct marketing channels are practically not applicable for Ukrainian producers of organic products in the EU market. These types of channels require the direct presence of the farm in the country where the organic products are sold.

As the European market for the organic products is stable, we will pay more attention to the specific features of the branch in the market while choosing the countries for exports of the national organic products. We will make the analysis of the countries by the following structure: the general characteristics of the market, if they are necessary to specify, the structure of the sale of organic products, the structure of export, import, and sales channels. These facts will give us the most accurate information about both the purchasing power, personal tastes of consumers and the level of competition, as well as the idea of the most likely distribution channels of the product manufactured on the territory of Ukraine by our agrarian businessmen. Exploring and analysing the Italian market, we make the conclusions that the market is stable and long-established; therefore, the level of competition in this market will be higher than in the markets developing the direction of making ecological products. You should also note that Italy is one of the largest producers of organic products and a greater share of locally grown and processed organic products is consumed within the country. The analysis of the distribution channels of the organic products showed that the main sales places of organic products are specialized networks accounting almost for 45%, which indicates that consumers make reasonable decisions regarding the purchase of organic food. Besides Italy, we have analysed 8 countries more, which are included in top-10 by consuming organic products, therefore, we can distinguish the key characteristics that influence the attractiveness of a country for the Ukrainian organic products manufacturers entering this or that market (Table 2.2).

Comparative table of the countries

Country	Index				
	Consumption of organic products, million EUR	Consuming organic products per capita, EUR	Channel: supermarket chain, %	The level of competition (1-min, 5-max)	Share in the consumption, %
Finland	225	41,3	82	3	1,7
France	4830	73,4	45	4	2,5
Italy	4145	35,3	27	5	2,2
Germany	7910	96,6	50	5	4,4
the Netherlands	965	57,0	52,8	3	3
Norway	278	54,4	76	3	1,9
Sweden	1402	145,4	55	3	6
Switzerland	1817	221,5	77	4	7,1
Great Britain	2307	35,9	30	5	2

Source: compiled by the authors

For performing a successful activity in the market, it is necessary to have the marketing strategy that is developed in detail, well thought over and consists of the 4P complex. But, preliminary we will explore the factors that influence customers' behaviour and their purchasing decisions, which then determine significantly the strategic marketing decisions of the producers, and especially establish effective channels of selling organic products. In order to study the features of demand in the European market of organic products, to identify its qualitative characteristics, the marketing research was carried out; it included a survey of Italian consumers. A collection of primary marketing information was held via social networks by filling out the questionnaire in google.docs format by respondents. The survey that was conducted can be divided into 3 logical blocks, which are: the knowledge of the consumer about organic products (when consumers learned about organic products, how often they make their purchases, etc.); in the second block, we analysed the structure of consumer demand and the main motives for buying organic products; in the last block, we were interested in the personal information about the consumer (age, gender, education, occupation). The analysis of the obtained results allows making the following common conclusions:

- firstly, the consumers of organic products pay a considerable attention to the factor of safety in organic products compared with traditional ones;
- secondly, many years of experience in the consumption of organic food is strictly linked with the safety and taste qualities of organic products as the reasons for purchasing;
- thirdly, consumers determine their choice in favour of organic products by the concern about the state of the environment, as well as readiness to support small local farmers;
- finally, new segments of consumers appear on the researched market, whose demand for organic products is motivated by increasing level of curiosity and awareness.

According to the study, conducted by European researchers, for regular buyers of organic goods, organic food consumption is a way of life, which represents a range of values they attribute to themselves. Some of these values include: altruism –

relationships with others; ecology – harmony with the universe and environment; universalism – protection of the welfare of all people/nature; benevolence – enhancing the welfare of loved ones and friends; spirituality – inner harmony and unity with nature; self-direction – independent thought and action. So, the positioning marketing strategy of organic food producers usually focus on these values, presenting the product as environmentally friendly, healthy, and as a means of bucking the system (independent thought and action). In a number of European studies carried out in recent years, the main reasons cited by consumers for buying organic are:

- organic farming is kinder to the environment (concern for the environment has increased over the last decade in particular);
- there are no artificial chemicals in organic food production (consumers are increasingly concerned about pesticides and residues in their food);
- consumers perceive organic food to be of higher quality and better tasting than conventional food;
- consumers perceive organic food to be healthier and more nutritious than conventional food products.

While studying the consumers' motives of purchasing organic products, it is found out that for the most consumers motive «health care» is the first motive of purchase with a rating of 4.5 out of 5.62. The buyers fully agree that they buy products with the aim of taking care of one's health and children's health. Motive «support for organic movement» is the second of the most important motivations in the process of making the decision for buying organics with rating 4.48 from 5. Again, most respondents (90%) agree that the organic methods are less harmful to the environment. Thus, the motive «concern for the environment» has 4.44 out of 5 points, ranking third as a motivation. The motive «superior taste» as the perception of organic products was chosen by 94% of the respondents and is very close to the motivation of «environmental protection» having 4.42 points in the ranking. Motive «support of small and local farmers» is the fifth most important motivation for consumers with 4.26 points. The next motivation is «high quality» of the organic products, which scored 4.2 points and is common with the buyers of the organic products. We should also note that the organic products are considered as having a high level of safety, guarantee, and quality control of the product. While checking if «food safety» is a motivation for buyers, we got the rating of 4.08, which testifies to a quite substantial place in the motivation of buying organic food, nevertheless, it is not the main motive as it may seem at first sight. Motive «saving resources for future generation» has gotten 3.86 points. Besides, motives «product freshness» and «positive image» do not have any essential importance for consumers of organics with a rating of 3.6 and 3.52 respectively. Table 2.3 shows the hierarchy of the basic purchasing motives in Italian organic food market.

As can be seen from the table 2.3, the main motivation for the consumption of organic products of Italian consumers is related to rational and social aspects. Dominant motives, «supporting organic movement» and «concern for the Environment», reflect the aspiration of consumers to meet modern challenges of society and demonstrate social responsibility in choosing a model of food behaviour and purchasing decisions. Emotional motivation is formed by such motives as «improved taste», «positive image», «fashion», whose positions in the general hierarchy are not high.

Consumers purchasing motives in organic product market

Motive of purchasing	Average rating	Position number in hierarchy
Health care	4.52	1
Support for organic movement	4.48	2
Concern for the environment	4.44	3
Superior taste	4.42	4
Support of local farmers	4.26	5
Concern over animal welfare	4.22	6
Product high quality	4.20	7
Food safety	4.08	8
Saving resources	3.86	9
Product freshness	3.60	10
Positive image	3.53	11
Fashion	2.56	12

Source: compiled by authors according to the results of research

The dominance of social motives in the consumer's choice of organic products suggests that the effective strategy direction of brand positioning on the market will be appealing to the social component. As a major barrier to purchasing organic foods is a high price, producers must inform consumers about *why* those prices are higher. Consumers need more information about organic food production and processing, and how that production differs from non-organic foods. It can be suggested to justify the high price for organic products not so much by traditional elements used by producers in such a case – high costs for production, for storage, logistics, etc. It is necessary to show the consumers a direct link between the high price of organic products and its high social value and to demonstrate the importance of organic products consumption, as this will contribute to the growth of society's welfare and the development of humanity as a whole. Traditionally, the basis for the positioning of goods may be the quality, service, price, image, the distribution and promotion system, the ratio of «price-quality», benefits, and conditions of application.

Since the Ukrainian producers have just begun to develop in the European market, they have not managed to make the final choice in positioning product strategy; therefore, they stand at the crossroads between the healthy food and attractive prices. The European producers, on the contrary, in positioning their brands give preference to a support for a local manufacturer, rather than usefulness of the organic products as a whole. The European producers, on the contrary in positioning their brands, give preference to a support for a local manufacturer, rather than usefulness of the organic products as a whole (Fig. 2.2).

But it should be noted that when the company is implementing the diverse marketing strategy, the positioning strategies should differ depending on the targeting segments of consumers. As a result of our marketing research, we have outlined 3 segments of consumers according to main product purchase motivations. The first segment (call them – *Convinced consumers*) includes completely convinced consumers, namely those whose ethical considerations regarding the preservation of the environment coincide with getting pleasure from the consumption of healthy food and whose income will vary from the medium to high.

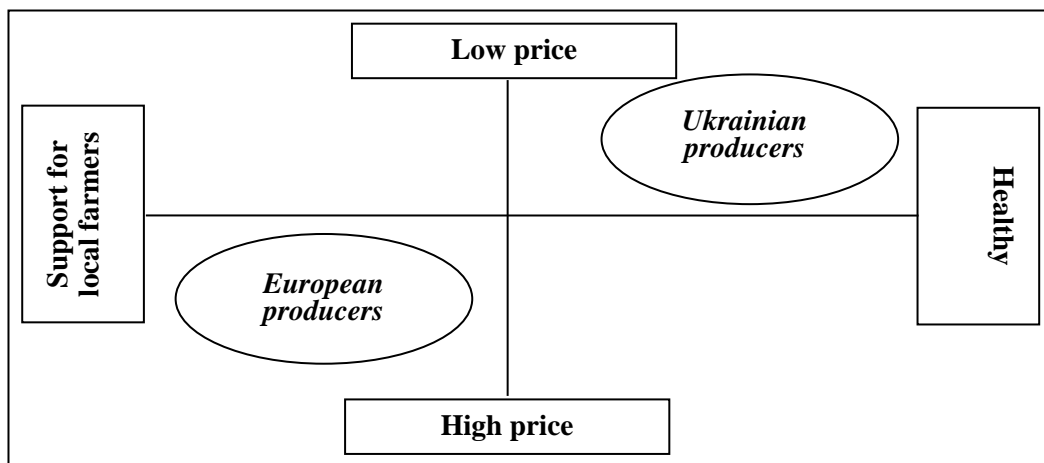


Fig. 2.2. Existing positioning of products of Ukrainian and European producers in the EU organic market

Source: compiled the by authors

These consumers have higher education; they are more inclined to rely on their own experience and are characterized by constant convictions in various life issues. For representatives of this segment, it is typical to have emotional and social motivations of purchasing behaviour. The second segment (*Caring for health consumers*) is formed by health-conscious consumers who are shopping for the sake of the home welfare taking care of their health and children's health. They rely on organic products and pay attention to what they consume, so they appreciate the qualified advice and information concerning the origin of the products. This targeting group may include representatives of both high and middle income level. The motivation of consumer behaviour of these consumers is based mainly on rational and emotional elements. The third group (*Consumers of social opinion*) includes successful and demanding buyers who consume organic products taking into account the recommendations of friends and opinion leaders, and pay attention to the society's encouragement of a healthy lifestyle and healthy nutrition. For this target segment, the key values are: personal growth and development, success and achievement, career and professional growth. They have the highest level of adaptation to the outside world and social requirements. In this connection, the social motivation is determinative on the market behaviour of these consumers.

When choosing the potential distribution channels for organic products, the manufacturer must take into account the influence of the motivation factors on consumers in the process of purchasing products (Fig. 2.3).

Thus, depending on the quality and number of target segments chosen by the company in order to enter the European market, marketing strategies would differentiate according to key motivational element and sales channel type. As you can see from the illustration provided, the first target segment mostly chooses specialized stores, farmer markets, and shops to buy organic products, as it considers these trade points as the one where the freshest products of the highest quality can be bought, where the consumer would enjoy the process and would find all the necessary products. The representatives of the second segment give their preference to the farmer markets, specialized stores, and small convenient stores. Key motivational elements of venue choice here are freshness and quality of the products, wide product range, attractive prices, opportunity to get all the additional information they need about the goods, producer, production and storing.

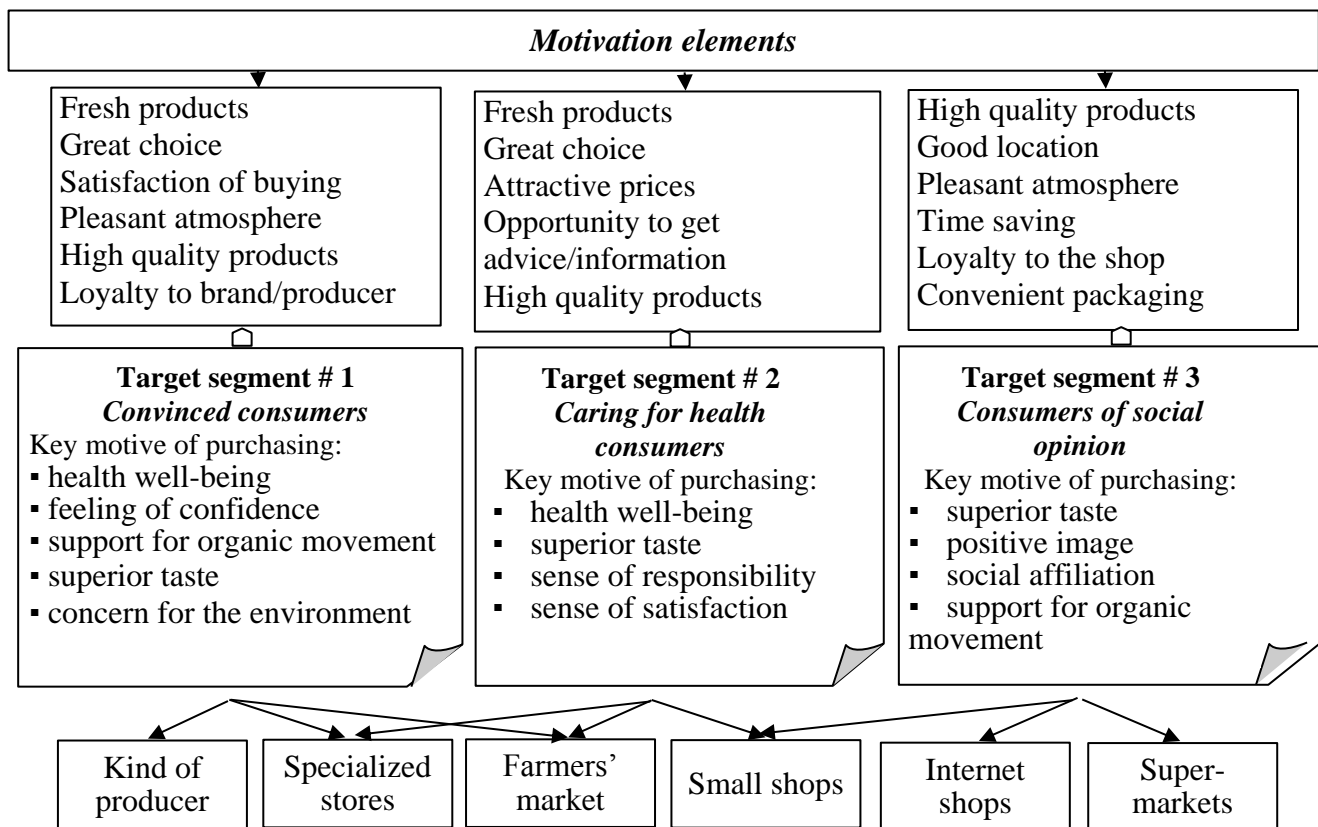


Fig. 3.2. Motivation factors of buying organic products and choosing the place of purchase

Source: compiled by the authors

And, finally, the consumers from the third segment more often buy products in the supermarkets, Internet shops, and small convenient stores. The choice of the last segment is caused by the wish to spend less time on shopping. As well the form high brand loyalty to some supermarket networks thanks to the pleasant atmosphere, salespeople qualifications, wide product range, and high quality of the products as well as product packaging fitting their demands.

Conclusions

Therefore, after considering all the above mentioned, we come to the conclusion that the main factors that influence the development of the market of organic products are: the legislation where the key role lies in regulating the quality standards for the production in agricultural sector; the economic and social aspects, such as the method of production, time, quantity and quality of products. To the opportunities of the potential development of Ukrainian industry of organic agriculture, we can refer a growing trend of consuming organic products around the world and, due to the tough standards and a limited quantity of products, a relatively easy access to foreign markets. The Ukrainian producers have much less experience in the European market compared to local companies, it should be noted that the image and the position of the Ukrainian producers in the foreign markets are only being formed. As the market for organic products is growing by all indicators, the national producers have all the opportunities to gain more market share in this sector than they have now. New technologies, that the Ukrainian producers use in making organic products, allow growing high-quality products, which are not inferior to the European ones, and make

it possible to reduce the cost of production that gives some advantages compared with foreign manufacturers.

The potential of the organic activity of the Ukrainian agricultural producers in the EU market depends on the following factors: regulatory barriers for the export of organic products to the EU, the cost value of products growing (seeds, soil, plant protection products, fertilizers), the rate of dollar exchange, because most minerals are imported by Ukraine, labour costs, network of supply channels, the trend to consume healthy (organic) food, requirements concerning the quality of the products and the effectiveness of provisions of the agreement about the association between Ukraine and the EU, since the quota on exports to the EU agricultural products to the EU is quite small and the rate of import duties adds significantly to the price. Manufacturing the organic agricultural products, which is carried out by well-defined standards, allows the Ukrainian producers to hold equal positions with national producers of organic products in the EU and to be quite competitive. Therefore, at the macro-level, the development of the appropriate infrastructure of the organic market, the development and harmonization of the correspondent legislation with the international standards, the state financial support of organic producers are essential for Ukraine. At the micro-level, marketing strategy, strategic decisions on the choice of distribution channels, and competitive positioning of products on the target segments are important elements for the successful entry of Ukrainian manufacturers into the European market.

References:

1. Bezus, R., Dubrova, N.P. (2014). The role of ecological, economic, and educational imperatives in development of organic agricultural production. *The Economy of Agro-Industrial Complex International Scientific and Production Journal*, 10, 27–33.
2. IFOAM EU and FiBL. Organic in Europe prospects and development 2016. Available from http://www.ifoam-eu.org/sites/default/files/ifoameu_organic_in_europe_2016.pdf.
3. Willer, H., Kilcher, L. (2016). *The World of Organic Agriculture. Statistics and Emerging Trends*. IFOAM, Bonn.
4. Organic in Ukraine. Available from <http://www.organic.com.ua/ru/homepage/2010-01-26-13-42-29>.
5. Kutarenko, N. (2014). The sales channels of organic products. *Goods and Markets: International scientific and practical journal*, 1, 26 – 36.
6. Cottin, Cole. (2013). *Marketing Strategies – Wholesale: Selling to Retail Outlets*. Kansas Rural Center’s Finding Your Niche: A Marketing Guide for Kansas Farms. Available from <http://kansaruralcenter.org/wp-content/uploads/2013/06/5-KSRC-marketing-guide-Wholesale-Marketing-Retail.pdf>.
7. Stephenson, G. (2015). *Direct Marketing Channels & Strategy for Organic Products*. *Organic Agriculture*, Vol. 5, November. Available from <http://articles.extension.org/pages/18381/direct-marketing-channels-strategy-for-organic>.
8. Gassler, B., Meyer-Höfer, M., Spiller, A. (2016). Exploring Consumers’ Expectations of Sustainability in Mature and Emerging Markets. *Journal of Global Marketing*, 29, 71–84.
9. Giampietri, E., Dieter, B. Koemle, A., Xiaohua, Yu, Finco, A. (2016). Consumers’ Sense of Farmers’ Markets: Tasting Sustainability or Just Purchasing Food? *Sustainability*, 8(11), 1157 doi:10.3390/su8111157.
10. Forssell, S.; Lankoski, L. (2014). The sustainability promise of alternative food networks: An examination through «alternative» characteristics. *Agriculture and Human Values*, 32, 63–75.
11. Aubry, C., Kebir, L. (2013). Shortening food supply chains: A means for maintaining agriculture close to urban areas? The case of the French metropolitan area of Paris. *Food Policy*, 41, 85–93.
12. Lev, L., Brewer, L., Stephenson, G. (2008). Tools for rapid market assessments. Oregon State University Extension Service. Available from http://smallfarms.oregonstate.edu/sites/default/files/small-farms-tech-report/eesc_1088-e.pdf.
13. Loureiro, M.L.; Hine, S. (2002). Discovering Niche Markets: A Comparison of Consumer Willingness to Pay for Local, Organic, and GMO-Free Products. *Journal of Agricultural and Applied Economics*, 34, 477–487.

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A STRATEGY MAP OF EVALUATION INDICATORS OF THE DIVERSIFIED COMPANY DEVELOPMENT

Summary

A strategy map is a tool for illustrating the relationships between the company goals, aimed at achieving the general objective of its activity, and helps in the optimal strategy selection for achieving these goals. It is suggested to establish a relationship between the local objectives, distinguished within the strategic objectives, for making clearer links between strategic objectives. It is very important to specify relationships between objectives, especially for diversified companies, when an effective development of the whole company requires not only defying and harmonizing the set of goals for several activity aspects of the company (finance, business processes, innovations, etc.) for each strategy business unit (SBU) and business unit (BU) separately but also establishing relationships between certain goals of different SBU and BU, aimed at achieving the company general objective. In this regard, it is suggested to distinguish a set of indicators within each local objective with regard to relevant elements in order to assess the level of their achievement. The company's compliance, as nearly as possible, with the target values of indicators will ensure an effective achievement of its local and strategic objectives and hence the general objective. In order to ensure an optimal achievement of the general objective using a respective strategy for development of the whole company, each SBU, and BU, it is proposed to build a strategy map of indicators that will allow specifying the relationships between local objectives separately within certain business (SBU and BU) and the whole company in general. The necessity of creating a strategy map of indicators is caused by their significant number and peculiarity (the relationship between certain local objectives does not mean that all their indicators are linked) that depends on the chosen development strategy.

Introduction

The development of a modern enterprise in the dynamic and uncertain conditions of internal and external environments is possible by selecting an effective strategy. The strategy is a general plan of actions for achieving the set goal; the long-term course of development of enterprises; method of achieving goals. The more inclusive

(goals set for several aspects of company's business that will contribute to the use of current opportunities of the company development to the greatest extent) and the clearer (plain and simple) the target goals and relationships between them, the more effective the way of their achievement. The selection of an optimal way of achieving the desired goals (strategy development) and efficiency of its implementation depends on the accurate and complete information on conditions of development (factors of internal and external environments) and timely gained possibilities of a prompt response to encountered problems. Such information and possibilities can be obtained by using the technique of comprehensive assessment of the processes of the strategy development and implementation, proposed in the work 1, the basis of the development of which is strategy maps of local objectives.

The effectiveness of the offered system has been confirmed by the practice of its implementation in Ozon LLC and Horodok Mechanical Plant PJSC. Its implementation allowed the companies under study to change the direction of their business development for a more promising one:

- abandon unpromising areas of business and start to manufacture products appealing to consumers, without changing the company's general objective (Horodok Mechanical Plant PJSC);
- enhance the company by entering old markets with new products that encouraged construction of new industrial premises, creation of additional jobs, improvement of image and growth of profits by attracting new consumers (Ozon LLC).

The difficulties emerged when implementing the system of indicators into the business of the diversified company «Zakhar Berkut» ski resort. The main problem, which the ski resort faced, was establishing relationships between local objectives of different business units (SBU, ABU, and SupBU). The necessity of determining the links between them is caused by peculiarities of creating strategy maps [1] and activity of strategic business units (SBU), providing business units (PBU) and supporting business units (SupBU) within one diversified company [2].

This drove the need for detailed study of the issue of determining relationships between local objectives of business units of a diversified company by specifying by means of links between evaluation indicators of relevant objectives. Since the ways to achieve objectives under certain circumstances are different, the sets of evaluation indicators even for achieving the same local objective depending on the chosen strategy and company's general objective will be different too. This requires creating a strategy map of evaluation indicators according to the particular situation (chosen strategy, general objective, etc.) for a certain business unit, in particular, a diversified company in general.

Part 1. The essence and algorithm of creating a strategy map of a diversified company

According to R. Kaplan and D. Norton, a strategy map is a graphical representation of cause-and-effect relationships between separate elements of an organization's strategy. The necessity of creation and advantages of building strategy maps lie in the fact that these maps [3, p. 207]:

- reflect relationships between separate objectives;
- create a model that reflects the logic of strategic focus of the company's business;
- explain the possibility of synergy emergence between separate objectives and hierarchy levels of the company;

- explain the meaning of separate management indicators;
- improve communication by establishing cooperation.

Having studied different points of view concerning creating strategy maps [4; 5; 6; 7; 8] and practical aspects of their use [9], in the work 1, we offer the algorithm of building a strategy map, which differs from a significant number of existing strategy maps in that the local objectives are distinguished within the strategic objectives for a clearer relationships between the latter. Determining the relationships between the local objectives of different aspects of company's business (finance, cooperation with contractors, innovations, internal business processes, infrastructure/employees) allowed specifying and optimizing relationships between strategic objectives, aimed at the achievement of the general objective according to the overall strategy of company development. A strategy map is built so that at every management level there can be its own due to other relationships between local objectives.

The elements of constructing a strategy map of a diversified company, created by the algorithm suggested in the work 1, are as follows:

1. According to the company's general objective, which is to increase its market value, the general objective «Provide increase of profitability and improvement of the company image» of «Finance» perspective is defined.

2. The strategic objectives of «Finance» aspect are defined, the accomplishment of which will provide the achievement of the general objective of this aspect:

- provide an increase in productivity;
- provide an increase in income;
- increase brand value.

3. The local objectives within each strategic objective of «Finance» aspect are defined; the comprehensive accomplishment of these objectives will ensure achieving the strategic objectives of the company's business aspects connected with them. The local objectives aimed at the accomplishment of the strategic objective of «Finance» aspect:

- «Provide increase in productivity» – optimize cost structure; improve asset utilization;
- «Provide increase in income» – effective management of financial resources; diversify sources of income;
- «Increase brand value» – increase the value of service; create good company image.

4. The established relationships between the local objectives of «Finance» perspective are given in Fig. 1.

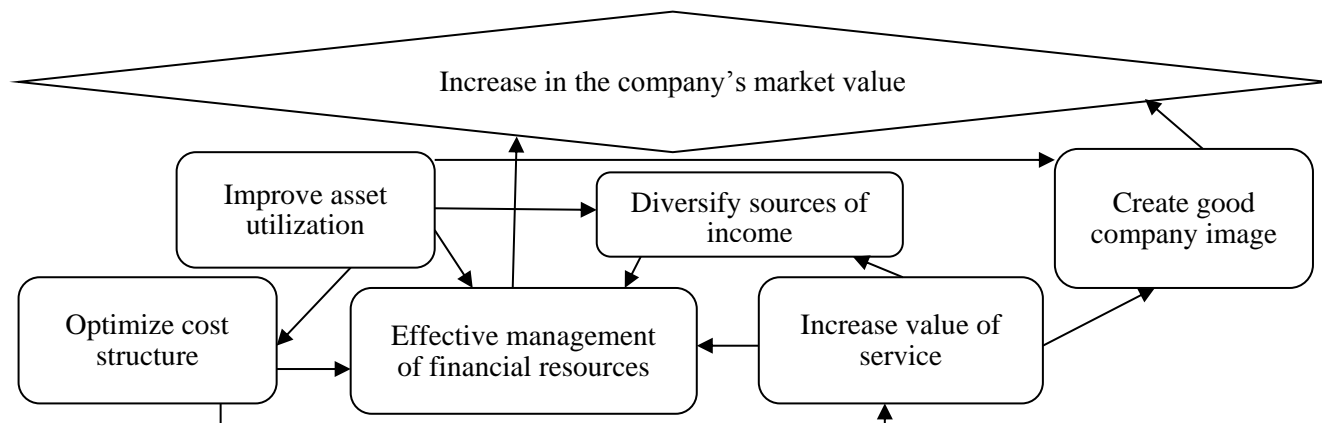


Fig. 1. Strategy map of local objectives for «Finance» aspect [own development]

Table 1

List of objectives of aspects (areas) of company's business

Aspects	General objectives	Strategic objectives	Local objectives
«COOPERATION WITH CONTRACTORS»	Increase satisfaction of customer needs, maintain contacts with suppliers, external partners, state authorities, and competitors	Increase customer base and improve satisfaction of existing customers	- Improve satisfaction of existing customers; - Increase demand
		Provide delivery efficiency	- Enhance control over delivery (optimize delivery terms)
		Satisfy needs better than competitors and establish contacts with partners	- Establish partnership relations with insurance companies; - Establish partnership relations with financial institutions; - Establish partnership relations with research institutions
		Improve activities on providing health care and environmental protection	
«INNOVATIONS»	Provide company operation with new goods, services, equipment, technologies	Implement innovation	- Purchase (develop) modern equipment; - Carry out production of new goods; - Improve customer appeal of products
		Provide effective market promotion of goods	- Provide effective operation of pre-sale and after-sale service; - Create effective sales network
«INTERNAL BUSINESS PROCESSES»	Provide business processes efficiency at the enterprise	Provide high quality of goods	- Implement the quality management system (provide optimal quality-price ratio); - Take preventive measures for the defect prevention
		Improve cost structure, implement resource saving regime	Optimize the chain of processes of creating consumer value of products
		Provide efficient use of production capacities	- Optimize duration of operating cycle; - Carry out restructuring of production processes at the enterprise
«INFRASTRUCTURE/ EMPLOYEES»	Improve working conditions and quality of infrastructure at the enterprise	Improve motivation of employees	- Provide material incentives of employees; - Provide moral incentives of employees
		Provide competence of employees	- Ensure continuous professional development of employees
		Create business climate at the enterprise	- Create and develop candidate pool for management positions; - Provide workplaces with equipment
		Provide infrastructure development	- Provide a high level of auxiliary and maintenance production; - Provide the company operation with necessary information

Note: created on the basis of [1]

5. The list of general, strategic, and local objectives for the rest four aspects of the company's business is given in the Table 1.

6. To establish relationships between the local objectives of separate aspects of business activity;

7. To build a strategy map of company's local objectives of a company for all aspects of its activity. A piece of the strategy map is given in Fig. 2.

8. Taking into account the relationships between local objectives, to establish links between the strategic objectives of separate SBU – built a strategic map of SBU given in Fig. 3.

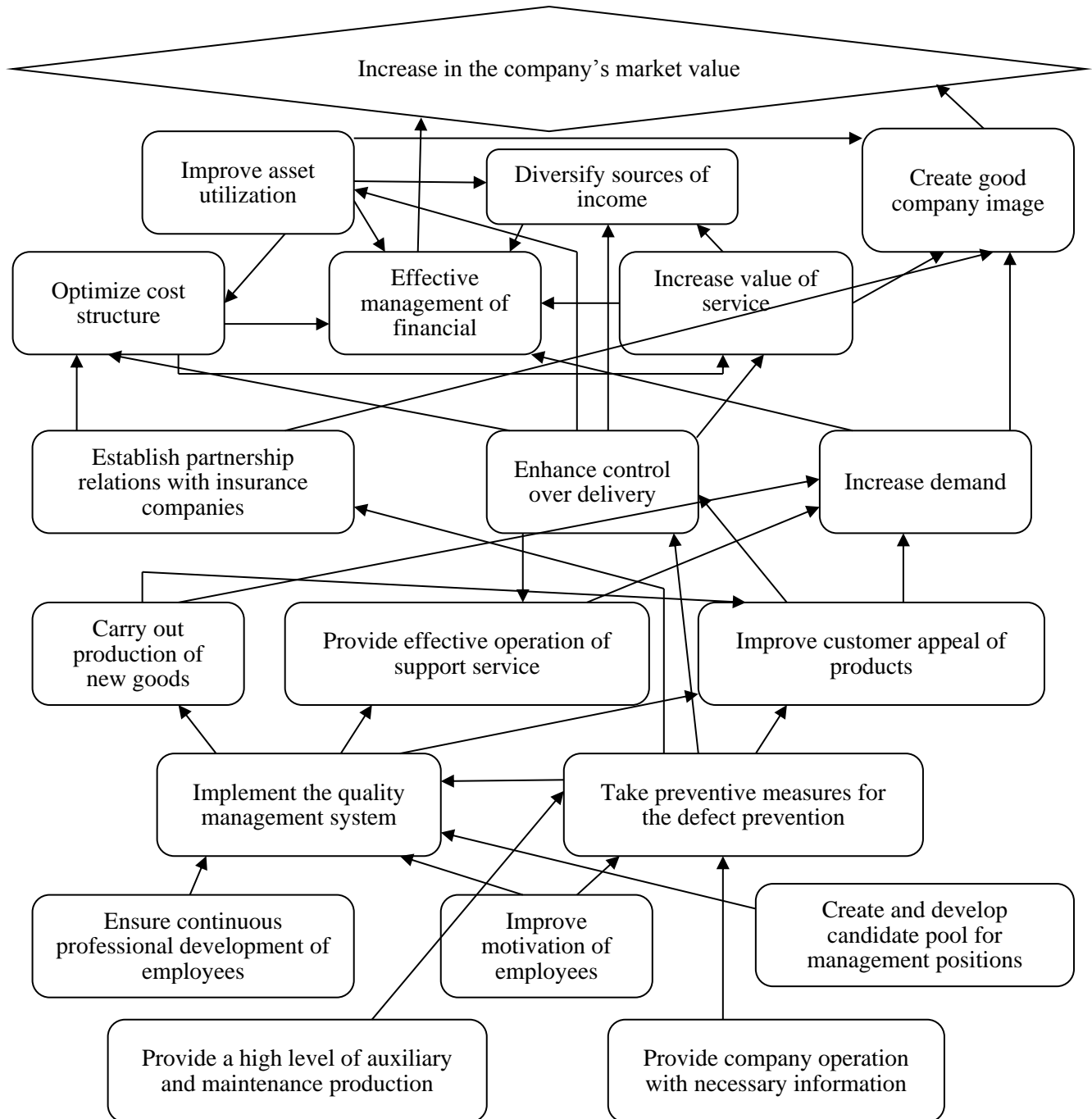


Fig. 2. A fragment of links between company's local objectives [own development]

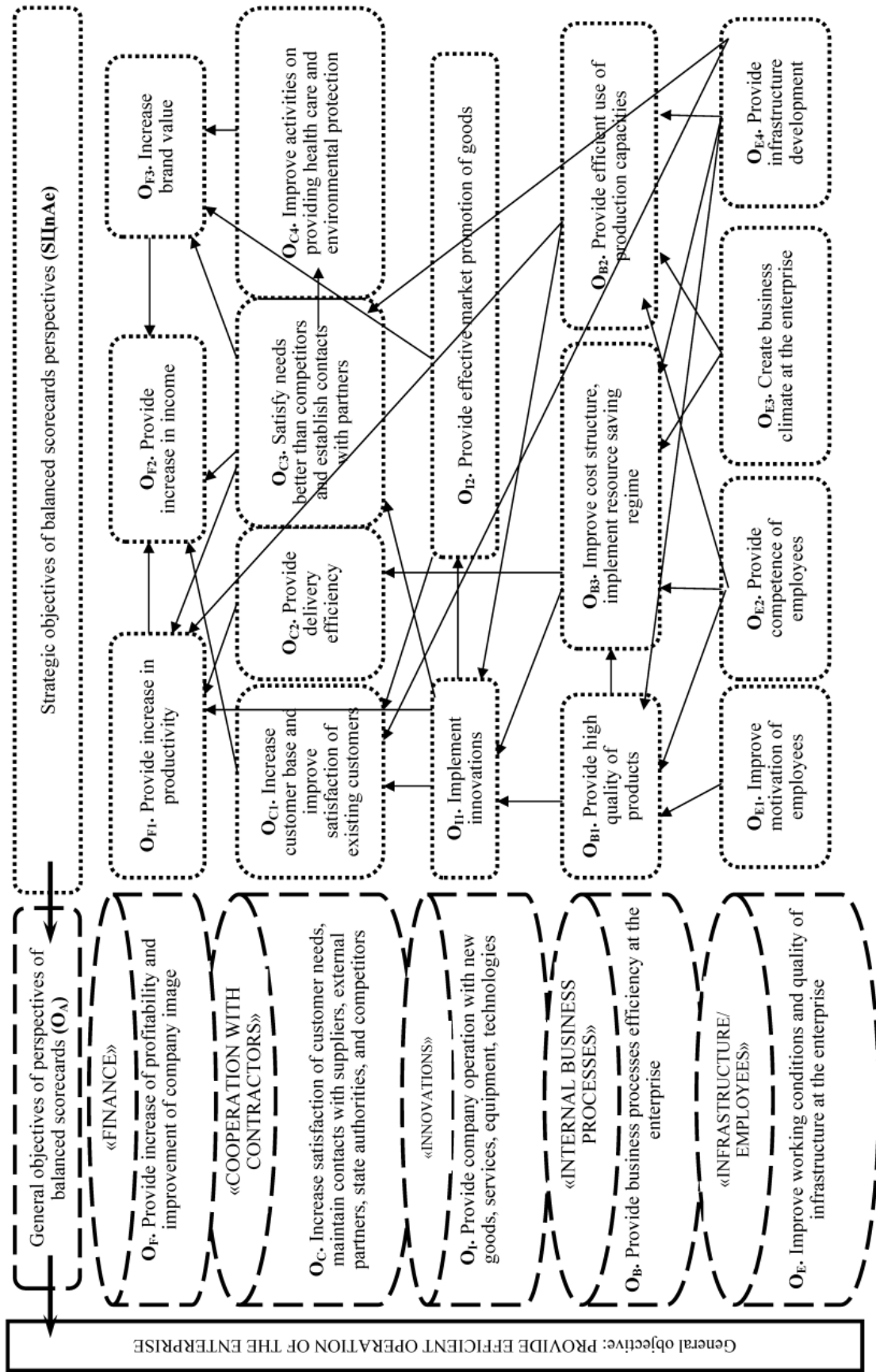


Fig. 3. Strategy map of a company [1]

9. To build a strategy map for the rest BU. A general strategy map for a diversified company with a simple structure (one SBU and several BU) will be similar to a strategy map of SBU. As for the rest diversified companies (several SBU or all business units being strategic), each SBU will have its own strategy map (though it may be similar) that will differ from the basic one by relationships between certain objectives. The strategy maps of BU of the diversified company can have not only different relationships between objectives but also different strategic objectives.

Thus, strategy maps of diversified companies, which consist of several SBU or all business units being strategic, are more complex. In this case, each SBU will fulfil specific tasks of the overall strategy for the diversified company development, the level of achievement and limitations of which will be established by means of a certain system of indicators of comprehensive assessment of the strategy implementation process. In other words, the system of indicators for the comprehensive assessment of the level of the local objectives achievement is an important element of constructing and implementing into operation a strategy map for diversified companies. The required points of the algorithm of creating a strategy map for a diversified company, therefore, will be as follows:

10. To create indicators of comprehensive assessment of the local objectives achievement within these objectives;

11. To determine relevant relationships between evaluation indicators of each business of the enterprise separately (SBU and BU), depending on the general objective and according to the chosen strategy of development of each SBU and BU;

12. Taking into account the links between the evaluation indicators of different SBU and BU, to build a strategy map of evaluation indicators for the whole enterprise according to the general objective of its development;

13. Based on the determined relationships between the evaluation indicators, to determine relationships between local and strategic objectives of different SBU and BU, aimed at achieving the general objective of the diversified company development.

Part 2. Peculiarities of creating a system of indicators for the comprehensive assessment of the strategy implementation (ways and level of achieving the set goals) based on a strategy map

It is suggested to create systems of evaluation indicators within the local objectives of each aspect according to the following elements: expenses; processes; results, and conclusions with the purpose of a comprehensive thorough assessment (defining the level of deviation of the company's existing state from a targeted one) and effective control over the process of the strategy implementation (making timely decisions concerning the elimination of problems encountered).

The «Costs» element reflects all types of resources required for the execution of a certain business process. The «Processes» element is connected with the current activity of the enterprise and provides for the monitoring of the company operation from the emergence of an idea to the production of goods or achievement of a positive result at a certain stage. The value of this element can warn of the need to change the way of achieving the goal or make changes in the execution of the process itself. The «Results» element reflects the results of a certain (innovative) effort. The parameters of this element describe what a certain (innovative) effort gives (gave) to the enterprise. The «Conclusions» element reflects how the innovative efforts turn results into value for the enterprise and allow defining net contributions into this value [1].

Let us have a look at some evaluation indicators that will let us define the level of achieving «Optimize structure of expenses (raw material)» local objective of «Finance» aspect, created according to the abovementioned elements («Costs», «Processes», «Results», «Conclusions») (Fig. 4).

The measures of the chosen strategy implementation (allocation of resources, adjustment of organizational structure, formed management system, etc.) will serve as standard (basic, reference) values of created indicators when assessing the process of the strategy implementation. The values of indicators of the comprehensive assessment of the company’s operation by five aspects of previous years (periods) will constitute a basis of the strategy development.

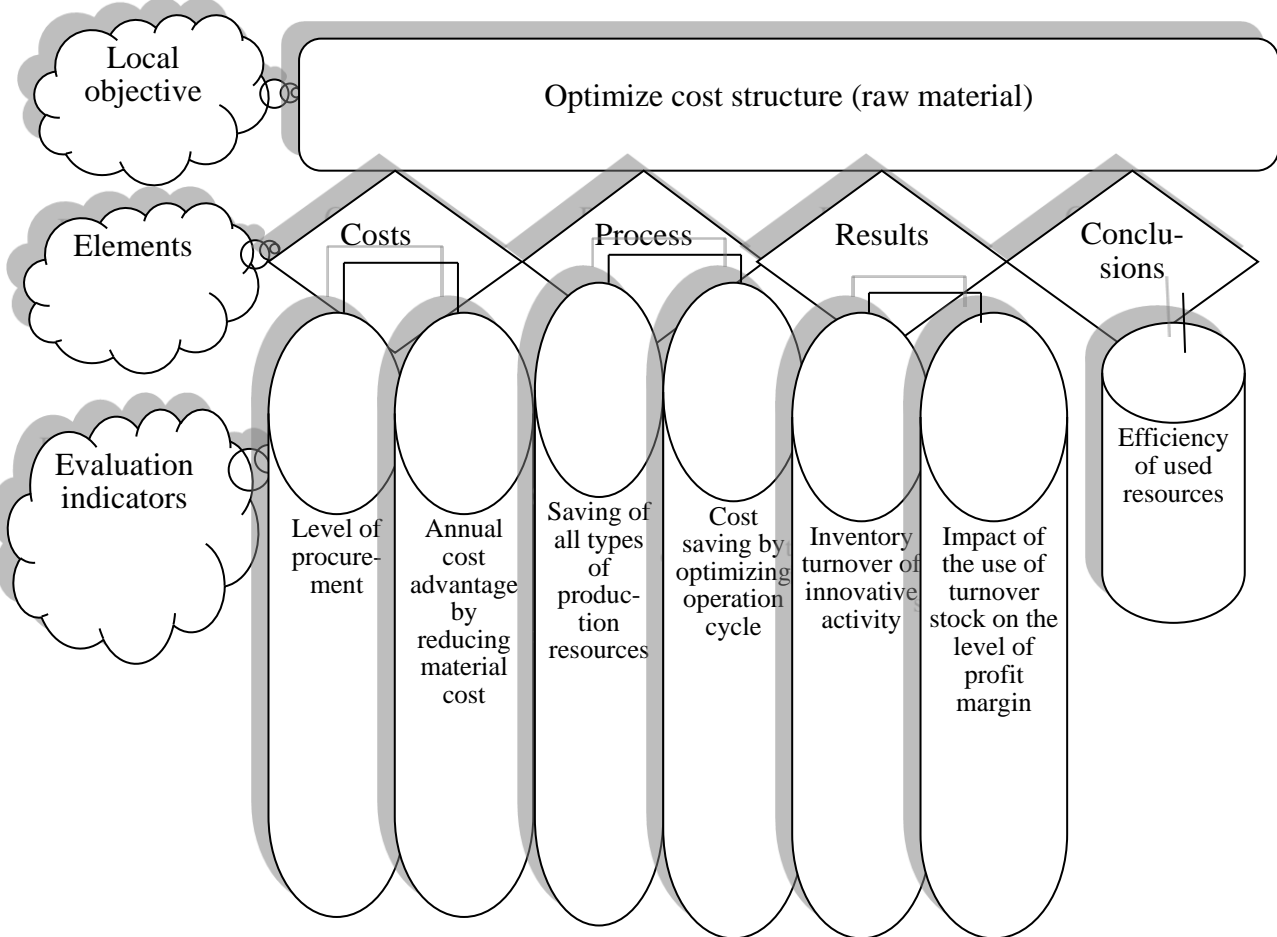


Fig. 4. An example of the system of evaluation indicators for the local objective achievement, «Finance» aspect [created by the author]

The system of indicators created in this way will allow giving a comprehensive estimate of company’s performance, selecting a correct strategy of further development and monitoring the process of the implementation of strategic measures concerning optimal achievement of the set goals, and the extension (cascading) of this system of indicators to all company levels will contribute to its effective management.

Certainly, different values of indicators will be significant for different levels of management. At the corporate level, for example, the values of indicators of each SBU, PBU, and SupBU are taken into account, which ensures the accomplishment, to the fullest extent, of general objectives of a diversified company by five aspects. As for the business level, the values of all indicators formed within local objectives are

taken into consideration. At the operating level – the values of constituent elements of each of the business level indicators within the operating cycle of a respective subdivision. At the functional level – the combined values of the operating level indicators by the constituent elements of business level indicators.

For example, the value of «Level of procurement» indicator (which is proposed to be calculated by formula 1 in the work 1) and necessity of its recognition at the corporate level will arise when a diversified company makes a decision concerning the selection of an option of raw material delivery to its SBU. In this case, the following alternatives are possible:

1. to purchase components (raw material) totally from external suppliers, other BUs of the diversified company have nothing to do with this raw material;

2. to start the production of components by other BUs of the diversified company, at that:

a) use all manufactured products for own consumption of SBU of the diversified company;

b) use a part of the products for own consumption and a part for sale to external enterprises;

c) sell the whole volume of production to external enterprises, and purchase this raw material for own SBUs from external enterprises, which are more experienced in work with such goods.

The level of procurement:

$$R_M = \frac{\sum_{i=1}^n Q_{mat.i} \cdot P_{mat.i} \cdot t_i \cdot E_{pi} + B_N}{Q_{mat.(\delta_{max}-\delta_{cep.})} \cdot P_{mat.\%} \cdot t \cdot S \cdot d \cdot b + B_Y}, \quad (1)$$

where $Q_{mat.(\delta_{max}-\delta_{cep.})}$ – maximum required amount of material, T.; $P_{mat.\%}$ – price of material adjusted by discount % for the order volume, UAH; n – number of suppliers; t_i – transportation costs of the n th supplier, UAH.; B_N – expenses connected with a delay of material delivery, UAH.; B_Y – expenses connected with stock reserve management and internal transportation of materials, UAH.; $P_{mat.i}$ – price of material of n th supplier, UAH.; b – loss of material during storage (thefts, damage of products at storage, etc.), %; $Q_{mat.i}$ – amount of material delivered by n th supplier, tons; E_{pi} – efficiency of n th supplier deliveries, points; S – quality of material, points; d – accuracy of parameters of the order, points.

The use of this indicator at the business level is required for the accomplishment of almost any general objective of «Finance» aspect as an indicator of change of suppliers (towards more accurate, cheaper, and proper deliveries of material etc.). An important task of the business level is to determine causes of the change of the given indicator and take appropriate measures aimed at their elimination. For example, the change of the indicator value is connected with the deterioration of raw material quality and requires detecting a particular supplier of defective products, which is a task of the functional level.

The current data of all departments, subdivisions, operations, etc. at the functional level is combined by a relevant component of a certain indicator and the cause of the change of this component value is determined. For example, the value of «Level of procurement» indicator by «expenses connected with delay of material delivery» component is a set of results of the activity of several subdivisions (manufacturing, marketing and financial departments, storage, etc.), since this component has internal and external orientation. The products from suppliers can be delivered to the

enterprise in time but they can be delivered late directly to the production process due to inefficient transportation, late payment, lack of the required number of loaders, etc.

At the operating level, a particular person or a group of persons of a certain department or subdivision deals with a specified component of the given indicator (maximum required amount of material, price of material adjusted by discount % for the order volume, number of suppliers, transportation costs of nth supplier, expenses connected with delay of material delivery, expenses connected with stock reserve management and internal transportation of materials, price of material of nth supplier, loss of material during storage, amount of material delivered by nth supplier, efficiency of nth supplier deliveries, quality of material, accuracy of parameters of the order), ensuring the achievement of its target value. For example, the component of «loss of material during storage» indicator will have its own values in two subdivisions: at the company's storage, the value of this component will depend on the number of thefts from the storage and in the manufacturing department it will depend on the amount of damaged raw material directly prior to the production process.

Part 3. Building a strategy map of evaluation indicators

The examples of indicators formed for the achievement of certain local objectives of five aspects is given in Fig. 5.

As can be seen in Fig. 5, and this is only a part of possible indicators, the process of developing and implementing the strategy on the basis of a strategy map provides for the necessity of calculating and processing a significant number of indicators, and as for a diversified company, also combining several values of one indicator by different SBUs and BUs. The results of the assessment of Ozon LLC, Horodok Mechanical Plant PJSC [1], and Zakhar Berkut ski resort, using the suggested system of indicators, showed that the relationship between local objectives does not mean the relationship between all their indicators, which is connected with peculiarities of taking into account and using each indicator at different management levels (Chapter II).

For example, the relationship between «Optimize cost structure» and «Effective management of financial resources» local objectives is provided by means of the relationship between «Level of procurement» and «Effectiveness of implementing innovations» indicators when achieving «Increase company value» general objective of the enterprise by implementing the growth strategy (Ozon LLC). If we select the retrenchment strategy for achieving «Optimize business structure» general objective (Horodok Mechanical Plant PJSC), the connection between the indicated local objectives will be made by means of the relationship between «Annual cost advantage by reducing material cost» and «Business profits» indicators.

The example of the strategy map of evaluation indicators: of the 1st option of growth strategy implementation is given in Fig. 6; of the 2nd option of the retrenchment strategy implementation is given in Fig. 7.

Areas of indicator formation	Local objectives	Indicator name
FIANANCE	Optimize cost structure (raw material)	The level of procurement; Annual cost advantage by reducing material cost;
	Increase value of service	Profit from maintenance service; Company's market share;
	Effective management of financial resources	Effectiveness of implemented innovations; Company equity-assets ratio; Company profit;
	Create good company image	Penalties for the violation of legislation;
COOPERATION WITH CONTRACTORS	Improve asset utilizations	The level of efficiency of major repairs costs
	Establish partnership relations with research institutions	The ratio of own and purchased developments
	Enhance control over delivery	Efficiency of deliveries of nth supplier
	Increase demand	Appeal of materials of nth supplier; The ratio of level of standard products demand to nonstandard ones; The level of satisfaction of market needs with products;
INNOVATIONS	Establish partnership relations with insurance companies	The ratio of number of insurance events during production process
	Improve customer appeal of products	Coefficient of marketing efficiency; Share of all-new products; Novelty factor
	Carry out production of new goods	Volume of products kept in storage for too long
	Provide an effective operation of pre-sale and after-sale service	The level of consumer satisfaction with customer service operation
INTERNAL BUSINESS PROCESSES	Purchase modern equipment	Production output which requires automation of production; Share of resource-saving manufacturing processes in total number of implemented processes
	Implement the quality management system	Manufacturing quality level
	Take preventive measures for the defect prevention	Materials cost during storage
	Optimize duration of operating cycle	Coefficient of variability; Flexibility of manufacturing process;
INFRASTRUCTURE / EMPLOYEES	Carry out restructuring of production processes at the enterprise	Share of technologically and economically outdated equipment; Capacity reserve
	Provide continuous professional development of employees	Effectiveness of visited exhibitions, fairs, conferences; Conformity of qualification of employees with work performed by them
	Provide incentives of employees	Efficiency coefficient of staff incentive
	Provide the company operation with necessary information	The level of reliability and sufficiency of information at the enterprise
	Provide a high level of auxiliary and maintenance production	Average load per 1 m ² of storage area
	Create and develop candidate pool for management positions	Inventive activity

Fig. 5. An approximate list of evaluation indicators of achieving certain local objectives

Note: created on the basis of [1]

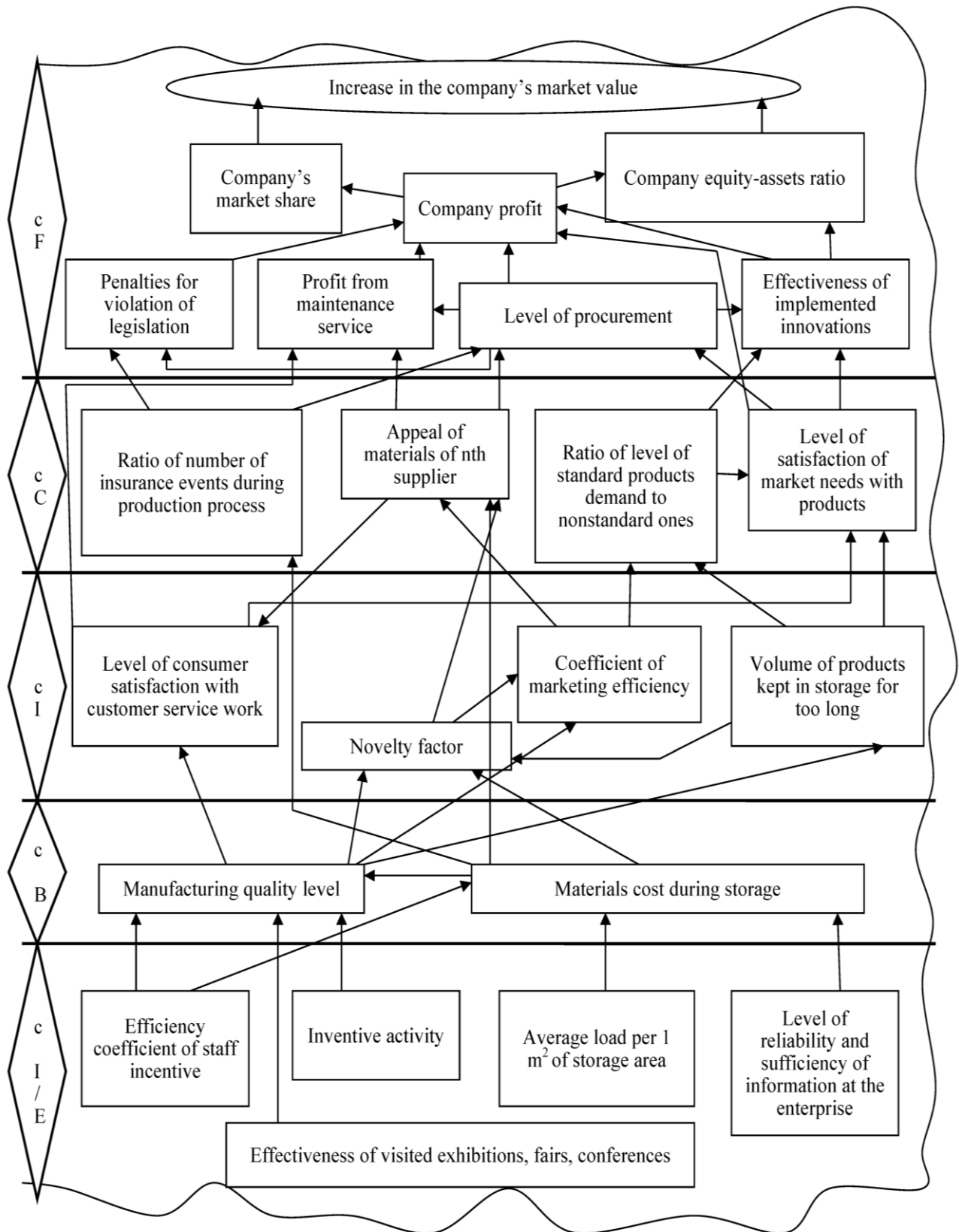


Fig. 6. A piece of the strategy map of evaluation indicators (option I)

Note: created by the author

c F, c C, c I, c B, c I/E – components of company's business: finance, cooperation with contractors, innovations, internal business processes, infrastructure/employees

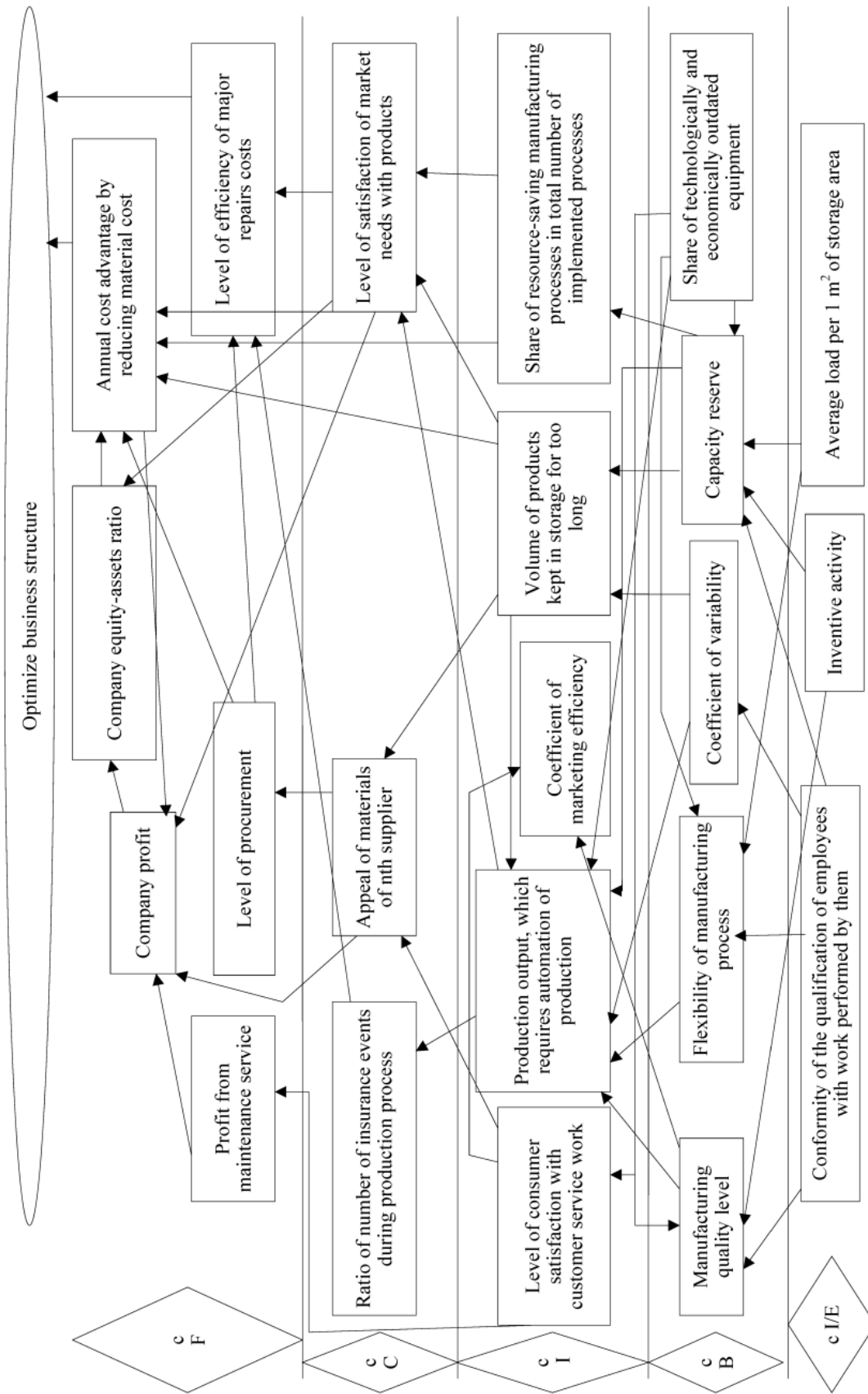


Fig. 7. A piece of the strategy map of evaluation indicators (option II)
Source: created by the author

As can be seen in Fig. 6 and 7, the relationships between local objectives remain the same, and the relationships between the indicators, which characterize the level and provide the optimality (accuracy) of the way to achieve the goals, change:

- in the 1st option, much attention is paid to increase of profitability and improvement of company image;
- in the 2nd option, an attention is focused on the maximum possible reduction of expenses without deterioration in the quality of products.

The following ways of business development are also possible: corporate restructuring, at that, the attention is drawn to the possibility of reduction in output of a certain type of products in order to focus on profitable goods; integration of different types (with suppliers, consumers, other enterprises attractive for the development); enterprise expansion by means of diversification, etc.

If «Optimize business structure» will be the general objective, the achievement of which will be made by implementing the strategy of narrowing the business area by reducing costs, the strategy map of local objectives of «Finance» area will differ from the strategy map given in Fig. 1 by the ultimate ways of achieving the general objective that can be represented in a form of back arrow in comparison to the basic version of the strategy map. In other words, arrows will be directed not from the local objectives «Create good company image» and «Effective management of financial resources» (Fig. 1) but from «Optimize cost structure» and «Improve asset utilization» (Fig. 8) to the general objective.

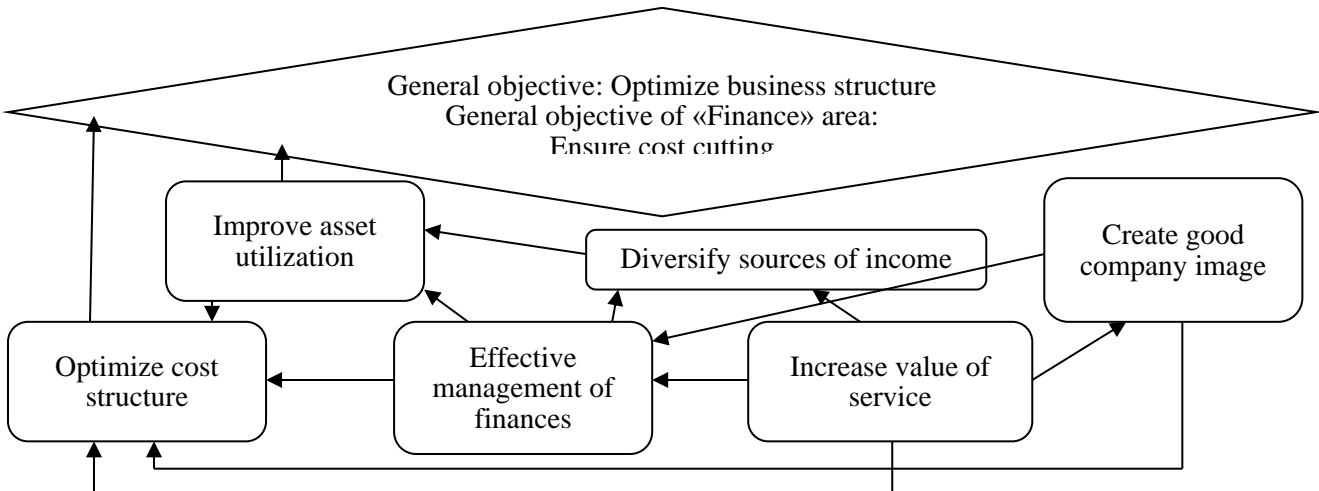


Fig. 8. Strategy map of local objectives aimed at achieving «Ensure cost cutting» general objective

Note: created by the author

The fragments of strategy maps of evaluation indicators for diversified company’s SBU or single business company are given in Fig. 6 and 7. As for the BU of diversified company, which manufactures components required for the manufacture of SBU products, the strategy maps of SupBU and PBU are linked by the following indicators: the level of procurement, novelty factor, manufacturing quality level, inventive activity, average load per 1 m² of storage area and level of reliability and sufficiency of information at the enterprise. The strategy maps of SBU and SupBU are linked by the following indicators: the level of consumer satisfaction with customer service operation and company equity-assets ratio.

As can be seen in Fig. 6 and 7, the scorecards are quite cumbersome, it would, therefore, be useful, for the purpose of clearer representation, to assign a number to

each indicator, depending on the local objective of the relevant area, to the achievement of which it will contribute.

Conclusions

A strategy map is a graphical representation of cause and effect relationship between separate elements of an organization's strategy. It describes the strategy in a universal and consistent way, allowing to not only determine the relationship between the objectives but to manage them as well, ensuring an optimal achievement of general objectives of the enterprise.

The peculiarity of the proposed algorithm of building a strategy map is the necessity of setting local goals that contributes to the specification of relationships between strategic objectives of different areas of business activity, specification and clearance of set tasks for their achievement by all company employees, and reasoned selection of only the most significant indicators of comprehensive assessment of the strategy implementation.

It is proposed to specify the relationships between the objectives of different SBUs and BUs of a diversified company through evaluation indicators, which ensure the achievement of relevant local objectives of different aspects of each business unity's activity and are aimed at the achievement of the general objective of the whole enterprise through relevant strategic objectives.

Building a strategy map of evaluation indicators contributes to prompt decision-making when strategic problems arise (inconsistency between the set goal of a company and its internal capacities or strategic resources) by taking proper measures to timely detect deviation of received values of indicators from the targeted ones and determine the cause of this deviation using the determined links.

A strategic map of a diversified company built in this way will provide effective links between its business units towards finding an optimal relationship between their activities that will ensure obtaining a maximum possible synergy effect and achieving the general objective of the company development.

References:

1. Solovii Kh.Ya. Creating and using balanced scorecards of company innovative activity indicators [Text]: Thesis for the degree of Candidate of Economic Sciences / Kh. Ya. Solovii. – Lviv, 2012. – P. 195.
2. Kozyk V.V. Peculiarities of diversified companies operation / V.V. Kozyk, Kh.Ya. Zalutska // Journal «The scientific heritage». – 2016. – VOL 1, No. 3 (3). – P. 4–6.
3. Kyzym M.O. Balanced Scorecard: Monograph / M.O. Kyzym, A. A. Pylypenko, V. A. Zinchenko. – Kharkiv: INZHEK Publishing House, 2007. – P. 192.
4. Kaplan R. Strategy maps: Converting intangible assets into tangible outcomes. – Moscow: Olimp-Business, 2005. – P. 512.
5. Kaplan R., Norton D. The strategy focused organization. How balanced scorecard companies thrive in the new business environment. – Moscow: Olimp-Business, 2005. – P. 416.
6. Kaplan R., Norton D. Alignment: Using the balanced scorecard to create corporate synergies. – Moscow: Williams Publishing House, 2006. – P. 384.
7. Olve N.-G., Roy J., Wetter M. Performance Drivers: A practical guide to using the balanced scorecard: Translation from English – Moscow: Williams Publishing House, 2003. – P. 304.
8. Kuzmin O.Ye. Strategic business activity: Planning technologies and creation of maps: [Monograph] / O.Ye. Kuzmin, N.Ya. Petryshyn, K.O. Doroshkevych. – Lviv: Municipal Information Systems, 2011. – P. 320.
9. Gorsky M. Golden pages: The best examples of implementing balanced scorecard: [Collection of articles] / M. Gorsky, A. Gershun; translated from English by M. Pavlova. – Moscow: ZAO «Olimp-Business», 2008. – P. 416.

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IMPLEMENTATION OF THE ECONOMIC SECURITY SYSTEM IN THE ENTERPRISE MANAGEMENT SYSTEM

Summary

The enterprise response to the changes in the external and internal environment that have a negative impact on its business, it is an attempt to defend themselves, that is to strengthen the economic security. That is why recently the company security-oriented management and its security-provided activities are actualized. The capacity of the economic security system is determined by its adequacy to the enterprise management system, which is laid in the implementation of the system of enterprise economic security to the enterprise management system and cause the changes inevitably. The purpose of these changes is the elimination of organizational inconsistencies arising from enterprise security-provided activities. The enterprise economic security system is objectified and the sequence of its implementation in the enterprise management system (as a subsystem or a supersystem) is developed, which is the result of justification of the creation of structural department of economic security, its abilities, and ways to interact with other enterprise departments to ensure the safety of the objects of security system of the enterprise economic security.

Introduction

The economic security system is a component of the enterprise management system regardless of the status – a subsystem or supersystem. Therefore, the capacity of the enterprise economic security system depends on its adequacy to the enterprise management system. It is namely this adequacy provides occupation of its proper place in the enterprise management system, due to the system of economic security can fulfil its role in the enterprise management.

The correspondence of economic safety system to the enterprise management system is laid in the implementation of the economic security system to the enterprise management system. This implementation causes changes in the enterprise management system inevitably; we are talking about its adaptation, which should provide adaptation of the enterprise management system to the emergence of new subsystems or supersystem.

However, the issue of changes in the enterprise management system during the implementing of a new system of economic safety is in a state of development of not only conceptual basis, appropriate methodology, and instrumental basis but also terminological (conceptual) and scientific basis. Moreover, changes in the enterprise management system provide primarily the transformation of workers' consciousness by forming security-oriented management and then – changing of processes that constitute the content of activities of separate subsections and the enterprise as a

whole, by changeover of the communication system, distribution of powers and responsibilities, and also making decisions from the position of evaluation of their influence on the level of economic security.

Part 1. Features of the impact of changes in the activities and the enterprise management on its economic safety

In conditions when the external environment is characterized by a high level of instability and unaccustomedness of influential factors, survival is ensured by the adaptation. In the scientific literature, adaptation is referred to as adaptation processes as on the level of the individual so in changes of entire populations during the whole their existence. This problem is multifaceted and covers the area of interest of many specialists.

For economic science, this direction is new and promising. The change of environment of organizations' activities and its impact on their activities is considered by modern researchers as the starting point for the adaptation of the organization.

The modern science singles out two types of adaptive reactions:

- adaptation according to the type of tolerance (endurance) is a passive way of adaptation;
- adaptation according to the type of resistance (resistance) is an active way of adaptation.

In this case, adaptation is considered as a way of organizing the management of strategic and tactical response of the enterprise to the changes in its management system – the emergence of a new subsystem or supersystem – with mechanisms and forms, which are inherent to it.

The changes in the enterprise management system in the creation and objectification of the enterprise economic security system are new and little-studied issue since the formation of the scientific direction in change management is not yet completed, it is possible to speak only about the development of the conceptual and scientific basis and the creation of appropriate methodologies and tools of change management. These processes are reciprocal: an adaptation of enterprise management system in the form of certain modifications is necessary for placement of economic security in it but changes in the enterprise activity and management affect the enterprise economic security too.

The issue of the impact of changes in the enterprise activity and management on its economic safety is outlined by Alkema V. G. and O. S. Kirichenko [1]. According to their mind, the issues of peculiarities in the enterprise change management, caused by the need of ensuring the enterprise economic security, acquire relevance: the introduction of the organizational structure of management of the economic security service and configuration of the corresponding communication system, distribution of powers and responsibilities. These changes are necessary to improve enterprise security-abilities. The adaptation of the enterprise management system to the emergence of a new subsystem or supersystem – the enterprise economic security system – is ensured by the changes that should happen. The purpose of these changes is the creation of conditions for the use of the developed mechanisms of the functioning of the enterprise economic security system and its management, which are management tool of the system performing its functions.

The adaptation of the enterprise management system in implementing it to the economic security system provides:

- determination of changes that should be introduced to the existing subsystems in connection with the implementation of a new subsystem or supersystem – the economic security system;
- overcoming resistance to the change of the enterprise employees;
- establishing teamwork between the employees of the service (department) of economic security and other structural subsections;
- the organization of the mechanisms of the enterprise economic security system on the base of the combination of formal and informal components (adjustment of organizational behaviour – the informal aspect and the establishment of organizational relationships – formal aspect).

For the implementation of activities on adaptation of enterprise management system to the emergence of a new subsystem or supersystem and developed mechanisms, which ensure its functioning and management, the appropriate approaches are developed that reflect key goals, objectives and initiatives of adaptation, its functional areas and requirements for implementation in the context of management levels.

The implementation of the economic security system to the enterprise management system is associated, first of all, with the implementation of changes, the purpose of which is to resolve organizational inconsistencies connected to the requirements of performing certain actions, functions, and tasks of the specialists of the economic security service (department) and employees of structural subsections in security-provided activities and assessment of the impact of different managerial decisions on the level of the enterprise economic security.

The effectiveness of adaptation measures is determined by the ability of the enterprise management system to respond to changes preventively and constructively, which are conditioned not only because of the emergence of a new subsystem or a supersystem (a one-time change) but also because of the changes that occur in the economic security system constantly due to the action of the management mechanism. From this position, the adaptation of the enterprise management system should be recognized as a constant process.

The effectiveness of the adaptation of the enterprise management system to the implementation of the economic security system and its constant volatility depends on the availability of appropriate tools, their application, and direct application. Tools of adaptation of the system of enterprise management are considered as a means of making changes to the subsystems of the management system, coordination of their interaction in terms of the situation and resource constraints.

The implementation of the economic security system involves not only changes in the enterprise management system but also their management, their handling, because the lack of control may slow down the implementation process, and in some cases can lead to completely opposite results due to strong resistance of the individual workers or of the enterprise structural subsections. Moreover, the higher level of the hierarchy the workers, who resisted, hold the more the number of structural units does not perceive the economic security system, the more real becomes the failure of the implementation system.

The changes that constitute the essence of adaptation of the enterprise management system to the implementation of economic security system must occur in two directions – personal changes and organizational changes. For their description and analysis, it is necessary to revise the structure and ratio of the components of the enterprise management system, which today are considered very often from the point of the functional approach.

In change management, the following components of the enterprise management system are distinguished: employees, processes, communications, the organizational structure of management (structure, relationships), knowledge, management organization (authority, responsibility, rights) [2, p. 67].

Personal and organizational changes in the enterprise management system in connection with the implementation of the economic security system should occur with the observance of a number of principles that are formulated on the basis of the principles of change management [3, p. 52] and information management [4]:

- the priority of personal changes in the enterprise management system;
- the coordination of organizational and personal changes in the enterprise management system;
- the concordance of organizational changes in the enterprise management system beyond managerial levels;
- the informatization of management in the context of the protection of the objects of the security system of economic security and ensuring the enterprise economic security to overcome the isolation of staff from the information;
- the sequence of changes and their transformation into specific actions and tasks.

The main purpose of the changes in the spheres of organizational life in the implementation of the enterprise economic security system to the enterprise management system is the formation of a united relationship of all employees to the perception of economic security as a main condition of the enterprise activity and development in ensuring economic security that requires changes in approaches to the fulfilment of tasks according to job descriptions of employees. The foundation for the formation of a single attitude of workers to the perception and ensuring of economic security is the formation of total «safe thinking», which should be manifested at all stages of formation and taking managerial decision-making in structural subsections and the enterprise as a whole.

The main vector of personal changes is a change of thinking and thus behaviours of leaders at all levels of management and employees of all structural subsections. Therefore, the introduction of personal changes to the elements of the enterprise management system is connected with the psychological and social aspects of management. I. Adizes noted such composition of personal changes [3, p. 73].

Using [3, p. 73] components of the personal changes that are associated with changes in the control system due to the emergence of a new subsystem – the system of enterprise economic security is described as follows.

Individual component involves a change of attitude of each employee to the perception of the enterprise economic security and, consequently, changes in his work. These changes occur in several stages. The presence of many stages is caused by the employees' attitude to the changes. The first stage happens due to the awareness of the need for changes, which changes further the attitude of employees to the terms of Regulations of the service (department) of economic security. This stage ends as soon as changes are perceived, the evidence of which is the willingness of employees to work in accordance with these Regulations. The next stage of personal changes is associated with a collective component, in which changes occur in the relationship between the structural subsections and analysts of the services (department) of economic security in the assessment of security of the security object of the economic security system, defined by specific criteria of types (kinds) of management decisions, projects, in the choice of methods to protect the security objects and their implementation in organization of implementing the recommendations of the service (department) of economic security. On the third

stage of personal changes as a result of changes in the management system due to the emergence of a new subsystem, the organizational component is formed, resulting in the dominance of «safe thinking» at all levels of the hierarchy of the enterprise management.

The organizational changes in the management system due to the emergence of a new subsystem – the enterprise economic security system – are changes that refer to the other elements of the enterprise management system, which are not connected with the enterprise personnel and its uncodified knowledge (knowledge that is inseparable from the workers). The organizational changes relate to the changes in processes, communications, and organizational structure.

The organizational changes in the enterprise management system are more formalized and structured compared to the changes on a personal level. But the personal and organizational changes must occur together because organizational changes are ineffective, formal without changes in the behaviour of employees. However, the changes in the behaviour of employees entail always necessary organizational changes [5]. But the question concerning the driving force of personal change, that is the question of the primacy of the personal or organizational changes (which starts the process of change in the thinking of the staff – personal or organizational changes) cannot be considered solved definitively, although theories of change management (e.g., I. Adizes) based on the priority of personal changes.

The organizational changes in the enterprise management system in connection with the implementation of the enterprise economic security system happen on almost all managerial levels.

At the level of individual employees, the organizational changes in the enterprise management system in connection with the implementation of the enterprise economic security system are manifested in the changes of functions, tasks, responsibilities and subordination, an operations procedure in a workplace, performing a new action or suspension of those actions, which were carried out earlier, the need to fill new documents relating to economic security. These modifications are formalized in the workplace and job descriptions of employees.

At the level of structural subsections, the organizational changes are manifested in:

- the emergence of areas of responsibility, where the security objects are situated;
- the extension of competences of the subsection in connection with the need to assess together with the service (department) of economic security the state of security of the security objects (or provide in a certain format the information to the service (department) if the assessment belongs to its exclusive competence), to participate in the choice and application of methods of protection of objects of safety;
- the performance of separate actions in the framework of the chosen method of protection.

The documentally organizational changes at the level of separate structural subsections shall be reflected in the regulations on the subsections, which must be revised and reclaimed when you create the service (department) of economic security.

At the level of groups of subsections (employees) of organizational changes in the enterprise management system relate often to the interaction between subsections and managers of middle level related to the protection of the security objects of the enterprise economic security system. Protection of objects of security of the enterprise economic security system applies to almost all subsections and, therefore, the change of interaction of subsections and managers with regard to the protection of objects of safety happen in all spheres of interaction (the interaction order,

subordination, functions, and tasks of subsections and staff, organization of management). Documentally the changes of this level should be reflected in the maps of processes and procedures, maps of the route of information.

At the enterprise level in general, the changes cover not only all the processes and elements of the management system but also the vectors, reference points, goals, and management principles. Thanks to the changes in the enterprise management system in general, the economic security is recognized as the main condition for its activities, its providing is one of the goals of the activities, security-oriented management is means of achieving this goal, security-providing activity is one of the types of management activities, and security-ability is an important characteristic of the enterprise management system.

In the implementation of organizational changes in connection with the creation of the service (department) of economic security at the enterprise, it is necessary to realize and consider that the dynamics and intensity of changes are different at structural subsections and management levels.

Part 2. The sequence of actions for the implementation of the enterprise economic security system in the enterprise management system

For the generalized display of the sequence of organizational changes related to the implementation of the enterprise economic security system in the enterprise management system, it is advisable to use a model of implementation of changes. Today in the management theory, there are many models of changes (K. Levin, P. Druker, R. Beckhard, J. Kotter, C. Thurley, etc.) but in the context of the implementation of the economic security system, the model of implementation of the organizational changes of L. Greiner is chosen as basic [6]. The original model of implementation of organizational changes of L. Greiner is filled with concrete content in order to reflect the sequence of actions for the implementation of the enterprise economic security system in the enterprise management system.

Let us consider the main stages of conduction of organizational changes at the enterprise to implement the enterprises' economic security system in the enterprise management system using the adaptive model of L. Greiner in details.

Step 1. The management and enterprise owners, recognizing economic security is an important condition for the activities, realizing the importance and necessity of the creation of economic security system that allows obtaining an idea about the status of economic security at the system level, making decision about the objectification of the system, and creating the service (department) of economic security at the enterprise.

Step 2. At the enterprise, the competencies of the service (department) of economic security are determined, which must be documented – they are developed, approved, adopted in the order accepted at the enterprise and enforced into action the Regulations of the service (department) of economic security. Included in the list of existing internal corporate documents, the Regulations of the service (department) of economic security becomes effective, its provisions become obligatory for the conduction.

Step 3. The listing of the service (department) of economic safety to the enterprise organizational structure provides the implementation of a number of actions to establish relations of the service (department) and other structural subsections on the issues of protection of the security objects of the economic security system. Such actions include gathering of information about threats, its joint processing, determination of probability of realization and consequences of realization of threats

to safety objects, the choice of the enterprise actions on a particular method of protection (the avoidance of threats, their neutralization, acceptance of threats, etc.), determination of value of these actions and the like.

Step 4. A large number and variety of these actions need documental performance. A large number and variety of the specified actions demand their arranging and documentary registration of performance.

Step 5. The enterprise economic security system is constantly changing. These changes in the system result from the functioning of the mechanism of management of the system. The occurrence of these changes is caused by the passage of the system into a qualitatively new state in order to fulfil its purpose. The changes of the economic security system should be reflected in the enterprise management system. If the changes in the economic security system are ignored and the appropriate changes to the enterprise management system are not made, then with time the contradictions between the system (enterprise management system) and its subsystem or super-system (the enterprise economic security system) will arise and deepen. This contradiction can have a negative impact on the protection of the security objects, and ultimately on the enterprise economic security. The mentioned contradiction can be resolved evolutionarily, that is, without the intervention of the enterprise management but the results of solving this contradiction may not satisfy the enterprise administration and, the main thing, will affect negatively on its security-providing activity and its results. Therefore, one of the tasks of the security-oriented enterprise management is to avoid contradictions in the enterprise management system, its conflict with one of the subsystems or super-systems (the enterprise economic security system), and effective solution – in the case of its occurrence.

Step 6. At the last stage, the measures for the encouragement of the enterprise employees are necessary for those who took part in organizational changes associated with the implementation of the enterprise economic security system in the enterprise management system. Despite the traditional meaning of this stage, it cannot be underestimated. In modern management, it is recommended to attract employees to organizational changes as more as possible. However, this is appropriate not in all situations. The implementation of the enterprise economic security system to the enterprise management system is just such a situation. Here it is expedient to use L. Greiner's opinion regarding the distribution of powers between levels of government because the security-provided activity is such a kind of activity that requires compliance with a certain level of secrecy and the mode of use of the relevant information.

The conduction of changes in the enterprise management system in connection with the implementation of the economic security system faces with a range of employees who are involved in such changes. The appearance of a problem is caused due to the specifics of the service activities (department) of economic security, which objectifies the enterprise economic security system. On the one hand, it makes sense to attract as many workers as possible to the changes in the enterprise management system and, on the other, it is not impractical due to the specifics of the activity of the service (department) of economic security (because managers and employees do not need to know what powers the service have to check their activities).

The delegation of powers, which provides that the administration of higher level provides subordinates with the information about the necessary changes, and then delegates authorities for the assessment of corrective actions and their implementation, has a number of advantages, the main of which is to reduce the resistance of the personnel and the risk of opportunistic behaviour [7]. However, the

distribution of authority in carrying out organizational changes related to the implementation of the enterprise economic security system in the enterprise management system, a preference should be given to unilateral actions, which involve the use of «managers' power» for conducting organizational changes. Although this approach is appropriate in cases when subordinates support all the instructions of the management completely, and the need to develop alternative options is minimal, its use in the implementation of the enterprise economic security system to the enterprise management system is justified by the specifics of activity of the service (department) of economic security.

The filling of L. Greiner's model of conduction of changes by specific content in the context of implementation of the economic security system to the enterprise management system contributes to the improvement of the enterprise organizational structure on the basis of the functional approach, which is characterized by the ratio between the structural subsections in vertical and horizontal directions in a section of levels of organizational structure of management. The scheme of functional relationships reflects the horizontal relations of structural subsections concerning activities, functions, and powers for the protection of objects of security and ensuring the enterprise economic security as a whole.

The implementation of organizational changes at the enterprise, which are caused due to any assumptions or causes, is always a challenge. Because any change in a person's life, including professional, often meets resistance, especially if this change is associated with the emergence of new responsibilities, the rejection from the usual procedure of performing professional duties, the need to master new work methods, to obtain new knowledge, and the like.

The intensity of the resistance of the staff depends on the state of corporate culture, the age structure of the staff, level of its qualification, and also quality and timeliness of the preparatory work concerning the anticipated changes.

There is no doubt that the creation of the service (department) of economic activity at the enterprise can cause the opportunistic behaviour of workers because the competencies of the service (department) are monitoring the actions of the enterprise managers and employees. This predetermines the need to develop measures to identify the main reasons for the occurrence of opportunistic behaviour of the employees and ways to counter it.

The generalization of risks of the subjectivity of the service (department) of the enterprise economic security has allowed identifying the most probable causes of resistance to the changes associated with the objectification of the economic security system. In particular, the service (department) of the enterprise economic security can identify the existing shadow schemes of separate employees and heads of structural departments (and management in case the economic security system with the status of supersystem is objectified) for the purpose of obtaining personal gain. It is clear that from their side, the opportunistic behaviour is very likely.

As L. A. Yankovska has fairly noticed, the problem of overcoming of resistance to changes in the context of ensuring the enterprise economic security was not still considered comprehensively [8]. The resistance to change of the enterprise employees in the theory of change management is considered as a negative reaction of certain employees and their groups which complicate the process of conducting changes, threaten not only to their effectiveness, but also the enterprise culture and its administration [8]. Resistance is the first reaction to changes because the employees need time to assess the costs and benefits of changes for themselves [9].

The resistance of the enterprise employees to the changes is divided into individual and group. The causes of individual resistance are egoistical interest, fear of losing a position, power, informal communications; improper understanding of changes and the lack of trust to the persons engaged in them; low level of readiness to the changes; different assessments of the need and impact of changes [10, p. 114]; the shock of the new, economic and symbolic fears, inconvenience, threats of breaching interpersonal relations, threat to the status or skills, fear of competence [11, p. 94]. Group resistance arises from the fact that the enterprise is a political system, in which there are groups with different political interests. The reaction of these groups depends on how, in their opinion, the conducted changes will affect the balance of powers [12, p. 211].

According to this, the differences in the causes of changes of these types of resistance are described as follows:

- the individual resistance, in general, is explained by a negative reaction of certain employees, due to the perception of significant changes as a violation of their plans for the future, the lack of confidence in their own competence and possibility of successful completion of transformation and the lack of «the habit to changes»;
- group (systemic, organizational) resistance arises from the discrepancy of organization value system to the goals of changes, the considerable magnitude of the cultural gap, a discrepancy of the management capacity of the implemented strategy of transformations [13].

Regardless of the nature of changes, the workers strive to protect themselves from their consequences, using the complaints, procrastination, passive resistance, which can escalate into sabotage and decline of the intensity of labour [13].

The resistance of the staff while creating the service (department) of economic security and changes that occur in the management system belongs most often to hidden. Only top managers can resist openly on the stage of the adoption of the decision on the establishment of the service (department). The interest and enthusiasm of the employees when creating the service (department) of economic security and changes that occur in the enterprise management system may be more associated with personal benefits, which they receive. As shown in [14; 15], the covert resistance, the hidden conflicts arise because different groups are trying to defend their own interests, using for this purpose the process of change. This may take the form of opposition to the specific change. In fact, the changes are the focus of constant and inevitable tensions and differences between individuals, groups, and subdivisions. The problems, which are faced in this case, the conflicts that underlies their base and that have to be settled may have little in common with the proposed specific change – the creation of the service (department) of economic security.

To identify certain workers and their groups that are more likely to resist (and not always intentionally) the implementation of the economic security system to the enterprise management system, the potential causes of resistance are summarized [16; 17; 18; 19]:

1. The expectation of personal losses as a result of the activities of the service (department) of economic security.
2. A low degree of confidence in the enterprise management.
3. Inadequate perception of the developed activities, reception of information from unreliable and dishonest sources.
4. People's fears that they do not have the necessary skills or abilities.
5. The growing sense of mistrust, conservatism, negative attitude to any changes.
6. Distrust to the competencies of the change initiators.

Moreover, this resistance is often the resistance to the changes in general, and not to the creation of the service (department) of economic security, so there appears a basis for the development of tools for overcoming the resistance of the staff to create the service (department) of the enterprise economic security.

The action of such tools is aimed at the transforming of the workers' interests and the inevitable displays of emotions. It is impossible to ignore it. The service (department) of economic security, of course, can be created without mentioning these emotions but their further ignorance threatens with tension in professional and personal relationships of economic security specialists and employees of other structural subsections, which will manifest in the form of conflicts in real life from time to time. The changes in the enterprise management system when implementing a new economic security system will be effective only if the emotional and behavioural aspects are paid attention to no less than to informational and technological ones.

Tools for overcoming the resistance of the staff are known primarily, it is used in overcoming the resistance of the staff to the changes of any kind. Its usage will allow setting the types of negative attitudes to the changes caused by the creation of the service (department) of economic security and associated with these changes in the enterprise organizational structure.

The rational type of a negative attitude to the changes: lack of understanding of the necessity of establishing the service (department) of economic security, assurance that its creation is unnecessary, a lack of faith in the expected efficiency of the service (department), expectations of negative consequences of organizational changes that occur in connection with establishing the service (department).

The ways of overcoming: to explain at meetings and conferences the necessity of establishing the service (department) of economic security; to describe the impact of lack of the service (department); to involve mid-level managers before the definition of the competencies of the service (department), redistribution of powers and responsibilities of structural subsections and officials: to make changes in the control system in connection with the implementation of the economic security system consistently, reinforcing changes after each stage of their sequence.

The personal type of negative attitude to the changes: fear of loss of authority or getting the additional types of work, responsibility for their implementation (non-fulfilment); unfamiliar work, unwillingness to learn to do them.

The ways of overcoming: introduction of changes in wages in connection with the expansion of duties connected with a participation in security-provided activities; organization of trainings to perform new types of work; the reduction in the level of responsibility for the errors and mistakes, which are made in the first few months of implementing the new types of work; increase of the number of employees of the structural subsections, which increases the amount of work substantially (according to the actual need and existence of possibilities).

The emotional type of a negative attitude to the changes: a total propensity for active or passive resistance to any changes, apathy towards initiatives, distrust to the motives, which led to changes.

The ways of overcoming: to explain the reasons for the creation of the services (department) of economic security in details and to talk about its competencies; to show specifically how changes in the enterprise management system will affect the duties of each employee.

Conclusion

The adaptation of the known models of organizational changes and their synthesis in the implementation of the enterprise economic security system in the enterprise management system, on the one hand, showed the effectiveness of these models in the conduction of organisational changes, which are undertaken for the specific purpose – the implementation of the enterprise economic security system to the enterprise management system, and on the other, created the basis for consistent and controlled implementation of the organizational changes resulting from the implementation.

A set of adapted models of organizational changes create a tool basis for such an implementation, and their use allows making the organizational changes consistently resulting from the implementation of the enterprise economic security system to the enterprise management system, considering the peculiarities of organisational changes, and implementing all necessary actions.

Consequently, the capacity of the economic security system is determined by its adequacy to the enterprise management system, which is laid in the implementation of the economic security system to the enterprise management system and entails changes in the enterprise management system inevitably.

References:

1. Alkema V. H. Upravlinnia zminy v systemi ekonomichnoi bezpeky subiektiv hospodarskoi diialnosti / V. H. Alkema, O. S. Kyrychenko // Vcheni zapysky Universytetu «KROK». – 2014. – Vyp. 38. – S. 112–118.
2. Kotter Dzh. P. Vperedy peremen / Dzh P. Kotter ; per. s anhl. – M.: ZAO «Olymp-Byznes», 2003. – 256 s.
3. Adyzes Y. Upravliaia yzmenenyiamy / Ytskhak Adyzes. – SPb: Pyter, 2008. – 224 s.
4. Tsyhanov V. V. Teoriia upravleniia evoliutsiei orhanizatsiy kak fundament informatsyonnoho menezhmenta [Elektronniy resurs] / V. V. Tsyhanov, Yu. H. Bochkareva // Sovremennyye problemy nauki i obrazovaniia. – 2013. – № 1. – Rezhym dostupu: <http://www.science-education.ru/ru/article/view?id=8375>.
5. Dziana S. R. Teoretychni zasady upravlinnia zminy v suchasnykh umovakh / S. R. Dziana, R. B. Dzianyani // Efektyvnist derzhavnogo upravlinnia. – 2013. – Vyp. 34. – S. 31–40.
6. Greiner L. E. Patterns of Organization Change / L. E. Greiner // Harvard Business Review. – 1967. – May, June. – P. 67–112.
7. Kuzhda T. Etapy uspishnogo upravlinnia orhanizatsiinykh zminy na pidpriemstvi / T. Kuzhda // Halytskyi ekonomichnyi visnyk. – 2013. – № 2. – S. 66–71.
8. Yankovska L. A. Zasady podolannia sprotyvu personalu zminam v umovakh zahostrennia zahroz ekonomichnoi bezpetsi pidpriemstva / L. A. Yankovska // Naukovi zapysky Lvivskoho universytetu biznesu ta prava. – 2014. – № 12. – S. 4–8. – Rezhym dostupu: http://nbuv.gov.ua/UJRN/Nzlubp_2014_12_4
9. Andreev A. S. Soprotivlenie izmeneniam v orhanyzatsiy: prichiny i diahnostika / A. S. Andreev, O. V. Sokol // Menedzhment innovatsii. – 2008. – № 1. – S. 86–91.
10. Daft R. L. Menedzhment [uchebnyk] / R. L. Daft; per. s anhl. – 8-e yzd. / pod red. S. K. Mordovyna. – SPb.: Pyter, 2010. – 800 s. – (Klasyka MVA).
11. Kharrinhon Dzh. Sovershenstvua upravlenie izmeneniami / Dzh. Kharrinhon; per. s anhl. V. N. Zahrebelnoho / pod nauch. red. V. V. Brahina. – M.: Standarty i kachestvo, 2008. – 192 s.
12. Frailinher K. Upravlenie izmeneniami v orhanizatsii. Kak uspeshno provesti preobrazovaniia / K. Frailinher, Y. Fisher; per. s nem. N. P. Berehovoii, Y. A. Serhevoii. – SPb.: Knihopysnaia palata», 2002. – 264 s.
13. Andreeva T. E. Upravlenie personalom v period izmeneniy v rossiyskikh kompaniyakh: metodiki rasprostranennyye i rezul'tativnyye / T. E. Andreeva // Rossiyskiy zhurnal menezhmenta. – 2006. – T. 4, № 2. – S. 25–48.
14. Orkina E. Upravlenie izmeneniami / E. Orkina. – K.: Feniks, 2014. – 192 s.

15. Sidorenko M. Soprotivlenie orhanizatsionnym izmeneniam na predpriiatii: prichiny, posledstviia i puti preodoleniia [Elektronniy resurs] / M. Sidorenko. – Rezhim dostupu: <http://kn-grup.com/publications/articles/rukovoditelju-proektov/121>

16. Armstronh M. Praktika upravleniia chelovecheskimi resursami : [ucheb. posob] / M. Armstronh. – 10-e yzd. – SPb.: Piter, 2012. – 848 s.

17. Herbert D. Orhanizatsionnaia psikhologhiia. Chelovek i orhanizatsiia / D. Herbert, L. Rozenshtil ; per. s nem. – Kharkov: izd-vo Humanitarnoho tsentra O. A. Shipilova, 2006. – 624 s.

18. Hrinberh Dzh. Orhanizatsionnoe povedenie: ot teorii k praktike / Dzh. Hrinberh, R. Beiron ; per. s anhl. O. V. Beredikhina, V. D. Sokolova. – M.: LTD »Vershina«, 2004. – 912 s.

19. Mkrytychian H. A. Opyt postroeniia klassifikatsii prichin soprotivleniia orhanizatsionnym izmeneniam / H. A. Mkrytychian, E. E. Voilokova // Trudy Nizhehorodskoho hosudarstvennoho tekhnicheskoho universiteta im. R. E. Alekseeva. – 2013. – № 4(101). – S. 262 271.

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AGRIBUSINESS PRODUCTION SYSTEMS AND ITS OPTIMIZATION EFFICIENCY IN UKRAINE

Summary

The main transformational changes, reasons for their occurrence as well as positive and negative consequences in Ukrainian agricultural economy are investigated. Labour and capital factors of influence on agricultural enterprises production volume in Ukraine and Poland using Cobb-Douglas production function are calculated. Calculations of statistical reliability using econometric methods are evaluated and competitiveness improvement strategies for domestic agricultural enterprises are argued. The main components of classification of agricultural enterprises production optimization based on their reasons, parameters, and purpose differences are proposed. Production optimization model of a test agricultural enterprise A is developed. Aggregate integral index of total production efficiency on the test agricultural enterprise A basis is calculated. Further research directions of integral index calculations determined.

Introduction

The unstable market environment requires transformational changes research and production systems efficiency determination. Sustainable development statements consideration involves responding to changes taking into account a combination of economic, social and ecological factors.

In such conditions, agricultural production optimization process is actualized. Production optimization requires a quantitative and qualitative analysis of available resources as well as market conditions consideration. An optimization purpose is enterprises production structure improvement, profit increase, and competitiveness growth of companies and products. Production optimization is among the main

methods to provide agricultural enterprises effective functioning in the unstable market environment. Because of that, its theoretical and methodological implementation features, the correlation between production resources, and their influence on output as well as parameters and restrictions for the optimization model development under limited resources conditions are extremely important.

Production structure is a set of branches and industries, which are the part of the enterprise and which define the assortment of manufactured goods. The main factors of production structure formation and change are production branch, technology and expertise enterprise level, geographical location, available resource potential etc. The optimal agricultural enterprise structure can be considered the one, which is the most favourable for solving agricultural production problems, increasing land protection and productivity, labour productivity, effective using technological resources, reducing transport and other production costs, maintaining alive organisms' environment etc.

There are certain concepts of social phenomena in economics, for example, the concept «organization of agricultural production». Organization of agricultural production means forms and procedures of labour combining with other purposeful activity elements in order to ensure high-quality products and achieve high labour productivity based on the better use of land, labour, and production assets.

Considering the fact that modern optimization models include factors, which often measured in different values, there is a total efficiency assessment necessity of agricultural enterprises production. This assessment is possible by integral index calculation based on the used factors set which allow cumulative effect determination from developed optimization model implementation.

Part 1. Transformational changes in Ukrainian agricultural economy

Transformational changes are an important element of the social and economic development, which affects production structure and sizes of agricultural enterprises. The market transformations typical feature is the increase of its occurrence frequency and impact speed on agricultural formations, which require a fast adaptation to new market conditions. Among perspective development directions for agricultural enterprises in conditions of constant transformational changes particularly important is forecasting and risk management system implementation.

Production activity forecasting intended to future conditions prediction of enterprise functioning environment and corrective actions development in the case of its change. An appropriate response to external challenges and production activities planning according to them help to reduce the negative consequences of unfavourable transformational changes and to take benefits from potential opportunities for the company. Ensuring forecasts accuracy requires the main spheres detailed analysis of transformational changes occurrence, which influences enterprises economic activity [1].

Table 1

The main transformational changes of Ukrainian agricultural economy			
Changes	Reasons of origin	Positive consequences	Negative consequences
The appearance of agricultural holdings	Low labour cost and land rent; tax benefits, subsidies and donations; food products prices and demand increase	Higher labour productivity and benefits from economies of scale; financial resources accumulation; exports increase	Dangerous socio-economic situation in rural areas because of automatization and unemployment; exhausting farming for the land
Livestock production reduction	Longer than in crop production capital turnover period; high cost price and low profitability level; feed production reduction and low livestock productivity	Capital release for investments in higher profitability level spheres	Organic fertilizers usage reduction; reduction of livestock product production and consumption per capita
Renewable energy usage increase	Government subsidizations; CO2 reduction obligations; traditional energy sources and fuel cost increase	Energy dependency reduction; ecological situation improvement and CO2 reduction	Government subsidies dependence; long capital turnover period; food products usage in technical purposes
New technologies introduction	Reorientation to capital-intensive production; appearance of high productive machines and equipment	Demand increase for highly qualified labour; labour costs optimization	Unemployment increase; necessity for significant financial investments
Increase of agricultural products processing depth	Government restrictions on agricultural products export	Higher state budget income and enterprises profitability level; new work places creation	Smaller by the volume and highly competitive commodity markets; large investments necessity
Agricultural products export increase	Production volume increase; population reduction in Ukraine; population growth in the world	Foreign currency earnings increase; new markets appearance	Government export restrictions; raw material production orientation
Food products prices increase	Decrease of food commodity stocks volume; increase of energy, fuel and fertilizers cost; biofuel production	Agriculture subsidizing reduction; higher enterprises profitability level	Population purchasing ability reduction; hunger and malnutrition
Livestock and crop productivity increase	High quality seeds usage; plant protection products; better feeds and animal breeds; mineral fertilizers usage increase	Enterprises economic efficiency improvement	Environmental and social indicators deterioration; failure to provide crop rotation
Prices increase for energy resources, fertilizers, seeds etc.	National currency devaluation; inflation; market conditions changes	Rational resources usage; market sanitation from inefficient enterprises	Food products price increase; enterprises demand in extra financial resources
Agricultural enterprises number reduction	Competition increase; bankruptcy	Property reallocation in favour of more effective enterprises	Economic efficiency orientation without consideration of social and ecological aspects

The main spheres of transformational changes occurrence are economic, political, social, technological, legal, and environmental. Changes in these spheres take place under the influence of processes inside the country and abroad. Depending on the type of enterprise activity and the nature of transformations, the changes can vary by influence level and consequences for production activity. As the resources are limited, enterprises should analyse changes' impact level on their functioning in order to identify priorities to response. The main transformational changes, reasons of their origin, as well as positive and negative consequences for agricultural enterprises are considered in Table 1.

Considering transformational changes, agricultural enterprises are optimizing production systems, assets structure, increasing energy efficiency and the return of investments. As the domestic market is saturated, agricultural enterprises are exploring opportunities for the food products' export volume increase. However, not all agricultural enterprises can quickly adapt to new market conditions. That is why there are so many unprofitable enterprises, which negatively affect economic situations in regions.

In 2014-2015 years, there was more than 200% local currency devaluation. As a result, equipment and machinery, fuel, fertilizers, and other costs increased. In such circumstances, agricultural enterprises seek export markets for their products to provide higher sales income level. Export prospects improved after Ukraine joins WTO on 16 May 2008 and after signing an economic part of the association agreement with the European Union on 27 June 2014. It resulted in tariff and non-tariff restrictions reduction of Ukrainian goods export to WTO countries and to the European Union – a market with over 500 million consumers and agricultural import volume at 101,8 billion euros in 2014 [2]. At the same time, European producers also received free access to Ukrainian market, which will stimulate domestic agricultural enterprises to the production efficiency improvement and further optimization of production systems' structures and sizes. In order to improve export prospects, agricultural enterprises implement security and quality systems in the production process such as series ISO, Global Gap, FSSC 22000 etc. International standards' implementation in the manufacturing process and its quality improvement expand sales opportunities through high-income sales channels.

Quality requirements increase for agricultural products is also typical for the internal market. For example, processing enterprises start carefully check product quality and increase requirements for it. At the same time, retail networks demand international certificates availability and inspect production. To comply with food products quality and safety requirements, it is necessary to provide production process controllability, which is almost impossible to do in private households. As a result, there is an agricultural products volume increase to processing enterprises from agricultural enterprises and decrease from other economic structures, particularly from private households. It is easier to work with few suppliers and control products quality for processing enterprises. Export opportunities increase is one of the incentives for agricultural enterprises development in Ukraine. It is caused by production expand necessity for customers' needs satisfaction in other countries.

Part 2. Agricultural enterprises' functioning efficiency in Poland and Ukraine

The basis of the production process is about effective use of economic resources by converting to the production inputs. One of the main tasks of economics is to increase economic efficiency by optimizing these factors' usage. This could be done by the determination of the effective ratio between inputs and intensity of their usage. In

general, classic economic school distinguishes three factors of production: land, labour, and capital, which are independent sources of value. Wages are the price of labour, profit is the result of capital, and rent is a «gift of nature». At the same time, capital refers to buildings, instruments, machinery, so-called real capital. One of the main methods to research technological ration between production factors and its volume is production function.

Capital as a factor of production represented by a set of previously manufactured benefits, which are involved in goods and services production process to: tools, machines, equipment, production facilities, communications etc. Their technical and technological condition is constantly improving and has a decisive impact on the economic activity. Labour is presented as the intellectual and physical activity is focused on goods and services production. Also, it is treated as «human capital», which means a combination of knowledge, skills, and abilities of a person due to education, professional training, skill, health etc. Complicated work leads to higher human capital and, as a result, the increase of income. Individual and material factors are the complex system elements connected by technology and organization of production. Therefore, technology expresses cooperation between the main production factors and means using different processing factors, change of characteristics, form, and conditions of labour subjects. Organization of production provides a coherent functioning of all production factors, their ratio, interchangeability etc.

In the market economy, the factors choice is not accidental but has a theoretical basis, which gives a meaningful interpretation of production function characteristics. Discussions about production factors and type of production function ratio gave a foundation for more general concept instead of production function – production dependence, which is defined as a functional correlation of more general type with a possibility to use not only absolute but also relative values as well as a wide set of non-traditional production factors. Among the methods that are offered by a specialist for the adequate consideration of transitional economy specifics, it is necessary to underline a preliminary analysis of data before specified dependencies parameters evaluation. In other words, not just production function construction macroeconomic dynamics analysing using terms and concepts from the theory of production function.

Among many instruments, which are used for enterprises production efficiency analysis, one of the most common is production function. The production function is a technical ratio between the amount of resources used by producers and production volume on its basis. It is calculated at the macroeconomic level, where it shows aggregate output dependence in monetary terms, and at the microeconomic level.

One of the most popular types of production function is Cobb-Douglas function, which in general form can be written as [3]:

$$Y_t = f(K_t, L_t) = A K_t^\alpha L_t^\beta, \quad (1)$$

where A – coefficient, which characterizes production efficiency, α i β – production elasticity coefficients of capital K and labour L , which according to neoclassical theory every production factor role in final output growth (or revenue share of a relevant factor in total income unit). In the practical calculation, the model should be converted into linear-logarithmic:

$$\text{LOG}(Y) = C_1 \text{LOG}(X_1) + C_2 \text{LOG}(X_2) + C_3. \quad (2)$$

Each production function must firstly pass a check on the logical and statistical adequacy. Logical adequacy equation means a compliance with the economic content of the phenomenon. Statistical adequacy and reliability are characterized by performance indicators system and its comparison with established limits.

Considering the European integration vector of Ukraine, for the competitiveness investigation of domestic agricultural enterprises, data from State Statistic Service of Ukraine [4] and Poland [5] are used.

Table 2

A regression model of Ukrainian agricultural enterprises production

Dependent Variable: LOG(V)				
Method: Least Squares				
Sample: 2005 2014				
Included observations: 10				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(K)	0.883946	0.252283	3.503795	0.0099
LOG(L)	0.390576	0.108130	3.612094	0.0086
C	-4.115551	1.447434	-2.843343	0.0249
R-squared	0.986449	Mean dependent var		11.94373
Adjusted R-squared	0.982578	S.D. dependent var		0.474054
S.E. of regression	0.062572	Akaike info criterion		-2.461662
Sum squared resid	0.027407	Schwarz criterion		-2.370886
Log likelihood	15.30831	Hannan-Quinn criter.		-2.561243
F-statistic	254.7878	Durbin-Watson stat		2.091467
Prob(F-statistic)	0.000000			

The equation of agricultural enterprises' production function of the countries is calculated for the 2005-2014 years and evaluated by the least squares method in econometric modelling environment Eviews (Table 2 and Table 3). Constructed regression models show output (V) dependence from fixed assets value (K) and salary fund (L). Production function calculation based on Ukrainian agricultural enterprises data creates the following model:

$$\text{LOG}(V) = 0.883946409941 \cdot \text{LOG}(K) + 0.39057559305 \cdot \text{LOG}(L) - 4.11555079483,$$

where determination coefficient is $R^2=0,986$. It allows to consider that production volume change caused by fixed assets value and salary fund changes on 98,6%, Durbin-Watson statistic is $DW=2.091467$, which means first order negative autocorrelation in regression model, statistical significance for indexes $L=0,01<0,10$ and $K=0,01<0,10$ is high, $\text{Prob}(F\text{-statistic})=0,000$, which means correctly chosen formula for indicators. Factors $L=0,88$ and $K=0,39$ together equal $1,27>1$, which shows a high reproduction level with Labour factor dominant role in it.

Production function calculation based on Ukrainian agricultural enterprises data creates the following model:

$$\text{LOG}(V) = 2.41071851164 \cdot \text{LOG}(K) - 0.00510739466941 \cdot \text{LOG}(L) - 16.9488145948,$$

where determination coefficient is $R^2=0,899$. It allows to consider that production volume change is caused by fixed assets value and salary fund changes on 89,9%, Durbin-Watson statistics is $DW=2.095343$ which means first order negative autocorrelation in regression model, statistical significance for indexes $L=0,05<0,10$ and $K=0,09<0,10$ is high, $\text{Prob}(F\text{-statistic})=0,000$, which means correctly chosen formula for indicators. Factors $L=0,01$ and $K=2,41$ together equal $2,42>1$, which shows a high reproduction level with Capital factor dominant role in it.

A regression model of Polish agricultural enterprises production

Dependent Variable: LOG(V_P)				
Method: Least Squares				
Sample (adjusted): 2005 2014				
Included observations: 10 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(K_P)	2.410719	1.254287	1.921983	0.0960
LOG(L_P)	-0.005107	0.443936	-0.011505	0.9911
C	-16.94881	8.089649	-2.095124	0.0744
R-squared	0.899473	Mean dependent var		11.32190
Adjusted R-squared	0.870751	S.D. dependent var		0.187619
S.E. of regression	0.067452	Akaike info criterion		-2.311489
Sum squared resid	0.031848	Schwarz criterion		-2.220714
Log likelihood	14.55745	Hannan-Quinn criter.		-2.411070
F-statistic	31.31645	Durbin-Watson stat		2.095343
Prob(F-statistic)	0.000322			

Calculations indicate that Ukrainian agricultural enterprises production is more labour-intensive and much less capital-intensive than agricultural enterprises production in Poland, which means lower competitiveness of domestic enterprises. As a result, it is necessary to optimize agricultural production of Ukrainian enterprises to improve the competitiveness of domestic crop and livestock production.

Part 3. Agricultural enterprises' production optimization and its socio-economic consequences

Agricultural production in Ukraine belongs to basic economic sectors. It must be sustainable, environmentally friendly, socially-oriented, and cost effective. Agricultural production development requires a rational proportion between the main production factors: land, capital, and labour. A characteristic feature of majority agricultural enterprises is the availability of efficiency improvement opportunities. These opportunities detection happens through detailed analysis of enterprise current situation with further proposals of economic activity improvement using production systems optimization.

There are many definitions of «production optimization» in economic science. One of the most appropriate among them is the next: «Production optimization is optimal values determination of quantitative and qualitative product or service production indicators and bringing production process in optimal condition taking into account economic, social, and environmental production parameters. Optimal production structure calculation requires quantitative correlation identification of all production resources and their usage intensity, which is necessary for providing optimal agricultural production according to the current market situation with the most efficient usage of land, labour, material, and financial resources.

It is worth to mention that any production optimization will not be effective without taking into account economic, social, and environmental aspects. According to Karl Myrdal, Nobel Prize winner, an economist who does not take into account the political and social impact on the economic events is dangerous. A scientist criticized economists of general flow because of losing attention to the moral side of economic

theory. Therefore, in addition to resources effective usage from the economic point of view, it is necessary to consider a possible negative impact on nature and potential social problems due to excessive production automatization and enterprises inability to provide work places for surrounding villages inhabitants. Let us consider the relationship between private business, social, and environmental society interests.

According to the enterprise functioning sphere and production process specifics, the optimization can have different characteristics. There are key optimization components, which are typical for agricultural enterprises, possible implementation reasons, parameters and main purpose in Table 4.

Table 4

Key components of agricultural enterprises production optimization and their main characteristics

Key components	Implementation reasons	Parameters	Main purpose
Economic	Low financial results; costs accumulation necessity for production investments	Costs structure; profitability level; capital turnover period	Return on investment growth
Social	Dangerous social situation in rural areas; social standards introduction at legislative level	Salary; employment level; working conditions	Salary growth; working places creation
Environmental	Government limits on environmental pollution	Soil fertility; air emissions; water resources pollution level	Environment damage reduction
Technological	Low livestock and crops productivity because of manufacturing technology violation	Fertilization and sowing technologies; livestock forage sufficient quantity and quality	Production productivity increase; production cost per unit reduction
Energy	Energy resources cost increase; restricted access to energy resources	Level of energy resources consumption and efficiency of their usage	Energy resources usage reduction for production per unit
Market	Demand and goods sales directions changes	Production assortment and volume of certain products	Products assortment manufacturing in quantity, for which there is solvent demand

A classification is a methodical tool of production optimization components choice depending on its purpose and enterprise functioning conditions. For example, it is possible to combine its components in required proportional ration for the priority problems solution. It is also recommended to change periodically this ration

depending on the internal and external transformations of enterprise functioning environment.

Optimization components selection involves the main parameters determination for current situation analysis with further optimization model development. For example, economic-socio-ecological optimization option means economic criteria as sale price, cost price, livestock and crops productivity; social criteria as salary, labour productivity and employment per 100 hectares or per 100 heads of livestock; ecological criteria as soil quality, air emissions, water pollution, and products quality.

According to sustainable development economic theory, any production optimization will not be effective without considering economic, social, and environmental aspects. Therefore, in addition to effective resources usage from the economic point of view, an optimization model should consider the possible negative environmental effect and potential social problems because of excessive production automatization and enterprise inability to provide working places for rural areas inhabitants. Optimization needs time and money investments but it gives the company a competitive advantage in long-term perspective.

Optimal crops structure identification can be done through the optimization task solution by economic-mathematical modelling methods. There are two types of optimization tasks objective functions: profit maximization or costs minimization. In the investigation, it is decided to use a profit maximization objective function with land area and costs limitations as well as taking into account the level of production risk [6, p. 104]:

$$\begin{aligned}
 w &= \sum_{i=1}^N c_i x_i \Rightarrow \max \\
 \sum_{i=1}^N b_i x_i &\leq B \\
 \sum_{i=1}^N x_i &\leq S \\
 \sum_{i=1}^N \sigma_i^2 x_i^2 &\leq \sigma^2(V)
 \end{aligned} \tag{1}$$

Suppose that there are N agricultural crops, for which it is necessary to determine land area $x_1; x_2; \dots, x_N$, which maximize profit. There are such characteristics of the following crops: profit per hectare $c_1; c_2; \dots, c_N$, costs per hectare $b_1; b_2; \dots, b_N$. Total costs amount should not exceed B (budget constraint) and the total area should not exceed S (land area constraint). The last limitation in market conditions is not obligatory because the land can be rented in bigger amounts if budget constraint allows doing it. Optimization task solution is done using accounting reports during 2006-2014 years given by typical test agricultural enterprise A of Cherkasy region in Ukraine [7].

Agricultural land area of the test enterprise A is 3000 ha, which was used as optimization model constraint. Objective function will be $w(x_1; x_2; \dots, x_N)$. Standard linear programming optimization task with two restrictions will have a monoculture crop solution, which means that profit maximization requires growing the crop with the highest profitability level: $\max(c_i / b_i)$. However, this optimization task formulation does not take into account agricultural production risks, which occur as a

result of unexpected weather conditions as well as production resources and agricultural products prices volatility.

Among existing science risk definitions, there are some, which obtain quantitative assessments, especially: losses probability or lower profit level compare to forecast and profitability at a given confidence level (with defined probability). Among many risk indicators used in the economy, the most common is profit dispersion, which allows estimating losses probability.

Suppose that in addition to task conditions, it is known profit dispersions from 1 hectare for each agricultural crop: $\sigma_1^2; \sigma_2^2; \dots; \sigma_N^2$. In order to add a non-linear constraint on the risk level (dispersion), it is necessary to quantify its maximum value. Profit variation coefficient will be appropriate for this purpose: $V = \sigma / \bar{w}$. Basing on normal profit distribution function at $V=0,1$ losses probability is almost zero whereas at $V=0,6$ losses probability reaches 5%, so at different enterprise profit level a possible dispersion range variances should be specified – $\sigma^2(V)$, which corresponding variation coefficient increase from 0,1 to 0,6 with a pitch 0,1. So there is the following dispersion profit algorithm based on the expected profit value and specified variation coefficient [6, p. 106]:

$$\sigma^2 = V^2 \bar{w}^2, V = 0,1; 0,2; \dots; 0,6 \quad (2)$$

For indicators variation reduction due to inflation, the enterprise data was given in the 2014 year prices. The main crop production types at the enterprise are: wheat, corn, sunflower, barley (not considered because of low profitability) and soybean. As a result of calculation, profit and costs values for both enterprises appeared at the similar level. That is the reason for setting the same coefficients for objective function and left side of constraints. The vector form of objective function and constraints will be:

$$\bar{c}(3,6; 4,9; 8,0; 4,1); \bar{b}(7,9; 9,4; 8,9; 6,4); \sigma^2(5,0; 10; 440; 70); S_1 \leq 3000ha; B_1 \leq 25millionhrn$$

Total profit dispersion value is given in six options for each enterprise according to the previously given algorithm. In addition to common agricultural production indicators: expected profit, costs, profitability, income variation, it was used an indicator of profit at 5% confidence level. This indicator used in banking and insurance for risks reduction. It allows defining the lower profit limit, which will occur with 95% probability. In the case of agriculture production, it means one case in 20 years. Profit at 5% confidence level calculated the following way [6, p. 106]:

$$w_{0,05} = w - 1,64\sigma \quad (3)$$

This indicator is completely acceptable for risk level determination in agricultural production. It helps to increase the quality of planned revenue value forecast. However, calculations accuracy depends on required data availability for a long period. Therefore, in the research, statistical data for the period of the 2006-2014 years is used.

Production optimization model of a test agricultural enterprise A developed considering further diversification through livestock production and crop rotation expansion (Table 5).

Developed optimization structure is cost-effective for the test enterprise A, which will have average profit per ha increase at 8%. Moreover, calculations explain why the main commodity item for food security determination (wheat) in market conditions remains in crop structure of majority agricultural enterprises. It is caused by profitability and risk level relation, which guarantees the enterprise a stable income.

**Production structure optimization of a test agricultural enterprise A
and its effectiveness in the future**

Indexes	2014 year (basic)		2020 year (project)		Index change, (+,-)
	ha, heads	%	ha, heads	%	
Crops, ha					
Wheat	460	15,8	348	11	-112
Corn	1850	63,4	980	31	-870
Barley	135	4,6	73	2,3	-62
Sunflower	300	10,3	647	20,5	347
Soybean	171	5,9	650	20,5	479
Corn silage	0	0	150	4,7	150
Alfalfa hay	0	0	102	3,2	102
Forage beets	0	0	44	1,4	44
Spring vetch on green forage	0	0	170	5,4	170
Livestock, heads					
Cattle	194	100	172	100	-22
including cows	134	69,1	143	83,1	9
Pigs	1456	100	3838	100	2382
including sows	91	6,3	213	5,5	122

One of the optimization task possible solutions on profit maximization through optimal planted crops ratio is a profit dispersion restriction of agricultural enterprise production. Without this restriction and artificial restrictions on individual crops land area, the profit maximized solution will be monoculture with maximum profitability. It is proposed to use profit at a given confidence level instead of expected profit value, which allows taking into account profitability and risk level indicators of the production activity. There is general economic correlation about direct dependence existence between profitability and risk level in agricultural production. However, profit at a given confidence level value usage causes this dependence becoming nonlinear and there is a risk level, which provides maximum profitability at a given confidence level.

As the evaluation criterion of production structure optimization, there is accepted integral index of aggregate enterprise production efficiency [8]. The methodical approach of aggregate production efficiency determination on the test enterprise A data is constructed on three indicators that characterize economic, social, and environmental performance. According to investigation purpose, economic efficiency is the most adequately described by profit value, social efficiency by average annual employees number, and ecological by used organic fertilizers amount.

The integral index value of the aggregate test enterprise A efficiency (In) was determined by the formula [9]:

$$In = a_1x_1 + a_2x_2 + a_3x_3, \quad (4)$$

where a_1, a_2, a_3 – weight performance indicators coefficients, which characterize the influence of this partial indicators. The weight coefficients determined on the

basis of experts evaluations based on agricultural economy transformational changes in 2000-2015 years (Table 1).

x_1 , x_2 , x_3 – graduated economic (profit), social (average annual employees number), and environmental (organic fertilizers usage) performance indexes. The graduation of the indexes calculated in relation to their average value (Table 6).

Table 6

**Basic production performance indicators
of the agricultural test enterprise A**

Indexes	Years									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Statistical data										
Profit, ths. UAH	809	130	3346	5571	2624	6333	3820	6543	8253	3384
Average annual employees number, person	334	296	221	250	288	254	222	229	171	165
Organic fertilizers usage, tons	6186	5830	5580	4520	3890	5080	4632	4238	4523	4781
Graduation (relative to average value)										
Profit	0,198	0,032	0,82	1,365	0,643	1,552	0,936	1,603	2,022	0,829
Average annual employees number	1,375	1,218	0,91	1,029	1,185	1,045	0,914	0,942	0,704	0,679
Organic fertilizers usage	1,256	1,184	1,133	0,918	0,79	1,031	0,94	0,86	0,918	0,971
Weight coefficients (experts evaluation)										
Profit	0,560	0,604	0,603	0,524	0,523	0,425	0,4	0,386	0,412	0,387
Average annual employees number	0,320	0,265	0,249	0,294	0,294	0,307	0,359	0,377	0,377	0,343
Organic fertilizers usage	0,120	0,131	0,148	0,182	0,17	0,216	0,223	0,237	0,261	0,27

For better visualization of integral index calculation, it will be useful to show the results on the graph in dynamics from 2006 till 2015 years with further forecasting to the 2020 year. There are 4 trends on the graph: profit graduate value, average annual employees number graduate value, organic fertilizers usage and calculated the integral index of aggregate production efficiency (Fig. 1). It shows that integral index growth in the 2020 year will be faster than profit increase from production activity. The reason for it is livestock production expansion and, as a result, new working places creation, as well as higher organic fertilizers amount usage.

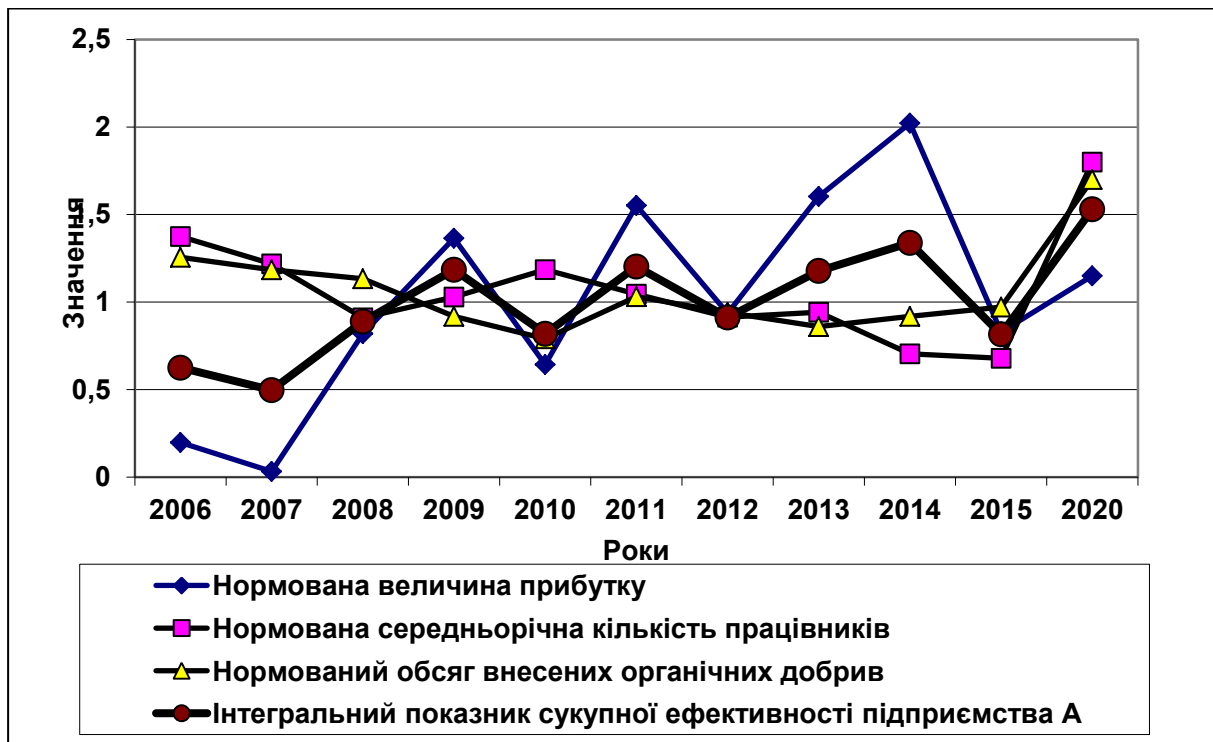


Fig. 1. Aggregate efficiency integral index of the test agricultural enterprise A production

Integral indexes usage for the production optimization effectiveness determination of agricultural enterprises can become an important method of companies' conditions assessment in the agricultural economy sphere because it allows taking into account at the same time indicators, which are expressed in different measuring units. Further investigations should be performed towards database expanding for integral index calculation and improvement of factors weight coefficients justification.

Conclusions

The investigation provides transformational changes assessment by their reasons determination as well as positive and negative consequences analysis. Agricultural enterprises consolidation leads to more effective resources usage and increases export opportunities. In addition, transformational changes adaptation requires constant production optimization of agricultural enterprises considering market conditions as well as social and environmental issues in rural areas.

According to the statements of classical economic theory, production factors include land, labour, and capital. All of these factors are equally important for the production process. Research of the correlation between production volume, labour, and capital can be done by using Cobb-Douglas production function. The insufficient development rate of the domestic agricultural sector can be explained by differences in production regression models of Ukrainian and Polish agricultural enterprises, particularly in salary fund and assets value. Thus, capital influence on production volume in domestic agricultural enterprises is 0,88 compared to 2,41 in Poland. At the same time, work factor influence is at 0,39 and 0,01 levels respectively. This indicates lower capital-intensity and higher labour-intensity production of Ukrainian agricultural enterprises as well as lower rates of reproduction in the sector compared to agriculture in Poland. In order to improve this situation, it is necessary to develop production optimization models for domestic agricultural enterprises.

An optimization model for the test agricultural enterprise A, which was developed accordingly with sustainable development principles, was evaluated by integral index construction, which includes profit, average annual employees number, and organic fertilizers usage. Calculated integral index after production optimization increasing from 0,82 to 1,53 units despite the fact that profit growth occurs at a lower rate from 0,83 to 1,15 units. It makes possible to prove mathematically proposed optimization feasibility with taking into account social and environmental indicators.

References:

1. Crops production forecasting and its resource provision in Ukraine / S.M. Kvasha, M.M. Ilchuk, I.A. Konoval, M.M. Fedushko. – K., 2013. – 244 p.
2. European commission. Agriculture and rural development [Electronic resource]. – Retrieved from: <http://ec.europa.eu/agriculture>
3. Shumska S.S. Production function in economic analysis: theory and practice of usage / S.S. Shumska // Economics and forecasting. – 2007. – Vol. 2. – p.138–153
4. Ukraine state statistical service [Electronic resource]. – Retrieved from: <http://ukrstat.org>
5. Central statistical office of Poland [Electronic resource]. – Retrieved from: <http://stat.gov.pl/en/topics/statistical-yearbooks>
6. Skrupnuk A.V. (2011) Methodology of agricultural enterprises risks evaluation. – Kyiv, Economy of APK, 10: 101-108 p.
7. Ilchuk M.M., Us S.I. Innovations in the development of socio-economic systems: microeconomic, macroeconomic and mesoeconomic levels. – Collective monograph. – Vol. 3. Lithuania: «Izdevnieciba «Baltija Publishing», 2016. – 348 p. (authors p. 308-326)
8. Methodology and methods of integral social indicators determination: monograph / Ukrainian National Academy of Science, Sociology institute; Y.I.Saenko – K., 2004. – 371 p.
9. Shumska S.S. Integral indexes construction and usage features in international and Ukrainian practise / S.S. Shumska // Economist. – 2006. – Vol. 11. – P. 74–77

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FUNCTIONING OF ENTERPRISES IN MARKET CONDITIONS: PECULIARITIES OF THE PROCESS OF MARKETING-ORIENTED MANAGEMENT

Summary

The theoretical and methodological importance of marketing in the market conditions of the company's economic activity is constantly growing. The study examines the features, methods, and models of marketing management that allow you

to adjust and adapt the marketing strategy to the new requirements of the micro and macro environment. The author substantiates the provision that the implementation of principles of marketing-oriented business management is possible on the basis of developing a system for managing marketing operations using cybernetic principles. Based on the architecture of the marketing micro- and macroenvironment and the hierarchical structure of the market potential of the enterprise, the models for choosing marketing solutions and choosing the directions of the process of forming competitive advantages are presented.

Introduction

The formation of a market economy in Ukraine significantly changed the conditions for the activities of enterprises: the forms and methods of the state regulation changed, the influence of the external environment, whose main quality is uncertainty, increased the level of responsibility of enterprise managers for independently taken management decisions.

The change in conditions led to the emergence of completely new problems in the activities of enterprises, which require theoretical comprehension and the development of practical recommendations for their solution.

Modern production should be marketing-oriented. Mechanisms, methods, and models of marketing management allow you to adjust and adapt the marketing strategy to the new requirements of micro- and macro-environments.

A manufacturing enterprise operating in a competitive market in a free market must distribute its limited labour and capital resources in an efficient and productive manner. Alternative models of the manufacturer's behaviour are: maximizing profits, maximizing sales, maximizing growth, maximizing value added, and maximizing managerial behaviour. The *manufacturer's behaviour model* from the point of view of profit maximization is acceptable first of all for stable economic conditions and for a short period. Arguing about the behaviour of the production form in the long term, one can come to the conclusion that the goal of the firm is to maximize the cost of capital. The *model of maximizing growth* can be identified with the model of maximizing profit in the future. Growth and its potential serve as evaluation factors of the firm's activity for financial analysts. The *model of managerial behaviour* should ensure a compromise of the economic interests of shareholders and managers. The *value-added model* is aimed at maximizing the benefits of all participants: managers, workers, resource providers, and shareholders. As a result of the coordinated activity of managers and employees, value added is formed as the difference between the company's sales for a certain period and the costs of goods and services purchased from external suppliers.

An effective method of informational influence in marketing management is the communication processes that represent the actions of the manufacturer aimed at implementing the interaction of the firm with all the subjects of the marketing system on the basis of a sound strategy for using a complex of effective communication tools. When communicating, various signals coming from the market are taken into account: development trends, surrounding micro- and macro-transformations, needs and preferences of customers. The dynamics of changes in the modern economy, the processes of globalization of markets, and the aggravation of competition lead to communication processes of interaction and dialogue between enterprises and end-users.

Marketing is one of the most developing subject areas of application of information technologies that allow you to almost instantly connect to any data

arrays, get all the necessary information and use it for analysis, forecasting, making management decisions in business and commerce.

The decisions in marketing management are made that describe the necessary actions of others and are related to them. Science is still poorly studied the decision-making processes in real economic situations. When preparing solutions, there is often a lack of factual and analytical material, difficulties arise in obtaining information from specialists, and there is not enough time to prepare the necessary justification for decisions. Therefore, decisions are often made without justification.

Part 1. Market potential and marketing process for forming the competitive advantages of the enterprise

The problem of market potential is closely related to the categories of growth, equilibrium, stability, and development of systems. Economic growth is called an increase in the dynamics of the value of aggregate income. It depends functionally on the accumulated potential: resources, fixed capital, technology, as well as on the size of aggregate demand, economic, social, and political structures.

One of the main sources of growth in the output of competitive products is an increase in the share of fixed capital expenditure.

The concepts of stability, equilibrium, and development are widely used to characterize a system, in which, despite its continuous changes, some properties must remain unchanged. It is believed that the system is in equilibrium if, in the absence of external influences, its state can remain as long as desired. In a dynamic equilibrium, the system is when all perturbations cancel each other in a certain time. The problem of the equilibrium of the market economy is the object of numerous studies that have not yet given a fundamental answer to the question of its existence under real conditions [1]. Consider the interpretation of these important concepts in relation to economic systems.

Each production system selects and implements a certain technological process of processing one product into another. In turn, each consumer system chooses and acquires the most desirable set of products within its budget. For the economic system organized in this way being efficient, it is necessary that its realized state be balanced in material flows, that is, that the total production (supply) of each product is not less than its total consumption (demand) or, more strictly; That was exactly equal to him. In this case, the state of the system is called the economic equilibrium.

The model of the production-consumer system includes two private models – production and consumption. The state of such an economic system is the set of states of both its subsystems:

$$\langle \{(y_i, x_i)\}, x_0 \rangle, \quad (1)$$

where (y_i, x_i) is the state of the i -th element of the system P_i ; y_i – vector of issues; x_i – vector of costs; x_0 – is the state of the system.

The equilibrium balance of production and economic system corresponds to the equilibrium state:

$$\sum_{\forall i} y_i - \sum_{\forall i} x_i = x_0. \quad (2)$$

The counterbalance to equilibrium models of economic systems are non-equilibrium models, for which the balance equation is violated. The need to study the behaviour of microeconomic systems in non-equilibrium situations is caused by the instability of the economic environment at the present time. The determinant of the equilibrium state of the economic system is the category of stability.

The main feature that distinguishes development from other dynamic processes, for example, from the growth process, is the qualitative change in time of variables that

characterize the state of the developing system, and this qualitative change is spasmodic. It is the gradual and monotonous change of a certain parameter during a noticeable time accompanied by a corresponding gradual change in the state of the system but at a certain moment a break occurs and the state of the system changes abruptly, the system moves to a new qualitative level, i.e. the quantity goes into quality. Then everything is repeated anew but already on a new qualitative level.

The emergence of instability as a factor of further development is the basis of the development process. The presence of a «quiet» stage and a rapid transition, convergence, and divergence of variables for developing systems are important components of the development process and they should be reflected in development models, playing an important heuristic role in the construction of these models. Development is first and foremost an irreversible change. Therefore, «too» stable, i.e., absolutely stable, or hyper-stable system to development is incapable because it suppresses any deviations from its hyper-stable state and returns to its equilibrium state for any fluctuation. To transition to a new state, the system must become unstable at some point.

At the content level, the functioning of the evolving system can be represented as follows. At the «quiet» stage of evolution, the system is stable; it converges to one state and, eliminating any deviations from it, always returns to this state. But over time, as a result of a continuous change in the relevant parameters, the stability of the system, its resistance to «disturbances» are weakened. There comes the moment when the stable system turns into an unstable one, and the irreducible variety of «disturbances» (divergence of diversity) increases sharply, the law of necessary diversity is violated [2], and the system, due to its instability, abruptly changes to a new stable state (or collapses in an unfavourable situation). Thus, although only stable systems have the right to exist (unstable ones are immediately eliminated), only those existing systems develop that are able (at the time) to become unstable under the influence of the relevant factors.

The functioning of the developing system in dynamics is described by a system of differential equations representing a change in the state of the system as a function of the state of the system and its parameters:

$$\frac{dx}{dt} = f_i(x_1, \dots, x_n; p_1, \dots, p_m), i = \overline{1, n}. \quad (3)$$

In this system, x_i means a system state variable, also known as a phase variable, a behaviour variable, an internal variable, etc. A set of n variables $\{x_i\}$, $i = \overline{1, n}$; determines the state of the system. The set of variables $\{p_j\}$, $j = \overline{1, m}$; defines the parameters of the system, known as the control parameters, external parameters, etc. They reflect the influence of certain fixed factors, for example environmental factors, on the functioning of the system. As an example of state variables, it is possible to specify socially significant social variables such as the number of people of a given age, a given profession, etc. corresponding to the state variables, the controlling and external parameters influencing them (for example, allocations for the development of economic potential, energy level, etc.).

An important for the dynamical system (formula 3) is the notion of a stationary state, i.e. state of rest for which the phase variables $\{x_i\}$, $i = \overline{1, n}$; do not depend on time, i.e. sufficient time does not change; only in this case it makes sense to talk about the actual existence and study of systems and structures. These are the limiting states, in which the system comes at a time tending to infinity, i.e. from a formal point of view, unattainable. But for sufficiently fast transient relaxation processes, in most of the real cases, this can be neglected and consider the system almost always in

a stationary state. By virtue of this definition of the stationary state, the phase variables $x_i = f_i(x_1, \dots, x_n; p_1, \dots, p_m), i = \overline{1, n}$ corresponding to it (usually called singular points) are determined by equating to zero the rate of change of these variables described by the system of equations (4) and the solution of the corresponding system of algebraic equations:

$$f_i(\{x_i\}, \{p_j\}) = 0, i = \overline{1, n}. \quad (4)$$

Stability or instability of a state characterizes the reaction of a system in this state to an external deviation of the state caused by a targeted action or random perturbation (fluctuation). The stable state is restored again as a result of the action of the system aimed at compensating the perturbation, and the unstable state is replaced by a new but already stable state, into which the system passes as a result of the perturbation [3].

When passing through critical regimes (if the system parameters, reaching critical values, continue to change), the phase picture of the system changes, the number of singular points, which leads to a jumplike transition of the system to a new, in general, qualitatively different stationary state. In certain situations, this process can be interpreted as a development process and, on the other hand, the notion of structural stability (replaced by instability in critical cases) underlies the theory of catastrophes.

Part 2. Peculiarities of marketing-oriented management of production: methods and models

The transition of enterprises and organizations to market relations, as well as the implementation of the principles of reasonable sufficiency and minimum expenditure, created a fundamentally new situation from the point of view of solving the problems of forming relationships between the elements of the economic and economic system. There was an urgent need for a rapid and widespread transfer of production management to economic methods, the characteristic feature of which is the use of marketing approaches [5].

As the goals of the enterprise, profit achievements, economic growth, conquest of a part of the market, etc. are usually put. The main operational methods for achieving the company's goals (Fig. 1) are the selection of the product range and target segments, finance, production, marketing, sales, labour, raw materials and materials, research and design activities.

Sufficiently relevant in these conditions is the development of the concept of marketing-oriented production management. At the same time, it must be emphasized that we are talking, first of all, about the so-called productive concept. Marketing activity, which is built only on the basis of the production capabilities of the enterprise, is a priori unproductive since marketing involves not just the sale of manufactured goods but covers virtually all areas of the enterprise's work to the extent that each of them affects the feasibility of products: from innovative research and development Before the purchase of raw materials, production, packaging, transportation, sales to customers, maintenance, spare parts, etc. and even a passive response to market changes fundamentally does not change the unproductive nature of the concept. The change in the market situation, the transformation of the desired into the possible, and then the real one are signs of productive marketing.

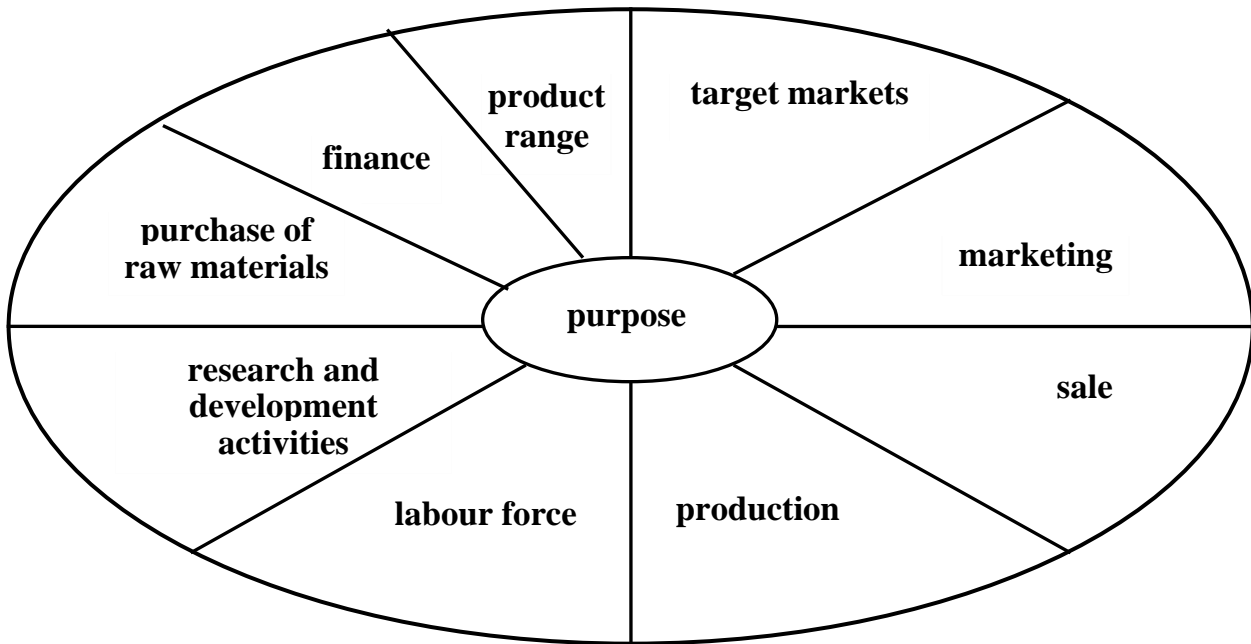


Fig. 1. Ways to achieve the objectives of the enterprise

It is also unproductive to recognize the concept of marketing in production based on the desire only to maximize profits. The main benchmark of effective management, which is based on marketing, is not only profit maximization but also the successful elimination of those risk situations that an enterprise may fall into during its economic activities.

Insufficient attention to non-traditional forms of relations in the producer-consumer dyad can also become a prerequisite for the unproductive nature of the marketing-oriented concept of production management.

Competition is an essential element of the market economy and its regulator. The role of competition is that it creates and maintains a certain order in the market that does not depend on other facts, subjective aspirations to achieve private goals in the course of competition are objectively coordinated, harmonized, and mutually adjusted.

The enterprise's activity in the conditions of toughening of the competition, characteristic for the current stage of economic relations, should be marketing-oriented. In the face of increasing competition, the success of an enterprise depends on the rapid response to constant changes in the external infrastructure of the market environment. The enterprise must have management mechanisms that allow an adaptation to market conditions and competition in the world producers' markets. In this regard, the company must develop its own competition strategy [6].

As the fundamental structure of a market economy, marketing is viewed as a continuous process of organization and management in the field of strategic and operational planning aimed at satisfying consumers and producers. The structure of the concept of marketing-oriented production management is presented in Table 1.

The mechanisms, methods, and models of marketing management considered allow adjusting and adapting the marketing strategy to new requirements of micro- and macro-environments.

Table 1

The concept of marketing management

Essential elements (EE)	The concept of improving production	Improve production Efficiency distribution
	Concept of product improvement	Improvement of consumer properties New opportunities
	The concept of intensification of commercial efforts	Manufacturer interests
	The concept of marketing	Consumer interests
	The concept of social and ethical marketing	Target markets needs
Strategy (S)	Strategic planning	Mission Imperatives Audit SWOT-analysis Business portfolio
	Marketing Management	Analysis of market opportunities Selection of target markets Development of a marketing complex Control
Architecture (A)	Marketing microenvironment	Company Suppliers Intermediaries Consumers Contact audiences
	Marketing macroenvironment	Economic Environmental Scientific and technical Political Cultural
Basic techniques (BT)	Segmentation	End-users Organized consumers International market Multifactorial
	Selecting target segments	Evaluation Choice based on strategy
	Positioning	Achievement of competitive advantages Selection and implementation of the strategy
	Mutual relations with consumers	Consumer value Level of satisfaction
	Creating competitive advantages	Analysis of competitors Choice of competitive strategy

Goods and Services (GS)	Selection of assortment and nomenclature	Consumer goods Commodities of production consumption
	Development and life cycle	Innovations Commercialization Stages of the cycle: bringing to the market; growth; maturity; decline
	Choice of strategy in the service sector	Types and characteristics of services Quality of service International services
	Methods	Cost price Value Competition
Pricing (P)	Choice of strategy	New goods Commodity nomenclature Adjustment and price changes
	Strategy of marketing communications	Identifying the target audience Advertising media Budgeting Integration of communications
Promotion (Pr)	Communication	Advertising Sales promotion Propaganda
	Distribution channels	Structure and functioning principles Goods promotion
Spread (SP)	Direct and interactive marketing	Customer databases E-sales
Block	MARKETING MANAGEMENT METHODS AND MODELS	
EE	<p>Choice of technological structure: $\langle \sigma, \pi \rangle$, where σ is the structure, π is the selection rule; Creation of many alternatives to productive program A; Choice of factors of production and counterparties $\Omega = \langle S, M, P, R \rangle$, S – means of production; M – resources; P – suppliers and consumers; R – technology; Optimal choice of a productive program as a solution to the problem of choosing alternatives A from the original set A: $A \subseteq A$; Ranking of consumer properties of goods A on the basis of the preference relation \leq: $a_1 \leq a_2 < \dots < a_r$; Formation of many preferences and interests of production: $I = \{i_1, i_2, \dots, i_r\}$; Structuring of target markets $C = \{c_1, c_2, \dots, c_a\}$.</p>	
S	<p>Selection of the main objective of the company: mission M Creating a two-element set of key factors: Strengths \bar{S} and weaknesses \underline{S} side $S = \bar{S} \cup \underline{S}$ Growth/market share method $R = \{R_1, R_2, R_3, R_4\}$ Method attractiveness/stability $U = \{U_1, U_2, U_3, U_4\}$ The growth strategy method is $T = \{T_1, T_2, T_3, T_4\}$.</p>	

A	Analysis of factors of micro- and macro-environment Creation of database on suppliers, consumers and intermediaries Modelling of consumer behaviour Product characterization Optimal selection of suppliers Decision on the expediency of entering the foreign market Choice of investment directions Analysis of external risks
BT	Analysis and evaluation of product competitiveness Formation of directions to increase the competitiveness of products Optimal competitive choice Rational choice of target segments Consumer choice: by expected value; lexicographical; by the degree of risk
GS	Optimum selection of the nomenclature and assortment composition Quantitative analysis and demand forecast Generating ideas when searching for new products Choice of directions of search Economic analysis Quality control of service.
P	Choosing an acceptable pricing method $Y \subseteq C$ Situational analysis of prices Competition pricing Choosing a price adjustment strategy Initiative price change.
Pr	Choosing the method of advertising budgeting Modelling the advertising process Optimal choice of advertising means Selection of sales promotion tools Evaluation of advertising activities Integrated marketing communications
SP	Decision-making on the structure of distribution channels Evaluation of the main options for building distribution channels Evaluation and control of distribution channels Formation of international distribution channels Choice of transportation method Integrated management of goods promotion

Principal provisions of the concept of marketing-oriented production management are as follows:

- the main directions of development of the production system of the enterprise are determined by the consumer market;
- achievement of the goal in the process of production functioning, associated mainly with the satisfaction of the entire spectrum of consumer market needs in terms of an assortment of products and types of services;
- marketing solutions determine the competitiveness of products in the global and domestic markets; the level of fluctuations in the demand for products is a signal for

selecting control actions and conducting marketing analysis of product competitiveness;

- the key moment in the marketing analysis of the position of a manufacturing company in the competitor's market is the choice of directions for increasing the competitiveness of products in the context of technical and economic parameters and optimizing the costs for these activities;

- a variety of assortment (diversification) of the manufactured products on the basis of the development of new products, the characteristics of which are determined as a result of marketing research of market needs and production possibilities;

- implementation of the principles of marketing-oriented production management is possible on the basis of the development of the functional structure of the automated management system for marketing operations using cybernetic principles;

- interrelated consideration of the functions of managing production, marketing and finance is a necessary prerequisite for the firm's firm position in the consumer market; formation of a strategy of behaviour in complex crisis situations;

- marketing-oriented production management relies on the fundamental foundations of hierarchical management and assumes the implementation of the coordination and coordination functions (in the spatial and temporal aspects) of solutions obtained in subsystems located at different levels of the hierarchy;

- the use of non-traditional forms of production relations (leasing, factoring, etc.) inherent in the market system should take a worthy place in the ICMO along with new information technologies for the marketing support;

- the system of marketing-oriented production management should be built taking into account uncertain factors and, above all, competitive risk [7].

Table 1 shows the mechanisms, methods, and models for solving marketing problems:

- selection of the technological structure $\langle \sigma, \pi \rangle$, where σ is the structure, π is the rule (instruction, algorithm) of the choice. This pair generates a choice function $C(\blacksquare)$;

- creation of many alternatives to productive program A ;

- selection of factors of production and counterparties $\Omega = \langle S, M, P, R \rangle$, S – means of production; M – resources; P – suppliers and consumers; R – technology;

- the optimal choice of a productive program as a solution to the problem of choosing alternatives A from the original set \mathbf{A} : $\bar{A} \subseteq \mathbf{A}$;

- ranking consumer properties of goods of set A based on the preference ratio \leq : $\mathbf{a}_1 \leq \mathbf{a}_2 < \dots < \mathbf{a}_r$;

- formation of a set of preferences and interests of production (the space of relations in the production sphere): $\mathbf{I} = \{\mathbf{i}_1, \mathbf{i}_2, \dots, \mathbf{i}_r\}$;

- structuring of target markets $\mathbf{C} = \{\mathbf{c}_1, \mathbf{c}_2, \dots, \mathbf{c}_\alpha\}$.

Table 1 shows the components of the marketing strategy: strategic planning and marketing management. In turn, strategic planning is implemented using the following mechanisms:

- the choice of the main objective of the firm – mission \mathbf{M} . Clear mission statement directs all the company's activities, allowing to achieve a common goal;

- creation of the set $S = \{\bar{S} \cup \underline{S}\}$ of strengths \bar{S} and weaknesses \underline{S} that are components of the so-called SWOT-analysis. It should be taken into account that the creation of S does not involve enumeration of all the features of the company but only the identification of key factors;

- matrix methods of drawing up and analysis of the business portfolio, which received special names:

The growth/market share in the form of an **R/D** matrix (Fig. 2) includes four sectors: **R₁**, characterized by high growth rates **R** and a large market share **D**; **R₂** – with a small share of fast-growing markets; **R₃** – a direction of activity with low rates and the big share of the market; **R₄** – the direction of activity with a large market share and low growth rate;

R \ D	D_C	D_M
R_B	R₁	R₂
R_H	R₃	R₄

Fig. 2. Matrix R/D

- The attractiveness/stability method in the form of a matrix **V/U** (Fig. 3) includes nine sectors **U₁**, **U₂**, **U₃** – with low attractiveness and accordingly high, medium, and low stability; **U₄**, **U₅**, **U₆** – with average attractiveness and accordingly high, medium, and low resistance; **U₇**, **U₈**, **U₉** – with high attractiveness and the same types of stability. As for attractiveness factors, an index of attractiveness is used, determined on the basis of market size, market growth rates, profitability ratio, degree of competition, seasonality and cyclical demand, cost structure. To assess sustainability, a stability index is used that reflects such factors as: relative market share, price competitiveness, product quality, customer and market knowledge, sales efficiency, and location advantages;

V \ U	U_B	U_C	U_H
V_H	U₁	U₂	U₃
V_C	U₄	U₅	U₆
V_B	U₇	U₈	U₉

Fig. 3. Matrix V/U

The growth strategy in the form of a matrix **R/T** (Fig. 4), which includes four sectors: **T₁** – the path of development based on the market deepening, **T₂** – characterizes the development by expanding the market through new goods, **T₃** – whose feature is the development of goods on existing and new markets; **T₄** – the strategy of introducing new products to new markets, called the diversification of the company's growth.

R \ T	T_C	T_H
R_C	T₁	T₂
R_H	T₃	T₄

Fig. 4. Matrix R/T

The main methods of marketing are: segmentation, selection of target segments, positioning, relationships with consumers, creating competitive advantages. A strict breakdown of the market into segments is possible with the involvement of the apparatus of logical relations. Cybernetic approaches to solving problems of this block are considered in the tasks:

- Analysis and assessment of product competitiveness;
- Formation of directions for increasing the competitiveness of products;
- Optimal competitive choice;
- Rational choice of target segments;
- Consumer choice.

The marketing strategy of the production system must take into account not only the needs of consumers but also the strategies of competitors. It should be aimed at winning other positions, analysing possible competitors and achieving a competitive advantage. The advantage over competitors is achieved by offering consumers a higher consumer value, a proper pricing policy. An analysis of competitors requires their identification, assessment of their goals, strengths, and weaknesses, and the range of possible actions. The cybernetic approach in this direction is applicable when creating an integrated system containing data on competitors and recommendations for the selection and application of solutions.

The only element of the marketing complex related to the revenue side is the price. Pricing in marketing management is quite complex and contradictory and at the same time one of its most flexible elements. The price is a factor ensuring the achievement of a balance of supply and demand. Actual problems in the field of pricing based on the use of mechanisms, methods, and models of marketing management are: the choice of an acceptable method of pricing; Situational price analysis; Competitive pricing; Choice of price adjustment strategy; Initiative price change.

The price factor is a regulator of the system of the financial and monetary mechanism of the marketing management of the enterprise.

Conclusions

Modern marketing requires not only the implementation of effective measures at the stage of production of goods but also high-quality marketing communications, which are an element in the policy of commodity promotion. The program of marketing communication represents a combination of means of advertising, sales promotion, personal selling, and propaganda.

The final stage of the activities of the marketing complex is distribution (promotion), which includes the main decisions and actions taken to promote goods and services. New information technologies, interactive and direct marketing open wide opportunities in the conquest of target markets and management of distribution channels.

References:

1. Braverman E.M. Neravnoesnye modeli ekonomicheskikh sistem: monografiia / E.M. Braverman, M.I. Levin. – M.: Nauka, 1981. – 304 s.
2. Bazzel R. Informaciia i risk v marketinge; per. s angl.; pod.red. M.R. Efimovoi / R.Bazzel, D.Koks, R.Braun. – M.: Finstatinform, 1993. – 504 s.
3. Liapunov A.A. Problemy teoreticheskoi i prikladnoi kibernetiki / A.A. Liapunov. – M.: Nauka, 1980. – 336 s.
4. Ekonomicheskaia strategiiia firmy: Ucheb.posobie / Pod red. A.P. Gradova – SPb.: izd-vo SPbGIEU, 1995. – 415 s.

5. Lepa N.N. Upravlenie konkurentnymi preimushchestvami predpriatiia / N.N. Lepa / NAN Ukrainy In-t ekonomiki promyshlennosti. – Donetsk:izd-vo «Yugo-Vostok Ltd», 2003. – 296 s.
6. Dubnitskii V.I. Mehanizmy upravleniia marketingom promyshlennogo kompleksa regiona: monografiia / V.I. Dubnitskii. – Donetsk: izd-vo «Yugo-Vostok Ltd», 2003. -314 s.
7. Upravlenie marketingovym potentsialom predpriatiia: monografiia / Pod obshch.red. prof. Yu.G.Lysenko, prof. N.G. Guzia. – Donetsk: izd-vo «Yugo-Vostok Ltd»; DonNU, 2005. – 352 s.

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MANAGEMENT OF INFORMATION SUPPORT PROCESSES OF ENTERPRISES OF THE CORPORATE STRUCTURE IN TERMS OF TRANSITIVE ECONOMY

Summary

The paper considers criteria for evaluation of qualitative characteristics of information, namely, clarifies its specifics according to the sphere of influence on the information value on the stage of data formation and use in the process of making managerial decisions that allows determining causes of an insufficient value level and directing corresponding management actions towards the realization of the information quality potential. Features of content-oriented use of information in integrated corporate structures (ICS) determines a circle of specific tasks being solved by management information system (MIS) of integrated corporate structures that allowed developing characteristics of functions of MIS of ICS, determining the main structural-functional relations and information flows there, as well as program methodological tools of their realization.

Introduction

The market business environment requires from economic entities to form a new business process management strategy aimed at increasing capitalization and investment attractiveness of business by means of building a specialized corporate structure and creating a fundamentally new system of its management, which is featured by self-reorganization and constant development.

Enlargement of assets of enterprises within the corporate structure requires a production modernization and improvement of its development indicators, especially business processes' efficiency, which is impossible without a constant timely providing of information that shows a clear need for improving not only the system

of its management but also processes of information provision for this system, which should be built taking into account features of functioning of integrated structures and will allow making an effective managerial influence. This dictates the need for the formation of a mechanism for the information provision management of enterprises of corporate structure on the level of functioning of the higher levels of management

Such leading scholars as O. Amosha, Ya. Bersutskyi, L. Varava, V. Yevtushevskyi, V. Kleiner, I. Markina, V. Pankov, H. Skudar, A. Temchenko, A. Turylo, and others devoted their works to multidimensional problems of enterprise management.

Problems of the formation and functioning of corporate structures are considered in papers of domestic and foreign scholars as I. Ansoff, I. Belikov, M. Bilyk, I. Bulieiev, V. Verbytskyi, O. Harafonova, M. Martynenko, H. Kozachenko, O. Osypenko, O. Povazhnyi, B. Raizberh, R. Chase, and others.

An issue of information support for enterprises is studied in works of B. Barmakov, N. Wiener, O. Karminskyi, M. Lepa, R. Lepa, H. Miller, L. Pavlenko, O. Pylypenko, H. Tytorenko, A. Ursul, J. Forrester, B. Chernikov, S. Yakovenko, and other scholars. At the same time, problems of the formation of the system of enterprise management within corporate structures, the interaction of their management systems by hierarchical levels, and problems related to the development and operation of information provision systems, built on mutual agreement of flow processes of enterprises, require further research.

The modern state of research and development of the problem of forming informational providing for the corporate structures' operation in Ukraine causes a need for further research on issues of development of methodological bases of the implementation of a concept of the mechanism for managing the processes of information provision of enterprises in the structure of the corporate structure.

Part 1. Information as a factor for increasing the efficiency of enterprises of the corporate structure

Management of production and economic activities of enterprises of the corporate structure as a process that needs grounded actions is certainly related to the use of information concerning the real state of production, organizational, and economic subsystems of an enterprise and formation of managerial influence for achieving goals of business and operations of enterprises of the corporate structure.

The use of information that contributes to the efficient managerial decision and, as a consequence, promotes the improvement of efficiency of enterprises of the corporate structure – is a process that requires a competent approach on the side of a subject that consumes it.

However, a complexity of category «information» determines complexity in the process of its use in relation to the fact that its efficient use is possible only in terms of knowledge of its essence and properties.

It is noted in the scientific literature that it is impossible to provide a generalized enough definition to the essence of the term «information» as this term cannot be defined fundamentally [1]. However, in some sources, there is an attempt to define information using a new approach: proof from the contrary. For example, information is not a substance, not energy, not a carrier [2].

There are the following definitions of information in philosophical dictionaries:

Information (from Latin *informatio* – familiarization, explanation, presentation, concept):

- the message, creation of awareness about the situation, news about anything conveyed by the people;
- the uncertainty that decreases and is removed as a result of receiving messages;
- the message that is inextricably linked to management, signals in the unity of syntactic, semantic, and pragmatic characteristics;
- messages, a reflection of variety in any objects and processes (of animate and inanimate nature) [3];
- some facts, an aggregate of any data, knowledge [4].

Some scientists consider the essence of information through the information exchange. In other words, information appears only in the process of information exchange that, obviously, means data interchange between subjects with different levels of informational awareness. Then information in the process of its use by the subject transforms into a new kind that can be called the subject's knowledge, which sharing by means of communication causes another information exchange and new knowledge formation. In this relation, it can be supposed that data change its status from information and knowledge one by one depending on their carrier. This means, if data are reflected on paper or another carrier, then definition «information» is taking place; but if the information is consumed by a human, it becomes knowledge automatically.

K. Kolin, a scholar, integrates approaches to the definition of the term «information» and gives the following definition: «In a broad sense, information is an objective property of reality that is manifested in the heterogeneity (asymmetry) of the distribution of matter and energy in space and time; the unevenness of the course of all processes occurring in the world of animate and inanimate nature, including in society and in the mind of a man. In other words, heterogeneity and unevenness are that very phenomena to be called information. As follows from the above, there is no information in a homogeneous environment and uniformly proceeding processes. Thus, information is not the product of our imagination, it is not a product of the activity of consciousness, but a real physical phenomenon that characterizes the state and motion of matter or energy, with which it is inextricably linked and which are its carriers. Consequently, information is their attribute, so-called integral feature [1]».

Summarizing scientific views of the essence of information, three the most popular concepts of information can be distinguished.

The first concept (which is already mentioned – Shannon's concept) that, representing the quantitative and informative approach, defines information as a degree of uncertainty (entropy) of an event. Information volume in one or another case depends on the probability of its obtaining: the more probable a message, the less volume of information it includes. «This approach, although it does not take into account the semantic side of information, proved to be very useful in communication technology and computer technology and served as a basis for measuring information and optimally coding messages. Moreover, it seems convenient for illustrating such an important property of information, as a novelty, unexpectedness of messages. With this understanding, information is a relieved uncertainty or the result of choosing from a set of possible alternatives [8]».

The second concept considers information as a property of matter. «Its appearance is associated with the development of cybernetics and is based on a statement that any messages perceived by humans or devices include information. It cannot exist out of matter and thus it has existed and will exist forever, it can be collected, stored, and processed [8]».

The third concept is based on logical-semantic approach, in which «information is interpreted as knowledge, moreover, not any knowledge but its part that used for the orientation, conation, management, and self-management. In other words, information is an active, useful part of knowledge [8]».

Given the conducted research, it can be concluded that information is a fairly complex category for the precise definition. Also, one should note its versatility that is predetermined by its use as in systems of philosophy so in exact sciences, e.g. cybernetics and economics. The presence of different approaches to the definition of information is determined by the purpose of using this category in a corresponding scientific direction.

Analysing above-mentioned points of view, it can be said with certainty that opinions of all scholars are combined by the only assertion that information is a somewhat special phenomenon and it plays an important role in the development of society and the activities of organizations and corporate structures.

Information, unlike the material resources of production, has a number of features in the process of use, which determine its special role in increasing efficiency of the enterprise of the corporate structure. These features can be reduced to the following [2]:

1. In the process of information exchange, it doubles: it appears to the recipient of the information, remains with the one who transfers it.

2. Not subject to deterioration with time as it does with material objects. It only deteriorates when new information comes out.

3. Information is a necessary component of mental activity and can be used or produced only by the people.

Given these features, information used for managing enterprises of the corporate structure must be rapidly and easily transmitted through communication channels of management for its effective use, and its production and consumption must be controlled by a man that will ensure its more rational use.

Information exists and is used at all stages of activity of any enterprise of the corporate structure. It is analysed at the stage of planning, the study of supply and demand in the market when analysing internal capabilities of the enterprise, evaluation of activities, and in many other spheres of activities. «Information is important in all phases of economic activities and stages of production: from an idea of a new product's creation to its realization ... the information plane of economic processes at the present stage becomes the main factor of the stable economic development» [10]. Thus, the modern activity of enterprises of the corporate structure cannot be inefficient without using exactly quality information.

Qualitative information also has a great significance in the process of implementation of the enterprise's strategy. The work [11] presents results of a survey of more than 100 companies, government and non-profitable organizations from more than 50 countries of the world. This survey lasted 5 years and was devoted to identifying capabilities of companies and factors that are of the most importance in their strategies' implementation. 4 fundamental blocks of recommendations were distinguished: to clarify the correctness of the decisions made (decision-making right); create information flows (information); create motivation (motivation); make changes to the structure (structure).

Results of such a research demonstrate the importance of the system of information flows at the enterprise. It is inefficient informational support for managerial decisions that is the first cause of incorrect implementation of the strategy of enterprises of the corporate structure. «When a company fails to implement its strategy, the first thing

managers do is engage in restructuring. However, our research shows that the foundations of the right strategy begin with a clear distribution of the right to make decisions and provide information flows where necessary. If you do everything right, the correct structure and motivation factors will become obvious [11]». Thus, in the modern conditions of activities of the enterprise of the corporate structure, providing management units, which really need and have to make managerial decisions, with useful and effective information is necessary.

Considering the role of information in the management process, an attention should be paid to features peculiar exactly to this information used for achieving the goal of management: not all data, which reflect features of the enterprise' activity, are useful in managing them. Revealing these peculiarities will help to use it more rationally in the managerial decision-making. V.V. Ivanova determines that '«information efficiency is directly related to the level of efficiency of informational provision that requires further research ... it is not the volume of information that determines process performance but its efficiency, which for it as a specific resource can be determined by the degree of usefulness and cost effectiveness when working with it [10]».

Besides usefulness of information, scholars distinguish such a qualitative feature of information as its objectivity. We can consider information objective if it does not depend on any opinion. Objective information can be obtained with the help of sensors, measuring devices. Objectivity of information is lost as a result of its processing by subject. This means that the most objective information exists only at the moment of its appearance, and the more it is processed by different subjects, the less objective it is. It has emerged that information that occurs in the workplace and is transmitted through different organizational units to senior management, at the end of its path turns into the least objective.

Completeness of information is a qualitative feature that characterizes information as sufficient for decision-making [12, 13]. Complete information must not have disadvantages or call for clarifications. Depending on the completeness, information can be classified as insufficient, complete, and redundant. Incomplete information can lead to an improper conclusion and irrational decision. A very important qualitative characteristic of information is its relevance, essentiality in concrete situations in managerial decision-making. That information is called irrelevant, which came late or does not relate to solving the problem at all.

Nevertheless, relevant information, namely that has a bearing on a solvable question, may have a different measure of utility. Then, another one characteristic of qualitative information turns out – its usefulness [12; 13]. Information usefulness is determined by the degree of its influence on the efficiency of a managerial decision, namely, the degree of achieving the goal to be sought.

The quality of information also depends on the timeliness of its receiving [12; 13]. The information should reach the recipient exactly at that time interval when there is a need, not earlier and not later. If the information arrives before the moment it is needed, it acquires properties that irrelevant at a specific time interval and may be lost in the general mass of information data. If the information arrives after the required time, it also becomes irrelevant and the costs associated with obtaining this information become useless.

Given the fact that obtaining any information requires not only time but also financial resources, one can distinguish such a property of information as its profitability. The information used should have the effect of its use, and decisions made on the basis of this information should have a significant impact on the overall

result from the activity of the recipient. As a consequence of such a property, overall performance of activities of the whole enterprise will grow due to receiving profitable information, whereas there is formed a relation between information and profit, value added of the enterprise.

Based on determined characteristics that have the greatest number of references in the literature, the spectrum of the main qualitative characteristics of the information that determines its quality and influence on the adoption of rational and effective management decisions was determined (Fig. 1).

Reliability characterizes information from the point of reliability and confidence, showing how data obtained by executive corresponds to reality and reflect the true state of the control object. Reliability of information is formed at the stage of its reflection in all carriers and can decrease with human exposure to information. Information objectivity is such a property of information that characterizes a degree of showed data independence and confirms their verity. Despite these characteristics, relevance and completeness of information characterize data from the perspective of their use by managerial personnel.



Fig. 1. The spectrum of characteristics of information used for business management of the enterprise

Relevance reflects how information relates to the management task, can change awareness of the manager, and change a choice of an alternative management action. Completeness characterises how data satisfy a real need of the personnel for extra information. Qualitative characteristic of timeliness reflects a possibility of effective use of information if it has the above-mentioned features. If the information is provided timely, it can be effectively used depending on the availability of other characteristics of the spectrum and intellectual abilities of the personnel.

Informational support for the process of managerial decision-making plays a key role in the modern business environment of enterprises. It is adequate, timely, and relevant information that contributes to the acceleration of making managerial decisions, saves the time of managers, and improves their performance. However, above-mentioned characteristics of information used for managing business and operation should form the main, scientifically grounded qualitative characteristic of information – its value. If at the time of the existence of an industrial society, the problem appeared in the lack of timely information, then, in the era of the information society, when there are very simplified communication processes and an expanded amount of information resources, the problem of identifying valuable types

of management information in the general amount of various information becomes relevant.

The value of information as a scientific category is mostly researched in papers of scholars on the theory of information [2, 12, 13]. However, the mechanism for its evaluation for the purpose of using in the enterprise's managerial activity is not developed that cause a need for further research of this scientific task as by scholars, so by managers of enterprises, moreover, particularly as it is the value of information that is associated with its efficiency.

A necessity for determining the efficiency of the use of information at the enterprise contributes to the development of researches concerning the assessment of separate information units from the point of view of their usefulness and influence on the effectiveness of the managerial personnel. A problem lies in the fact that relating to the complexity of the category «information», a definition of a single information unit and its value is a quite complicated process.

Thus, the information and its qualitative characteristics are an indispensable component of the process of the modern corporate structure management under the transitive economy.

Part 2. Foundations for forming the system of management of informational support for enterprises of the corporate structure

Information serves as one of the production factors, moreover, as an independent (service resource, means of production), so as auxiliary one (the source for the choice of counteragents, the justification of policy in the market, and so on).

Any object of management is characterised by a certain aggregate of information related to this object. Such an aggregate is usually called a system of economic information or information system of the object [7]. At the same time, such an understanding does not reflect the fullness of the links related to the information exchange. A wider definition of the informational system is provided in the Economic Encyclopaedia – it is «a system of collecting, storing, processing, transforming, conveying, and updating information with the help of modern computer and other technology for a constant use of information in the management process» [3]. Such an understanding of the essence of this term – a set of technical, software, informational, and human resources that are used for the information processing and forming a result for making managerial decisions – is proposed by V. Maslov [8]. V. Huzhva, when interpreting the essence of information systems, focuses an attention on goals and structure of the information system, which, in turn, is understood as complexes that support routine and management accounting at the enterprise, provide information for a prompt and strategic managerial decision-making, are the development of systems of working groups oriented to the enterprise scale, which can integrate geographically dispersed nodes and networks, have a hierarchical structure composed of several levels [9].

Along with that, given definitions do not correspond to the main provisions of systematology, in accordance with which the system should be determined through its own specific elements (i.e. minimal indivisible objects or subjects of the system), relations among them, and integral properties, which differentiate the system from just an assembly of elements [10].

Structuralization of informational space that is taking place along with the organization's formation and development, as well as formation of a corresponding information system (IS), occurs under the influence of a mechanism that is based on the following means of formation of information support: conceptual – a set of ideas and

principles of IS building; functional – a complex of functions and tasks that IS solves; mathematical – an aggregate of mathematical problems and models used for solving tasks of functional support; algorithmic – a set of algorithms for solving mathematical problems of IS functional filling; informational – a set of methods and means of a single system of organization, accumulation, storage, processing, and use of information; linguistic – an aggregate of linguistic means of projecting, modelling of the interaction with IS; software – a set of software tools for integrated software environment of IS; technical – a set of technical means of selection, transmission, input, processing, presentation, output, and use of information; ergonomic – a totality of solutions on the creation of optimal user environment in IS; organizational – a set of regulatory documents and other means that ensure IS interaction with non-automated production sites and its accompanying processes; legal – a set of normative legal documents that regulate a process of creation and operation of IS; methodical – a set of methods of projecting, prototype testing, analysis of operation and development of IS [2].

Given the above, in the circle of information system, one can distinguish: an aggregate of data (databases), a set of users of these data, organizational-methodical mechanisms for the formation, use, transfer of databases' contents with the help of knowledge bases that include approaches to the organizational, legal, methodical implementation of functions and tasks faced the information system, information technology, which are a set of ergonomically realized in a certain software and technical environment mathematical-linguistic algorithms of implementation of aforesaid organizational-methodical mechanisms [9].

Thus, management information system (MIS) is a set of structured with the help of certain organizational-methodical mechanism information flows and relations between people on their use for the purposes of the organization's management, which is realized within the organization by means of a complex of software and hardware tools and mathematical and linguistic algorithms of collection, processing, interpretation, use, and transfer of information.

For the concretization of a structural model of MIS, some other issues should be clarified. Information flows, which arrive at MIS and come out of it, traditionally can be classified as input and output. Input information flows, in turn, are divided into input external, which comes from the external environment, and input internal, which comes from the enterprise's system. The latter reflects direct communication between the object of management – administrative and economic activity of the enterprise – and information system. It also includes feedback of the object and MIS as this information provides data about the status of the object, in respect of which the MIS performs certain functions and the changes that have taken place. Output flow is also divided into two groups: information consumed by external environment and information intended directly for the needs of the MIS users (output internal information flow). The latter is management information. The purpose of the functioning of information system lies directly in developing exactly this information. An effect from achieving this goal consists in the fact that when repeating the cycles of traffic flow in the service of them direct and feedback in the MIS, there is formed a knowledge base, i.e. accumulated management experience, a portfolio of organizational behaviour scenarios, the use of information selection methods, the paradigm of its interpretation and use, which in the final increases the efficiency and flexibility of managing the organization as a whole.

A conceptual model of MIS is presented in Fig. 2. For the analysis of MIS of ICS, an essence of its constituents from the perspective of the enterprise structure as a system should be concretized.

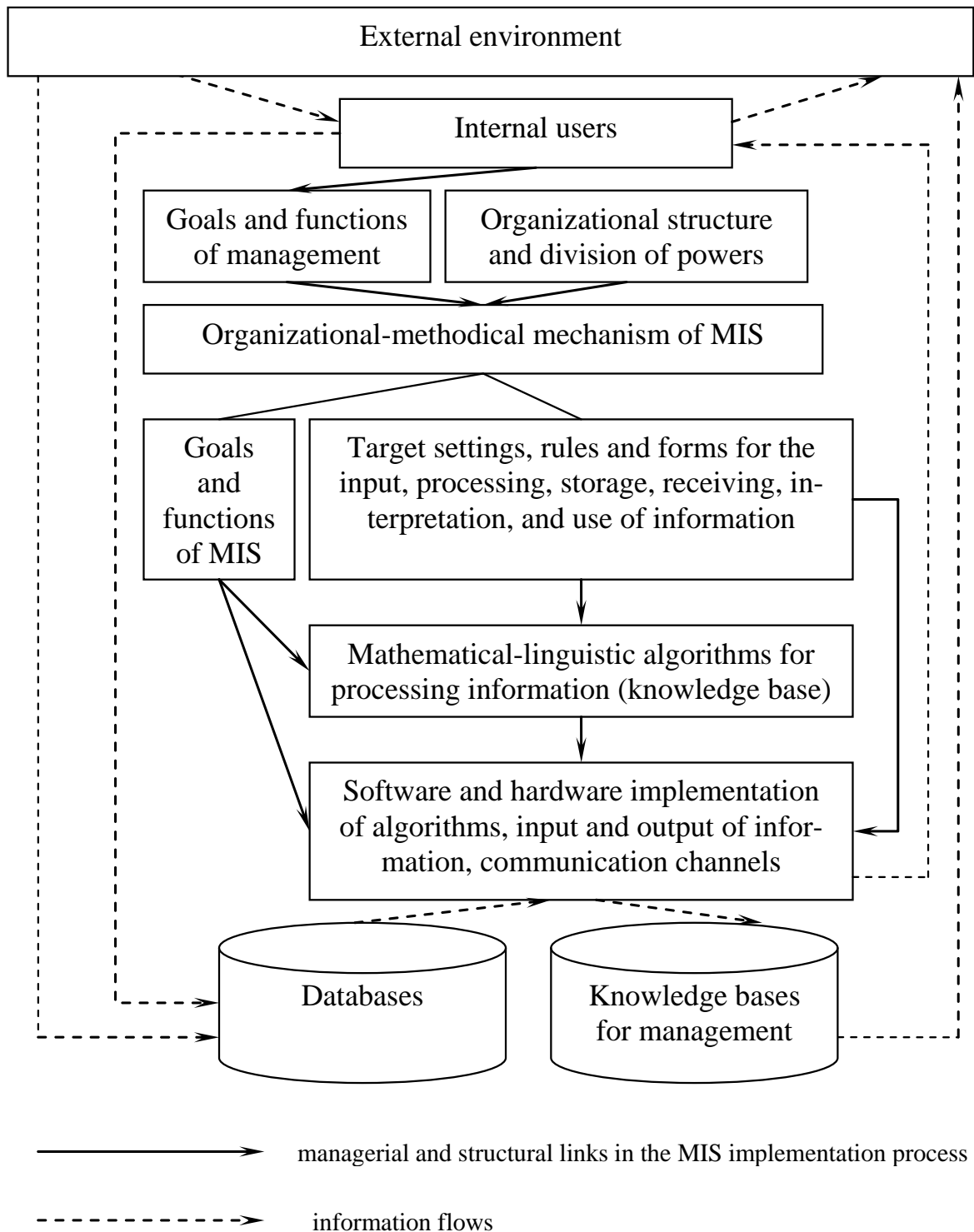


Fig. 2. MIS conceptual scheme

The purpose of the formation of MIS by integrated corporate structures (MIS of ICS) is the improvement of organizational and managerial efficiency of activity of the corporate structure as a whole, including at the expense of optimization of the efficiency of enterprises included in it.

It is worth mentioning that the development of MIS of ICS should be based on results of the evaluation of efficiency of reactions of the corporate structure and certain elements of this structure to the conditions of external environment and internally corporate processes, competitiveness of some enterprises-participants, and a synergic competitiveness of the corporate structure as a whole at the expense of integration processes; management efficiency of some enterprises and the

corporate structure; degree of the marketing use for the formation of an operating strategy of corporation and its participants; accessibility of information on sectoral, inter-sectoral, and extra-sectoral development.

As a final stage of reorganization of the management system at the enterprise, the foregoing concept of improving the efficiency of management of the corporate structures suggests introducing Decision Support Systems (DSS) as the fundamental factor in ensuring the efficiency and quality of management.

DSS introduction requires the mandatory integration of enterprises of the corporate structure on the basis of multifunctional MIS, their operation in a single information environment. In relation to MIS of ICS, DSS is a functional superstructure that provides aggregation of information indicators necessary for the adoption of managerial decisions.

The conducted analysis shows that regardless of a brisk growth of informational support and its almost universal introduction in management, most enterprises, trying in one way or another to automate management activities, receive in the end a set of disparate, albeit powerful enough, MIS. This especially concerns integrated corporate structures, within which enterprises have their own MIS. Such an approach to the management system automation does not solve the problems of automation of direct management functions, does not exclude multiple parallel accounting of identical information in the disjointed MIS, and does not lead to a desirable reduction in the level of internal paper workflow between the participants of the corporate structure, which does not allow either the participants themselves or the structure as a whole to achieve potential results from automation.

However, the purpose of introduction of MIS of ICS envisages that its formation should take place by means of integration of all participants of the corporate structure within the single information system that has workstations at each of the enterprises. In order to ensure functioning, it is not enough for DSS to have a complex of functioning in a single information environment MIS of ICS. Since such MIS are different by their functionality and spheres of application, they work with different data arrays that, in turn, can have identical information content and aggregate data of several systems can be the basis for calculating the indicators used in the adoption of management decisions. Moreover, over the functional and target differences, systems of a complex of MIS used today at enterprises have different information structure of data. In spite of the fact that the main requirement to MIS of certain enterprises-participants if the corporate structure is their information compatibility, differences in the data structure often not allow conducting end-to-end import and export of data from one system to another. As a result, functions for sorting and input of an array of information necessary for the functioning of each concrete MIS, including DSS, rely on specific executors – operators of the complex of MIS. As a result, a cycle of making managerial decisions stretches in time and the efficiency of operation of the entire complex of MIS comes to the efficiency from the automation of settlement mechanisms that take place in concrete business processes.

Therefore, a variant, in which MIS of separate enterprises unite in the information system through MIS of the main company of the corporate structure, is insufficiently effective over the compatibility issue of separate information systems and increase in the number of information flows, determined by the need for data exchange via the central office exchange. Thus, considerable reserves of improving the production management efficiency consist in the creation of an integrated system for organizing the information flow in a set of enterprises taken as a whole.

MIS functions should include management of information support for processes of managerial decision-making, structure of information flow, information flow transfer, collection of information, creation of systems of databases on managing collection, storage, processing, transfer, and the use of information, information flow control procedures.

MIS provides information necessary for managing. It, in turn, reduces to the execution of the following tasks:

- tracking the status of material, financial, and information flows in real time mode;

- transfer of necessary information flows in due time, of the proper quality, with a necessary content, and in the prescribed form for decision makers;

- performing operations to minimize the detected deviation in the state of the information flow by means of improving its own structure of the information system.

The role of information support for flow processes is so important that many Western specialists distinguish a special informational logistics that is independent in business and managing information flows and resources. Thus, in [10], a perspective tool for economic process reengineering is the workflow management, which is informational logistics management on the basis of computer technology, which development has recently enabled the effective processing of information through distributed systems and networks using the appropriate software.

From this perspective, information flow serves for the coordination of resource supply, production, and sales. The essence of the supply coordination system lies, firstly, in the division of product flows into independent periods of transportation and storage, and secondly, in the preparation of information on the stage and state of the flow in real time. This will allow solving at least two tasks. Firstly, such an information system adapts management to the supply of materials and machinery in the case of its complication. So, when forming an integrated corporate structure, it allows optimally allocating supply flows and further resource transfers within affiliated enterprises. Secondly, stock management efficiency increases.

A key element that unites enterprises-participants of the corporate structure in a logistics chain is the common use of information that becomes a general information flow process of all grouped enterprises. Data exchange on suppliers, which extends to the network of enterprises, allows the corporate structure generally reduce costs related to providing the operation of the full logistics chain. By improving its efficiency, the enterprise-producer receives a significant economy, which is especially considerable in terms of vertically integrated corporate structures. This economy practically shares in certain proportions among all participants of the logistics chain, offsetting the costs of creating and maintaining the modern information systems and creating profits from their use [11].

Let us consider the organization of information flow in system integrity with the next stage of material flow – production process. Horizontal integration of information service provides material flow with information in the chain of receipt of goods and raw materials, their pre-processing, the manufacture of finished products, its verification, and sales. Horizontal integration allows integrating material flow in the general system of planning and management at the level of production and enterprise. Such integration enables adhering to a principle of integrity: any decision on production process can be adopted and implemented without its correlation with the general strategy and industrial purposes, goals of the corporation in general.

Vertical integration of logistics information subsystem consists in the relation of different levels in the hierarchy of structure of production management, starting from structures of strategic planning of development of production and sales and ending with the level of operational management of separate enterprises or production sites. Feedbacks of vertical integration allow the upper level to have information on the state of separate sections of the business activities of the corporate structure and respond promptly to the changes that take place. Direct relationships allow providing the release to the market of products, for which there is solvent demand, the operational realization of target orders of consumers; high quality of production.

Information system organizes data flow, which accompanies material and financial flow and is a tool for the integration of supply production, and sale. A weak interrelation of separate spheres of activity of the corporate structure at inadvertent errors of their coordination leads to an overstatement of inventory and working capital, an imbalance in production capacities, the incompleteness of initial information when making alternative decisions, and uneven loading of individual production and distribution subsystems.

Thus, in the modern conditions, information flow carries not only accompanying load but also is a specific independent force capable of improving the enterprise competitiveness. It serves as a kind of tool for regulating material and financial flows, which is grounded on the unity of information and management.

A process of information support in the management of enterprises of the corporate structure consists of the following sequence of actions:

- providing the management apparatus of individual enterprises-participants with data for making a management influence inside the organization and relationship management of each enterprise with the environment;

- reducing a gap between data entry and a moment of the need for making managerial decisions on a certain kind of material or financial flows and so on, i.e. minimization of information lag and management labour intensity, as well as appropriate increase of its productivity.

Let us consider general functions, which MIS of ICS should perform for solving management tasks (Table 1). Considering the purpose, tasks, and presented functions of MIS of ICS, in its structure, it is appropriate to distinguish the following relations and information flows (Fig. 3). Therefore, the client application does not read database record «directly» but sends a request to the server of databases where they are accepted and consequently handled.

Thus, efficiency of the corporate structure management in terms of the transitive economy, its flexibility, and promptness are determined by building an efficient system by processes of information support, which is based on principles of integration of information, material, and financial flows within the corporation and structuralization of information flows in accordance with the management needs, building a uniform knowledge base on information processing, appropriate firmware. For the realization of this concept, it is necessary to pay more attention to the functional and content filling of the model of MIS that satisfies requirements of corporate business and supply needs for information support of the corporate structure.

General functions of MIS of ICS

Tasks	Functions
Collection and initial structuralization of information	Providing openness of MIS of ICS and its connection with other information systems, access to interface and hardware and software of information input, databases' building, algorithmization of procedures of initial information structuralization, layering of modules that will perform special functions for the processing of information structured by special features, providing a restricted access to the information processing database building
Information processing	Providing required hardware and software solutions that will allow solving issues of information processing with the required speed and accuracy according to certain algorithms, providing compatibility of analytical modules, and transferring information among them
Transfer of results of data processing	Determination of software, hardware, and interface capabilities of data transfer to users inside the corporate structure and to the external environment; providing a control of access to initial data and databases on managerial activity
Regulation of information resource flow	Providing information technology functions of filter, hub of data flows, information storage, production, and supply of necessary management information, resource access control, coordination of information flows
Integration of information flow into a single corporate information space	Centralization of development and implementation of MIS of ICS at all enterprises-participants; using common databases on information processing, securitization of external access to MIS of ICS
Data entry on the efficiency of management of corporate and non-corporate rights	Development of modules that serve relationships on information exchange between bodies of corporate (or non-corporate) management of the main company of the corporate structure and its participants
With the help of information system, a coordination of management of different types of production	Algorithmization of information transfer and processing simultaneously by material and financial flows of enterprises-participants of the corporate structure taking into consideration features of their production organization and pace of production process
Providing the information support improvement	Centralized correction of the modular composition of MIS of ICS, its software and hardware support at each of the participants of the corporate structure being in compliance with requirements of incompatibility among individual units of MIS of ICS and its efficiency in general

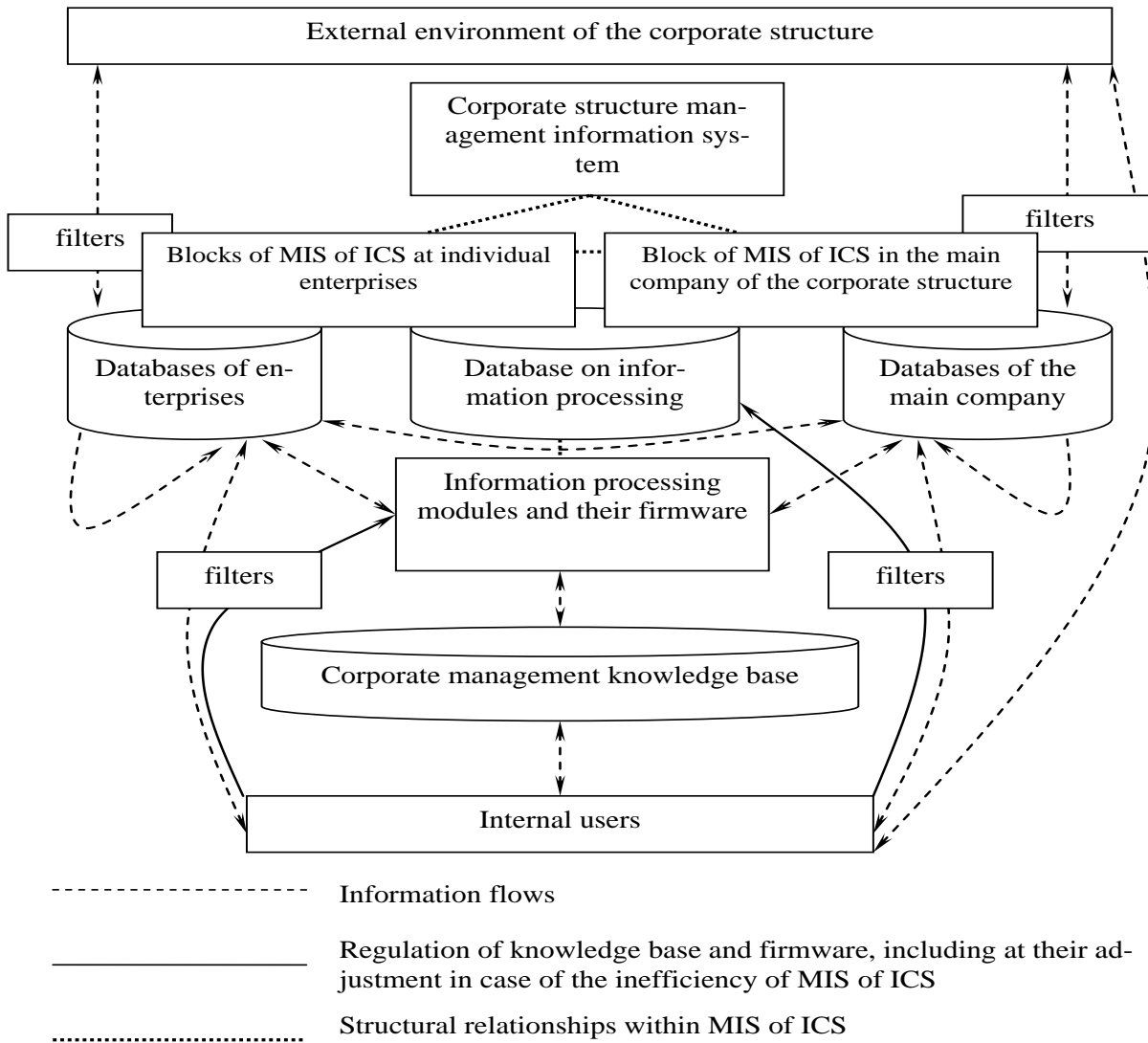


Fig. 3. Generalized block scheme of MIS of ICS

Conclusions

Increasing complexity of the system of corporate management determined by the structure of integrated corporate structures makes solving the issue of improving management efficiency of integrated corporate structures dependent on the quality of information support for organizational and managerial processes that is manifested in ensuring the combination of goals of information support.

Application of the methodology of a system approach to the structuralization of information space of integrated corporate structures allowed clarifying the essence of the concept «management information system» from the perspective of its subject and object composition, organizational-methodical mechanism of its operation and software and hardware tools for the realization and clarifying its conceptual scheme on this basis. In accordance with the proposed definition, management information system is a set of structured with the help of certain organizational-methodical mechanism information flows and relations between people on their use for the purposes of the organization's management, which is realized within the organization by means of a complex of software and hardware tools and mathematical and linguistic algorithms of collection, processing, interpretation, use, and transfer of information. This approach allows determining terms of MIS formation for integrated corporate structures, in particular, a necessity for providing program-methodical

compatibility and eliminating parallelism in solving managerial tasks determines an appropriateness of creation of an integrated system of information flow organization within the corporate structure taken as one enterprise.

Features of content-oriented use of information in integrated corporate structures determine a circle of specific tasks being solved by management information system of integrated corporate structures that allowed developing characteristics of functions of MIS of ICS, determining the main structural-functional relations and information flows there, as well as program methodological tools of their realization.

References:

1. Barmakov B. Rol informatsionnogo obespecheniia B. Barmakov // Upravlencheskoe konsultirovanie. – 2007. – № 2 (69). – S. 44-50.
2. Informatsionnye tekhnologii upravleniia: ucheb. posobie / Pod red. G.A. Titorenko. – M.: YUNITI-DANA, 2003. – 439 s.
3. Ekonomichna entsyklopediia: u trokh tomakh. – T. 1 / Redkol.: Mochernyi S.V. (vidp. red.) ta in. – K.: VTS «Akademiia», 2000. – 864 s.
4. Korolev M.A. Teoriia ekonomicheskikh informatsionnykh sistem: uchebnik / M.A. Korolev. – M.: Finansy i statistika, 1984. – 223 s.
5. Denysenko M.P., Informatsiine zabezpechennia efektyvnoho upravlinnia pidpriemstvom. M.P. Denysenko, I.V. Kolos // Ekonomika ta derzhava. – 2006. – № 7. – S. 19-25.
6. Fedorenko S.V., Rozrobka informatsiinoho zabezpechennia ta informatsiini potoky promyslovoho pidpriemstva. S.V. Fedorenko, D.O. Pravotorov // Ekonomika ta derzhava. – 2006. – № 11. – S. 33-34.
7. Taganov D.N. Informatsiia kak osnovnoi faktor formirovaniia konkurentnoi strategii. D.N. Taganov // Menedzhment v Rossii i za rubezhom – 2005. – № 1. – S. 10-17.
8. Ursul A.D. Otrazhenie i informatsiia // Leninskaia teoriia otrazheniia v svete razvitiia nauki i praktiki. A.D. Ursul: v 5 t. T. 1. – Sofiia, 1981. – 451 s.
9. Maslov V.P. Informatsiini systemy ta tekhnologii v ekonomitsi: navch. posib. V.P. Maslov – K.: Slovo, 2003. – 254 s.
10. Huzhva V. Intehrovani systemy upravlinnia pidpriemstvom. V. Huzhva // Spravochnik ekonomista. – 2006. – № 9. – S. 24-28.
11. Solovev M.M. Avtomatizirovannye systemy menedzhment i korporativnoe upravlenie: logika razdeleniia i razvitiia. M.M. Solovev // Menedzhment v Rossii i za rubezhom. – 2009. – № 5. – S. 9-22.
12. Kuznetsova S.A. Bukhhalterskyi oblik v systemi formuvannia upravlinskoii informatsii: metodolohiia ta praktyka: Monohrafiia [Tekst] / S.A. Kuznetsova. – Melitopol: Tavriiskyi derzhavnyi ahrotekhnolohichnyi universytet, 2007. – 297 s.
13. Zakon Ukrainy «Pro osnovni zasady rozvytku informatsiinoho suspilstva v Ukraini na 2007–2015 rr.»

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MANAGEMENT STRATEGY OF THE FINANCIAL POTENTIAL

Summary

In this chapter, the mechanism of enterprise's financial potential management strategy formation is offered, presented by correlating stages, where each stage is oriented to a certain task. Based on the analysis of the literature, the characteristics

of the company's strategic potential are identified. Realization of every task is carried out by the methods needed, which are also mentioned in the mechanism. In such a manner, we offered the mechanism of forming the enterprise's financial potential management that allows, based on the enterprise's general strategy, emphasizing the elements useful in the creation of financial potential. That will allow in prospect to develop financial potential formation goals, to build forecast, to separate main directions of accumulation, formation, and distribution of financial resources. It worth mentioning that analysis and control over financial potential formation strategy are important, as well as the usage of analysis results for the concretization of strategic directions of the enterprise's development.

Introduction

Nowadays strategy constitutes a working mechanism of competitive advantage creation, both at the macroeconomic and at a given separate enterprise's levels. The absence of a strategy or choosing a wrong strategy leads to non-effective usage of limited production resources and time waste, while time is an important part of the market success.

Strategic management of the enterprise's financial stability can be presented as a complex of measures focused on maintenance of enterprise's financial stability during strategic development, which consists of the next stages:

- carrying out a strategic analysis of the enterprise's financial stability;
- formation, selection, and evaluation of strategies, which allow maintaining enterprise's financial stability;
- realization of the selected strategy.

To analyse approaches to the rationale for the notion of «strategic potential», let us consider the structure of the enterprise's potential. This will allow determining the place of strategic potential among other types of potential.

The structure of an enterprise's potential is understood as a set of essential, stable (invariant) connections between its elements [1].

In the economic literature, there are different approaches to determining the structure of the enterprise's potential. Many scientists consider the resource structure of the potential but each of them allocates a different number of components. Some researchers include in the composition of the potential only the means of labour, others – the means of labour and labour, the third – the means of labour, labour, and natural resources used in the production process, the fourth – means of labour, labour force, and objects of labour [2].

According to scientists [1], the structure of the potential can be divided into two parts:

- objective. The elements of this part of the potential are related to the material-substantial form of the potential, which is consumed and recreated in the process of the enterprise functioning. It includes: the resource potential, productive capacity, financial potential, the potential of technological personnel, etc.

- subjective. This part of the potential is the opposite of the first and is a collection of elements that are not consumed and are associated with the social form of manifestation. To such elements of potential belong: scientific and technical potential, managerial potential, marketing potential, intellectual potential, etc.

Based on the analysis performed in Figure 1, the structure of the enterprise's potential is proposed.

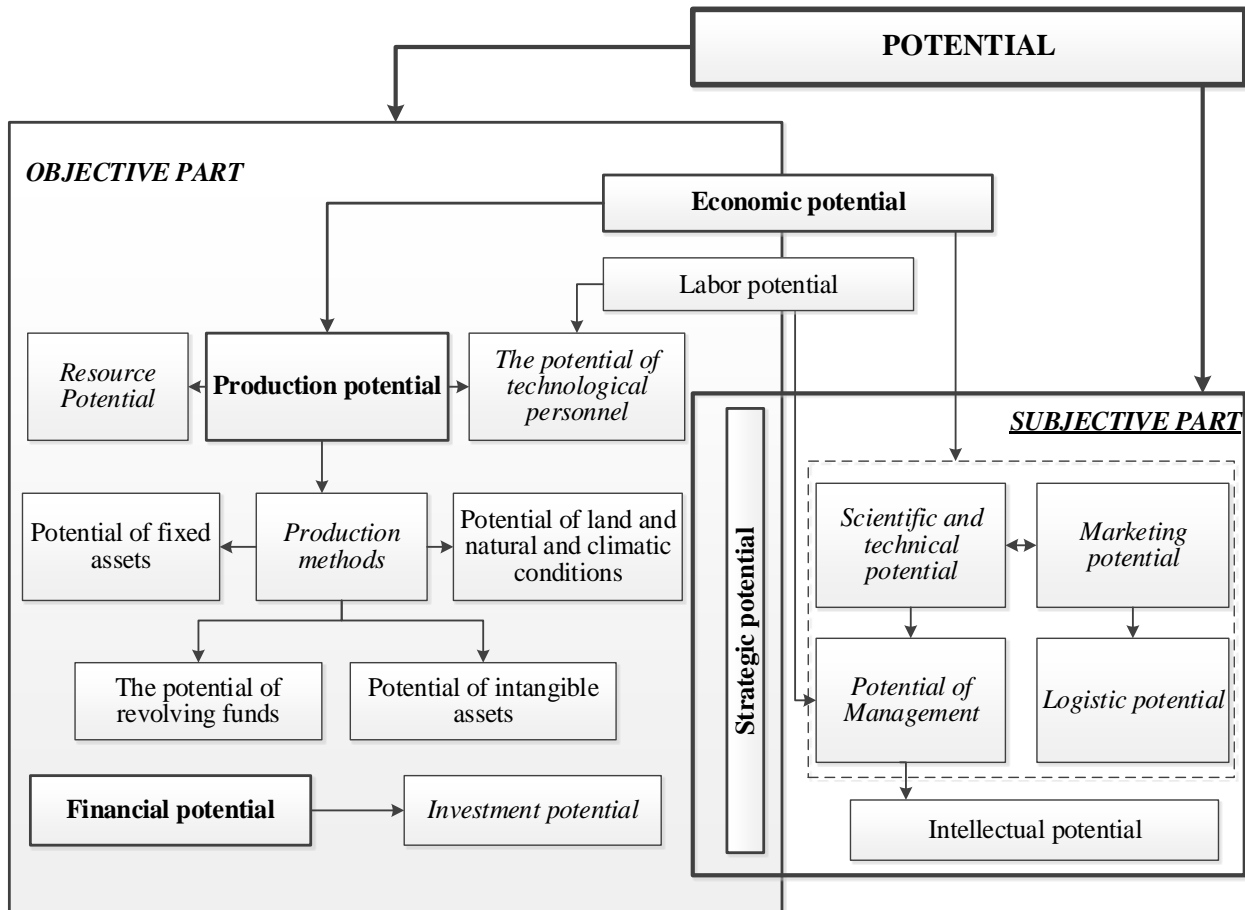


Fig. 1. The structure of the enterprise's potential

As can we see in the Fig. 1, the strategic potential lies in the intersection of the objective and subject parts. This means that the strategic potential exists when there is the interaction of the constituents of both parts of the potential.

Part 1. Strategic potential

Nowadays, both in foreign and domestic literature, there are many approaches to determining strategic potential but they all boil down to one thing:

The strategic potential is a system of both existing and possible knowledge, skills, and abilities of employees, as well as a set of company resources that allow developing and implementing a strategy that will ensure the effective functioning, development, and preservation of the organization's competitive position in the market.

Based on the analysis of the literature, the following characteristics of the company's strategic potential can be identified, which make it possible to determine its potential capabilities [2]:

- allows conducting a macroeconomic analysis of the external environment of the enterprise;
- allows building forecasts of changes in the structure and volume of demand for products or services of the enterprise;
- allows analysing, as well as forecasting the conjuncture of capital and resource markets;
- the ability to develop and implement effective strategies for the interaction of the enterprise with different markets to attract the necessary resources;
- by developing and implementing effective protective strategies, ensures the enterprise's sustainability to negative changes in the external environment;

- the ability to effectively use investment opportunities to develop constituent capacities.

According to the literature, there are many different approaches to determining the structure of strategic potential. Consider the main ones.

One of the directions is the presentation of strategic potential as one of the final products that ensure the achievement of the objectives of the enterprise. The input of strategic potential comes from human resources, raw materials, information, and financial resources, the result or the output of strategic potential is the products or services produced, as well as a set of activities that help the company achieve its goals.

The structure of the strategic potential is determined by the basics of the enterprise and the personnel quality.

The basics of the enterprise can be:

- opportunities and capacities of technologies, equipment, buildings, and structures;
- opportunities and capacities of communication systems for the transfer and processing of information;
- the organizational structure of the enterprise, i.e. distribution of job tasks and responsibilities as for a separate employee so groups of workers;
- internal processes;
- organizational culture, such as norms, rules, values, and traditions, laid on the basis of the organizational behaviour of the enterprise.

The quality of the personnel is expressed in the following:

- professional qualifications and competence of employees;
- adaptation to changes;
- ability to solve problems of a strategic level.

Thus, according to this approach, the structure of strategic potential reflects the direction of management to ensure the long-term viability of the organization with respect to constantly changing conditions.

The early reviewed structure of the enterprise's potential clearly demonstrated the place and role of strategic capacity. As it is noted, the strategic potential exists when there is the interaction of the main potentials of the enterprise. According to the analysis, they include: financial, investment, economic, marketing, logistics, production, resource, intellectual, scientific and technical, innovative, managerial potential, as well as the potential of engineering and technical personnel. Figure 2 shows the structure of the strategic potential from the position of the Balanced Scorecard (BSC).

According to R. Kaplan and D. Norton, the description of the balanced scorecard is based on the «bottom-up» principle; therefore, considering the structure of the strategic potential, it is necessary to start from the perspective of «Training/Development».

As can be seen from the Fig. 2, this block contains the intellectual potential, which is an integral concept. This kind of potential includes the managerial potential and potential of engineering and technical personnel [3]. The second component of the «Training/Development» perspective is the innovation potential, where the scientific and technical potential is a part.

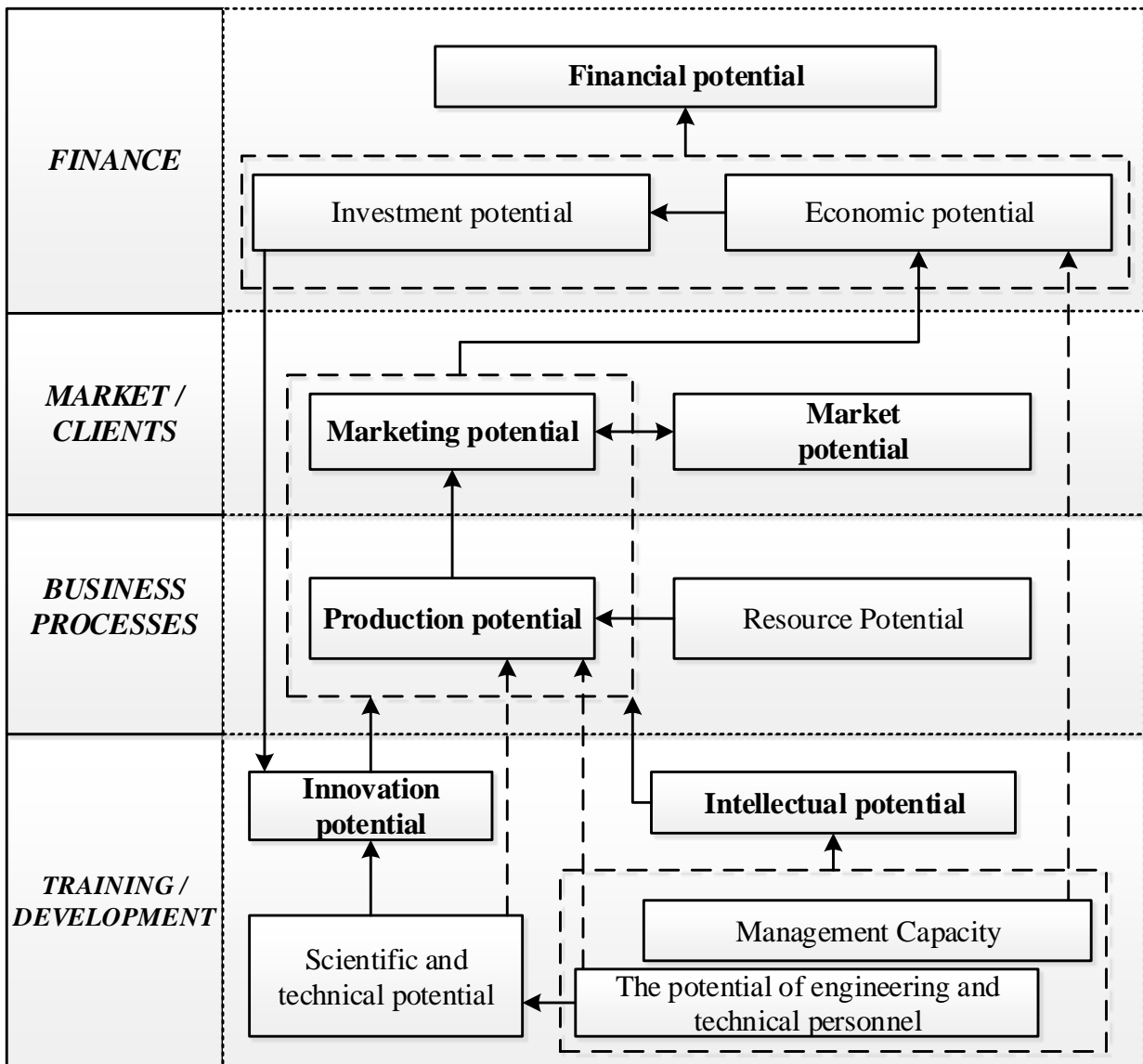


Fig. 2. The structure of the strategic potential of the enterprise

Analysis of the literature has shown that the rationale for the concepts of «intellectual potential» and «human potential» is similar. In the modern scientific literature [3; 4; 5; 6], there is no unambiguous approach to the definition of human potential but, in general, all the opinions of scientists are reduced to one:

Human potential is a combination of both the physical and intellectual abilities of the employee, which can be used to achieve strategic goals and solve specific tasks of the enterprise.

The importance of management capacity at the enterprise is quite large since it is the ability to see the course of events in advance, as well as to set strategic goals and develop tactics for achieving them, especially in problem situations, is the key to successful operation of the enterprise.

In the modern scientific literature, the concept of «managerial potential» is a fairly new term and, therefore, there is still no generally accepted interpretation of it. However, it should be noted that I. Ansoff also suggested in his works to understand the amount of work that management can undertake under the management potential [7].

According to A. Fedonin, I. Repina, and O. Oleksyuk, managerial potential is justified as a set of knowledge, skills, and abilities of managers at the levels of management according to the structure of the enterprise, which they apply to create the necessary conditions for the existence and development of the enterprise [1].

According to L. Prokopyshyn, management potential is the knowledge, skills of the personnel that can be applied to make the most effective decisions, ensure the successful operation of the enterprise, and also achieve the set goals [8].

The concept of «the potential of engineering and technical personnel» is not widely used in the modern scientific literature, so first consider the rationale for the term «engineering and technical personnel.» According to the analysis of various sources of personnel management, we can conclude that the engineering staff is a group of employees who organize and manage the production process at the enterprise. Consequently, the potential of engineering and technical personnel is understood to mean the hidden knowledge and skills of employees that they do not currently use but can implement when solving tasks related to the production process at the enterprise.

Touching upon the topic of personnel management from the position of the enterprise's potential, it is necessary to consider the actual issue at the present time about the formation of the personnel reserve.

According to scientists, a personnel reserve is a group of employees at the enterprise who have the ability to lead activities and with the help of their further development can replace certain positions.

The next part of the «Training/Development» perspective is the innovative potential of the enterprise, the study of which is currently relevant, which is proved by analysing the statistics of innovative development of Ukrainian enterprises by economic activities.

Some scientists do not share the notion of «innovation potential» with components and consider the term in a broad sense, as the ability and readiness of an enterprise to develop and implement innovations. In this paper, on the contrary, the scientific and technical potential has been identified in the structure of innovative potential. This is due to the need to isolate the work that can be done with the help of engineering and technical personnel to build productive capacity.

The perspective of «Business Processes» includes the production and resource potential that directly affect the enterprise. The production potential is a system that allows transforming the resource potential into finished products (goods, services).

Analysing the block «Market/Clients», it can be noted that G. Bagiev, V. Tarasevich, and H. Ann under the marketing potential understand «an integral part of the enterprise's potential, ensuring its constant competitiveness, economic, and social conjuncture of the goods in the market through effective marketing activities in the field of demand research, commodity, price, communication, distribution, marketing policy, organization of strategic planning and control over the behaviour of goods, competitors, consumers, and the enterprise itself in the market» [9].

As a rule, the enterprise takes into account only a part of its customers and adapts resources to the specific requirements of customers, so the task of marketing potential is to find ways to establish a balance between own resources and market potential.

In the structure of strategic potential, the «Finance» perspective is represented by economic, investment, and financial potential.

Investment potential is the application in practice of the principles of the developed investment policy, which determines the properties and dynamism of investment activity. The main condition for the justification of the term «investment potential» is the need for the enterprise to have the knowledge, the possibility of attracting

investment resources, the organization's ability to increase the market value of the business through the implementation of investment projects [10].

Thus, the investment potential is based on the knowledge that allows adapting the intellectual and production potential for increasing the financial potential. So the investment potential is an opportunity for an enterprise to invest in its own development.

It should be noted that the formation and existence of investment potential at the enterprise are aimed at solving the following problems [11]:

- the continuous development of the organization of labour and production through the search, selection, development, as well as the implementation of innovative ideas;
- formation of the base of innovative proposals and ways for their implementation;
- organization of the process of identifying problems that may impede the development of the enterprise, as well as the development of measures to address them;
- encouraging staff to develop innovative ideas, creating a climate of innovation.

The financial potential reflects potential investment opportunities and financial indicators, such as profitability, liquidity, solvency. The competitiveness of this type of potential is expressed in the firm's sustainable solvency, as well as in the availability of sufficient own working capital, which, with the help of a clear organization of calculations, is appropriately and effectively used in economic activities [12].

It should be noted that the structure of the enterprise's potential requires optimization and taking into account the synergy effect; this process should be carried out on the following stages [13]:

Step 1. Formulation of strategic, tactical, and current goals for the entire enterprise, and for its units and individual activities.

Stage 2. Define a set of strategic resources for each goal. It should be noted the necessary coordination of the second stage of the process of optimizing the structure of the enterprise's potential with the first stage.

Stage 3. Proposal of alternative variants of strategic resource sets for the purposes of the enterprise, their evaluation, the possibility of combinations of several sets. Formulating final conclusions on the choice of resources.

Stage 4. Rational distribution of the selected resources, determining their profitable direction to ensure the high competitiveness of the enterprise's potential.

Step 5. Evaluation of the results obtained after four stages of optimizing the structure of the enterprise's potential.

Part 2. Financial potential

Need to form and implement a financial strategy as a necessary element of the financial potential management of businesses is determined by the deepening of market reforms, integration processes' development, and growth of volatility factors in the outer financial environment.

The financial strategy here means a flexible general model of the financial system of the enterprise development, which ensures its sustainability and adaptation to changing economic situation, in other words, the formation of stable financial potential happens.

Management of financial potential is a system of rational management of business financing, which includes the formation of financial relations emerging as a result of finance recourses flow.

Considering the fact that the financial potential should be seen as both current and future period strategy, the elements shown in Fig. 3 comprise the financial potential components.

Let us consider the elements of enterprise financial potential in more details.

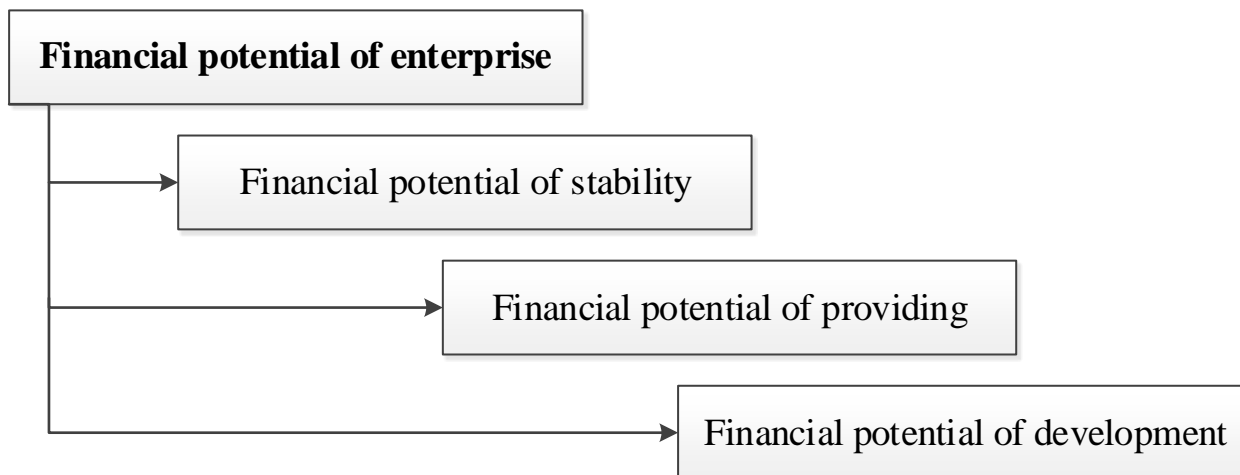


Fig. 3. Components of the enterprise financial potential

Financial potential of stability and well-being characterize the possibility of the organization and the enterprise's current activities results, while the financial potential of development suggests the possibility of further development.

Thus, financial potential of enterprises' development is the sum-total of all existing potential resources, including financial ones, which can ensure definite strategic goals achieving in current and long-term perspective, considering outer factors influence.

Development of financial potential of businesses nowadays is accompanied by variability, unpredictability, and strengthening of economic globalization, and depends to a considerable extent on their financial stability.

Let us point out conditions, by which the existence of financial potential is possible.

- Availability of own capital, enough for business activities and financial stability;
- Opportunities for attracting loans for the business development;
- Cost-effectiveness of investment.

It should be noted that the financial potential is reflected in total cash flow of business, which reflects the state of potential and its development trends.

We can say that the essence of financial potential management lies in the effectiveness of using the mechanism of financial strategy management for business's goals achievement. Basic categories of the theory and practice of evaluation, formation, and management of the enterprise are financial resources, cash flow, profit, current assets, and net assets.

Let us take a look at the main segments that make the enterprise's management system of financial potential function more effectively.

- current liabilities management;
- paying capacity, liquidity, financial stability management;
- capital management;
- enterprise's investments management;
- cash flow management;
- long-term loans management;
- indirect investments management and business evaluation;

- pricing and enterprise's capital structure management;
- entrepreneurial risks management.

Let us mark the specifics of enterprise's financial potential management:

- list of financial resources;
- necessity of rational distribution of financial resources, which allows reaching and sustaining balance, financial stability of the enterprise, and gaining profit along with financial backup for economic and social tasks;
- competition influence accounting;
- need for gaining of financial resources from different sources;
- image of management object based on cash flow sizes and payment terms;
- use of management influence on financial resources;
- financial potential structural reforms regulation;
- development and decision making after reaching compromise on profitability, reliability, and liquidity of enterprises' capital.

Consequently, the enterprise's financial potential management is a complex of stages, financial methods, financial tools, and organizational support, which coordinated in a right way allows managing enterprise's financial potential. In addition:

- financial methods are forecasting, planning, insurance, investment, loaning;
- financial leverages are forms of payment, price, types of loans, and interests;
- maintaining can be regulatory, judicial, informational, technical, personnel, and software;
- financial tools are securities, stock options plan, funds, futures and forwards contracts.

Let us mark the main stages of the mechanism of financial potential management formation:

- analysis of the enterprise's strategy and allocation of the elements, which help to formulate the strategy of financial potential management;
- development of goals, which consists of:
 - analysis and forecast of economic conditions of the environment;
 - analysis of the enterprise's internal environment;
 - identification of strengths and limitations.
- leading policy of adaptation to environment conditions;
- searching for new sources for getting loans, and definition of financial resources' accumulation, formation, and distribution strategies;
- definition of financial potential management strategies, those are choosing of financial tools, tax planning, organizational and legal execution, planning and control over cash flows and resources, along with analysis and evaluation of financial risks;
- development and realization of financial potential management strategy;
- financial potential management analysis and control;
- using results of the analysis for the concretization of the enterprise's development strategy.

Before building up the mechanism of financial potential management strategy formation, let us take a look at the general financial potential management scheme, which is given in Fig. 4.

This scheme shows us that the main goal of such a management is the maximization of enterprise's value by making profits and investing these profits in businesses with a low level of risk. This goal is often coinciding with the main function of businesses.

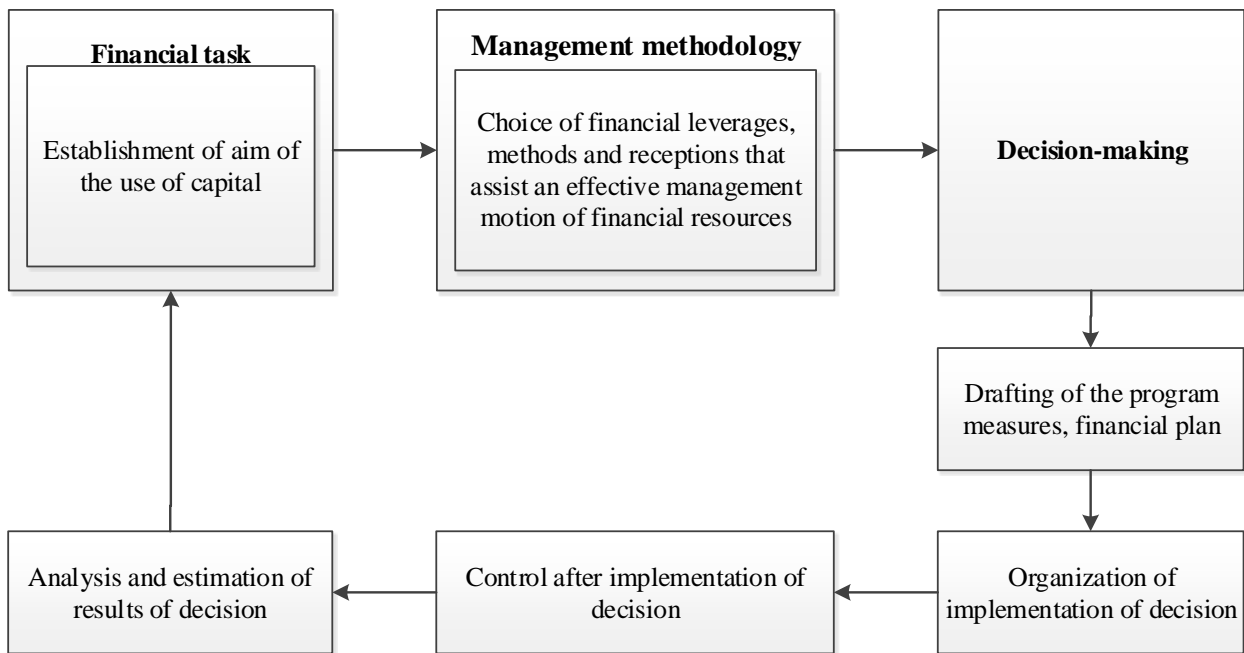


Fig. 4. General scheme of financial potential management

Also, identification of the elements, which help to form enterprise's financial potential strategy, is necessary for building financial potential management strategy:

- forecasting and analysis of the enterprise's financial potential;
- strategic and tactical planning;
- tax planning;
- organizational and legal execution along with the control over cash flows;
- financial risks management;
- selection of financial tools, which are useful for investment decisions making;
- control over financial and economic activity;
- use of investment decisions.

Tools for the enterprise's financial potential management strategy formation are given in Fig. 5.

These elements help to form financial potential management strategy and define the enterprise's competitive power. Execution of these elements along with the enterprise's management system allows realizing the main goals of the enterprise.

Let us point out that enterprise's financial potential management strategy is considered to be a system of coinciding goals and actions, the development and realization of these goals and actions are based on financial management. The system given allows managing the plans of gaining and distribution of financial resources.

Development of the enterprise's financial potential strategy should be based on effective use of the market, which the main function is securing cash flow among their owners. It should be noted that by the enterprise's financial potential strategy development, a set of financial tools, levers, methods, laws, and norms is necessary. But it must be taken into account that market tools are evolving and renovating constantly, and this fact makes continuous research of market development tendency along with in time decision-making on profitable economic strategies the main factors of enterprise's effective activity.

One of the main tasks for financial managers is effective management of internal financial sources maintaining, formation, forecast processes. The structure of forming financial resources is given in Fig. 6.

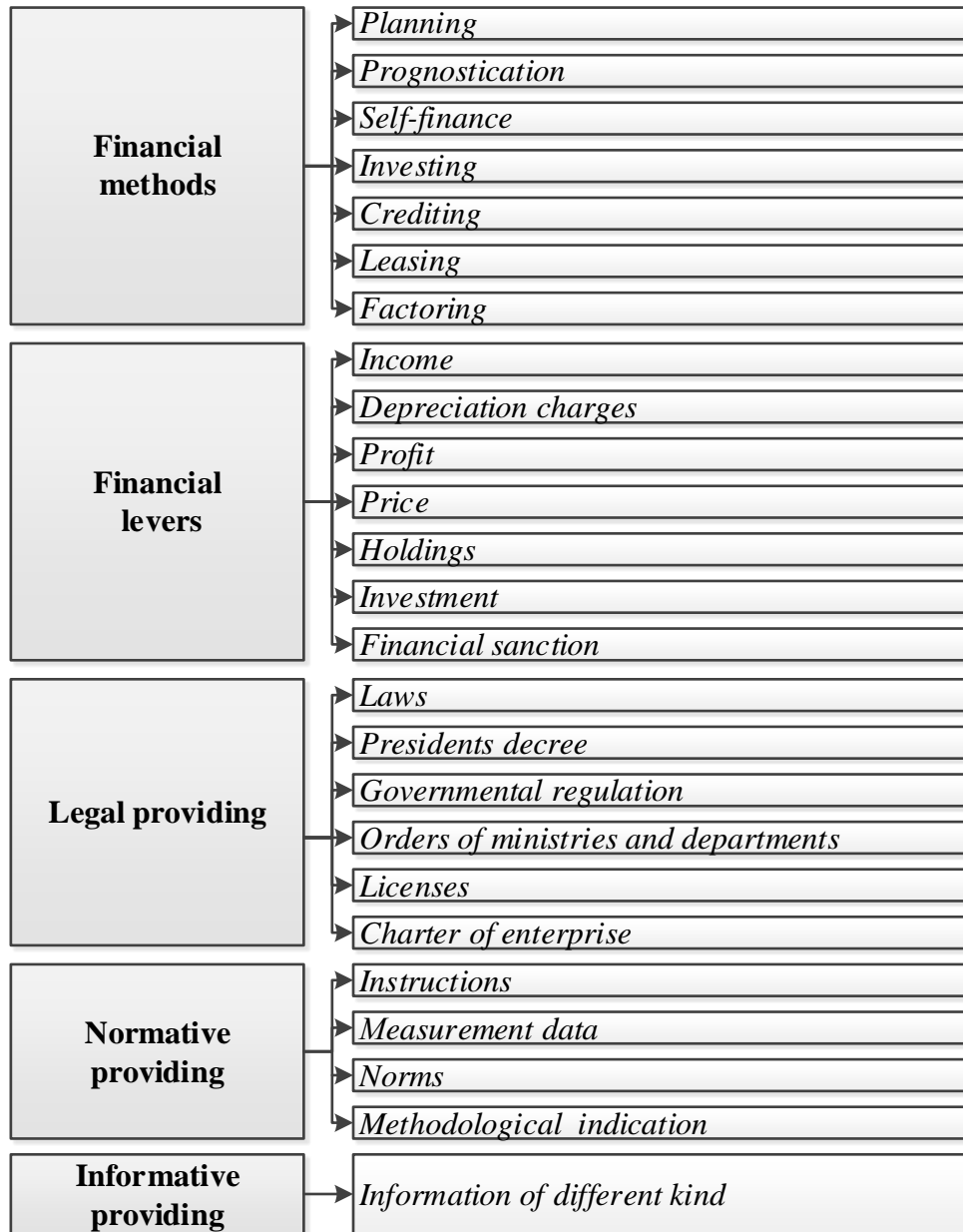


Fig. 5. Tools for the enterprise's financial potential management strategy formation

It was mentioned above that one of the main factors forming enterprise's financial potential management strategy is financial potential forecast.

The financial potential forecast is a formation of a financial capacity system, as well as a selection of the most effective ways to optimize it. During the financial forecast process, comes out the development of the general financial growth concept and the enterprise's financial policy regarding certain aspects of its activity.

It worth mentioning that financial forecast cannot be called accurate since a lot of the important factors can lead to the discrepancy between forecast results and reality. Nevertheless, the possibility of mistake is not the reason to abandon forecasting.

It is possible to set aside some of the financial forecast aspects:

- enterprise's resources based forecast, which are labour forces, financial and corporeal resources;
- financial situation forecast made by evaluation of financial balance;
- financial policy forecast.

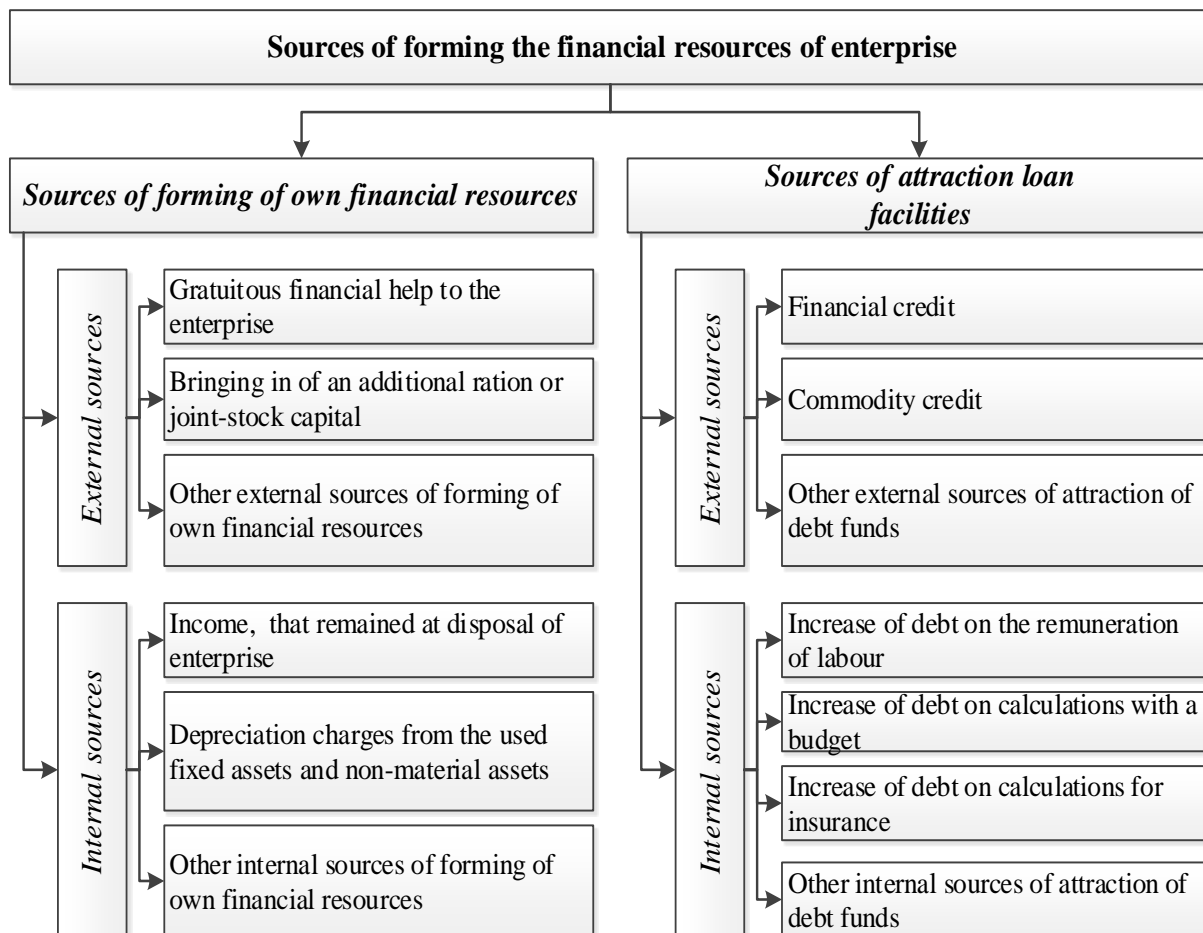


Fig. 6. The structure of formation of financial resources

For the financial potential forecast to be more accurate, the information used should be of high authenticity and also well-structured and given in a full measure. In addition, there should be a possibility to collate information upon quality and quantity indicators.

One of the specific characteristics of the financial potential forecast is that the enterprise has a certain level of interdependence and sluggishness, where the sluggishness level is the dependence of any index in the present moment on the one from the previous period. However, it is worth mentioning that the forecast index includes the realization of the accurately determined model, correlating the result with factors, which influenced the forecast given.

Thus, financial forecasting sets the task of the development of financial potential management strategy optimization model, along with the research of important factors.

We can separate internal and external factors, which promote the development of financial potential elements and affect their balance and effectiveness of their usage.

Internal factors are those, which are defined by limiting and stimulating measures. For example, tax rates, rates per cent, legal and social norms and political forces influence. Also, the next factors can be called internal:

- social terms;
- political terms;
- legal terms;
- terms of resources market competition;
- terms of business competition.

To the external factors, we can assign enterprise's strategy, realized by:

- composition and structure of property and financial resources;
- managers' competence;
- principles of the organization and maintenance of business;
- company's culture.

Conclusions

So, let us set out the main management systems, which in prospect allow efficiently realizing the enterprise's financial potential management strategy.

1. The management of enterprise's development stability, liquidity, and financial reliability. The given system means the management of accounts receivable, short-term marketable securities, short-term credit debts, funds, and stockpiles.

2. The management of enterprise's investment activity that means carrying out of the comparative analysis of different investment projects efficiency, along with setting out the value of cash flows with the allowance for the influence of the next factors: risk and inflation, time, and setting of criteria for the financial decision-making.

3. The management of enterprise's financial sources by ensuring the stable growth of its own capital, based on increasing of nominal capital by issuing capital stocks, usage of effective dividend policy and increasing profits. Also, management of such a system can be realized by long-term fund raising with the help of leasing, long-term credits and corporate bond issuance.

4. The management of the enterprise's financial stability by estimating of its value, formation of an optimal capital structure, estimation of the enterprise's total value, and setting of optimal correlation between leveraged investments and owned assets.

5. Control over cash flow.

6. Maximization of enterprise's profits with allowance for financial risk and minimization of financial risk level considering the level of needed profits.

It should be noted that one of the most important stages of the formation mechanism of the enterprise's financial potential management strategy is the analysis and evaluation of financial risks.

Recognition of financial risks includes identification of every possible risk connected to the certain corporate operation. In addition, it is necessary to recognize risks that depend on the enterprise itself and on its external environment, defined by macroeconomic activity.

When identifying risk factors, it is viable to divide them into internal and external, where external financial risks affect economic and market factors.

Economic risks: rise in the inflation rate, instability, and imperfection of tax laws, the decrease in the state manufacture volume, the decrease in the income level and purchasing capacity of the population, the delay of payment transaction etc. Market factors are the decrease of market demand, lowering home market capacity etc.

Internal financial risks of the enterprise are influenced by investment, financial, and production commercial factors.

Based on mentioned above, we have offered the mechanism of the enterprise's financial potential management strategy formation, presented by correlating stages, where each stage is oriented to a certain task. Realization of every task is carried out by the methods needed, which are also mentioned in the mechanism.

In such a manner, we have offered the mechanism of forming the enterprise's financial potential management that based on enterprise's general strategy allows emphasizing the elements useful in the creation of financial potential. And in prospect, that will allow developing financial potential formation goals, building

forecast, separating the main directions of accumulation, formation, and distribution of financial resources.

It worth mentioning that analysis and control over the financial potential formation strategy are important, as well as the usage of analysis results for the concretization of strategic directions of the enterprise's development.

References:

1. Fedonin O. S., Riepina I. M., Oleksiuk O. I. Potentsial pidpriemstva: formuvannia ta otsinka: Navch.-metod. posibnyk dlia samost. vyvch. dysts. – K.: KNEU, 2005. – 261 s.
2. Bohatska N.M., Kovalchuk D. Stratehichniy potentsial pidpriemstva. – Rezhym dostupu: http://www.rusnauka.com/33_DWS_2010/Economics/73229.doc.htm
3. Nechetkie modeli i neironnye seti v analize i upravlenii ekonomicheskimi obektami: monogr. / [Yu.G. Lysenko, E.E. Bizianov, A.G. Khmelev i dr.]; pod red. chl.-kor NAN Ukrainy, d-ra ekon.nauk, prof. Yu.G. Lysenko – Donetsk: Yugo-Vostok, 2012. – 388 s.
4. Levitskii S.I. Modelirovanie proektnogo upravleniia slozhnymi ekonomicheskimi obektami: monografiia / S.I. Levitskii. – Donetsk: Yugo-Vostok, 2012. – 341 s.
5. Intellectualnyi potentsial obshchestva: formirovanie, otsenka, effektivnost ispolzovaniia / Kosmin A.D., Kosmina E.A. – M.: Ekonomika, 2004. – 318 s.
6. Berglezova T. V. Poniatie kadrovogo potentsiala i ego vliianie na effektivnost deiatelnosti promyshlennogo predpriatiia // Korporativnyi menedzhment, 2006. – № 8. – Rezhym dostupu: <http://www.cfin.ru/bandurin/article/sbrn08/07.shtml>
7. Ansoff I. Novaia korporativnaia strategiia. / I. Ansoff – SPb.: Piter Kom, 1999.
8. Prokopysyn L.M. Metodychni pidkhody do otsinky potentsialu upravlinnia mashynobudivnym pidpriemstvom (na prykladi VAT «Presmash») / L.M. Prokopysyn // Visnyk Natsionalnoho universytetu «Lvivska politekhnikha» «Problemy ekonomiky ta upravlinnia». – Lviv, 2008. – № 611. – S. 170-175.
9. Bagiev G.L. i dr. Marketing: Uchebnik dlia vuzov // G.L. Bagiev, V.M. Tarasevich, Kh. Ann / Pod obshch. red. G.L. Bagieva. – SPb.: Piter Kom, 2004.–800 s.
10. Chto takoe investitsionnyi potentsial? – Rezhym dostupu: <http://www.genon.ru/GetAnswer.aspx?qid=83dfdb00-d349-4798-8d85-cb9f833816f6>
11. Izraileva O.V. Upravlenie finansovym potentsialom predpriatii sfery obsluzhyvaniia: monografiia / O.V. Izraileva. – Cheliabinsk: Izd-vo YUURGU, 2007. – 182 s.
12. Modelirovanie socialno-ekonomicheskikh sistem: teoriia i praktika: Monografiia / Pod.red V.S. Ponomarenko, T.S. Klebanovoi, N.A. Kizima. – Kh.: FLP Aleksandrova K.M.; ID «INZHEK», 2012. – 592 s.
13. Refleksivnye protsessy v ekonomike: kontseptsii, modeli, metody: monogr. / R.N. Lepa, O.E. Kuzmin i dr.; pod red. R.N. Lepy / NAN Ukrainy, In-t ekonomiki prom-sti. – Donetsk: IEP NAN Ukrainy, 2012. – T.2. – 290 s.
14. Imitatsionnoe modelirovanie ekonomicheskikh sistem: prikladnye aspekty: kollektivnaia monografiia / Yu.G. Lysenko, D.V. Belenko, V.N. Kravchenko; Pod red. d.e.n., prof. Yu.G. Lysenko, Donetskii natsionalnyi universitet. – Donetsk: Izd-vo «Noulidzh», 2013. – 310 s.
15. Lysenko Yu.G. et al. (2009) Methods of crisis management for weak signals: monograph, Yugo-Vostok, Ltd., 195 p.
16. Mikhaylik, D.P.; Levitskiy, S.I.; Frunze, I.A. (2014) Assessment Techniques For Integration Efficiency Of Economic Objects // International Journal of Economics, Commerce and Management, Vol. 2, Is.2. Available at: <http://ijecm.co.uk/wpcontent/uploads/2014/02/222.pdf>
17. Levitskiy, S., & Frunze, I. (2014). Planning Technique for Complex Economic Object's Synergy at Mergers and Acquisitions, International Journal of Economics, Commerce and Management, Vol. 2, Is.6. Available at: <http://ijecm.co.uk/wpcontent/uploads/2014/02/266.pdf>

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BUSINESS PROCESS REENGINEERING AS AN INNOVATIVE TOOL FOR THE IMPROVEMENT OF QUALITY MANAGEMENT SYSTEM

Summary

The features of improvement of quality management systems at the enterprise through business process reengineering and their using for improving the management are introduced in the article. Within the framework of quality management system, some measures are proposed in the article that will allow producing qualitative products, the confidence in the competence, and the recognition at the national and international levels. A creation of an optimum quality management system based on the results of modelling business is suggested. The essence of such concepts as quality, quality management, and quality system of consumer and producer positions is highlighted and the criteria for determining the results are offered, achieved in the process of continuous quality improvement. It is proved that the effective means of sustainable enterprise development acts the improving of the production organization based on the current quality management system. The experience of foreign and domestic practices from certification of quality management system is generalized. Within the framework of product quality assurance, some measures are proposed in the article that will allow providing the stability of financial and economic activity of enterprises. The process of planning and providing quality level in market conditions is revealed. It is determined that a significant factor in the competition for the conquest of markets is the certification of quality management systems in compliance with the ISO 9000 standards. The experience of foreign and domestic quality management practices by developing, implementing, and improving quality management systems in the enterprise is analysed. According to the results of the research, it is proved that the effective tool for enterprise competitiveness acts the improved organization of production based on the current system of quality management.

Introduction

Ukraine's economy transition to a market economy has made dramatic changes in the weight of financial factors success of domestic enterprises. Providing the implementation of volume realization was directly dependent on the quality of goods or services, that is, their ability to satisfy the demands and expectations of consumers.

Among the many items to be solved by domestic enterprises, one of the most important at the present time – the achievement of the appropriate quality of products

as a means of ensuring its sales. It is quite clear that without a precise, comprehensively designed, and implemented system of measures and activities aimed at ensuring sustainable production of goods or services of the specified level of quality, achievement of the success in market conditions is impossible.

Many domestic enterprises try to implement a quality management system in accordance with international ISO-9000 standards.

The question of the optimization of the enterprise's management is crucial for managers. The success of the business depends directly upon the quality. The success in market conditions is impossible without a clear, precise, comprehensively designed and implemented system of measures to ensure sustainable production of goods or services of the specified level of quality.

The level of product quality is a variable value. It depends upon the development of productive forces of the society under the influence of scientific and technological progress. In an increasingly competitive environment, it is necessary to manage the quality properly. The manufacturer must take care of the demand for their products, and the main condition for competitiveness is the continuous improvement of its quality, which is achieved at a high level of production. The organizational structure that ensures conditions for total quality management is the system of quality management. According to international researches, only 30% of certified systems actually operate in accordance with international ISO 9000 standards.

Managing the quality, we manage projects, resources, marketing, personnel, and processes of production.

Part 1. The introduction of quality management system is reliable means of sustainable enterprise development

Nowadays, one of the major problems of Ukrainian companies is to create a quality management system that increases productivity, competitiveness, increase the confidence of the organization. The problem of management quality is the subject of many scientists' researches of different countries accumulated considerable experience in the field of quality management. A great contribution to the development of quality management theory is made by foreign and domestic scholars: V. Vitkin, A. Hlichev, K. Isikawa, V. Ilyin, S. Illyashenko, P. Kalyta, Yu. Koifman, V. Pavlov, V. Tanyhin, J. Harrington, M. Shapoval, and others. However, the conducted researches require further study experience of the quality management systems' usage, their improvement by creating optimum quality management system based on the results of the modelling business.

Effective means of sustainable enterprise's development acts the improvement of the production organization based on the current system of quality management. Many research papers of scientists in different countries are devoted to the issue of quality management, the considerable experience in the field of quality management is accumulated.

In the conditions of global competition, the product quality increasingly becomes the main function. The quality is a system of production, works or services, providing a stable image of the enterprise. The manufacturer must take care of the demand for their products, and the main condition for competitiveness is the continuous improvement of its quality, which is achieved at a high level of production, its technical equipment.

The level of product quality is dynamic and it changes with the development of the productive forces of society under the influence of NTP. Therefore, it should be regularly and promptly established and provide at domestic enterprises the best

quality products, while achieving maximum cost savings of social labour during the installation and the use or consumption of goods, in other words, the right management product quality.

Quality management – is the action taken by the creation and exploitation and consumption of products, aimed at establishing, providing and maintaining the required level of the quality. The complex systems of quality management act at the enterprises and unifications. The quality system is the organizational structure that guarantees the conditions for total quality management [1].

In the conditions of increasing competition, Ukrainian business structures can survive only if they constantly take care of the improvement of quality and satisfaction of the effective demand of consumers. The control subsystem creates and provides quality management, which is based on managing interrelated processes as a system and improves the efficiency of the enterprises [2, p. 24]. Marketing service must stay ahead of their competitors in determining trends and identifying needs, processing them into ideas, and then taking an active part in the planning and development of new products. Schematically, the planning process and level quality ensuring in market conditions can be represented as follows:

- identifying needs, identifying the main product characteristics that determine the quality or measures to meet these needs;
- definition of basic indicators;
- identifying the ways to achieve these indexes.

Nowadays, at the first stages of quality planning, its main participants are consumers and marketing service. It should be well remembered because, as you know, in our country the customer was completely removed from the system of quality control for a long time at all, which led to the low efficiency of the developed measures and attempts to radically solve the problem of quality in conditions of the administrative-command economy. The quality management system should be spoken about as a major problem of management [3, p. 84].

The modern method of confirmation of enterprise's ability to provide quality on a permanent basis is the certification of quality management systems in compliance with the standards of series ISO 9000. The application of these standards ensures production of safe, reliable, qualitative products. They will help the enterprise to gain access to new markets, to provide equal opportunities for developing countries, and promote free and honest international trade.

To improve the efficiency of quality management system and management system as a whole, it is necessary to apply various tools and methods to achieve financial and economic benefits. Nowadays many Ukrainian enterprises have already implemented and certified quality management system in compliance with ISO 9001 and should actively seek the ways to improve them.

Every enterprise that operates already has its production management system as a whole and regarding quality assurance. Without this, the existence of this enterprise is hardly ever possible. However, the existing systems, in most cases, are not effective on the inadequacy of those conditions that exist objectively in the present day. As a result, a large number of domestic products are uncompetitive even in the domestic market, not to mention the world.

There is a direct connection between the quality and production efficiency. Improved quality contributes to the efficiency, leading to lower costs and increasing market share. The main tasks of developed countries economies include increased productivity. At the same time, much emphasis on the costs associated with the high-quality products. This approach allows for a low cost to get high incomes and ensure

competitiveness in the global market. This is achieved only under conditions of quality management systems.

The quality of work is directly connected with ensuring the operation of the enterprise. This is the quality of leadership and management (planning, analysis, control). The achievement of the goals and the quality of the enterprise depends on the quality of planning, strategy development, and plan system.

Increasing complexity of products leads to the increasing number of characteristics being valued. The centre of importance shifts to a comprehensive inspection of functional abilities of finished products. In the conditions of mass production, the quality has been regarded not from the standpoint of individual instances, and from the standpoint of quality standard of all products manufactured in mass production of products.

The quality management system is important when negotiating with foreign customers who consider as a compulsory condition the existence in the producer of quality management system and the certificate for this system issued by an authoritative body that certifies the system. The quality management system has to consider features of the enterprise, to ensure the minimization of costs for product development and their implementation. Consumers want to have confidence that the quality of products supplied will be stable.

In the theory and practice of quality management, two problems are identified: the quality of products and the quality management.

It is necessary to underline such a direction as the functioning quality assurance systems. Consultants in quality management noticed that service management quality and reliability directed efforts and resources at identifying problems and correcting errors. As a result, the management system is formed by rejection. This system reacted to errors and underestimated the role of preventive measures and the role of departments not associated with the production process. It was made the conclusion that the quality assurance systems management depends upon the management system, which governs the production and economic activity of the enterprise.

During the long evolutionary development of interconnections and relationships between suppliers and customers, a common understanding of the need and importance of a systemic solution of the problems in quality sphere was formed. Nowadays, the application and certification of the quality system are regarded as a necessary condition of successful operation and development of organizations of any ownership, as the most reliable form of guarantee conformity of quality products that supplied and services to the consumers' demand. Enterprises that did not certify its quality system, today almost have closed access to the European market and markets of advanced economically developed countries of Asia and America.

A significant influence on improving product competitiveness in the world market is the presence of quality system certificate in the enterprise issued by the authoritative body at the international level by the certification of quality management systems. During the period of market relations in Ukraine, more and more enterprises recognize the need to create a quality system according to the international ISO 9000 standards.

The registration at enterprises of quality management systems by the certification body in accordance with international standards and recognition in the global market is an important aspect in dealing with improving the competitiveness of domestic products.

For the successful development of work to expand the applications of ISO 9000 standards in the regions of Ukraine is important that managerial bodies at all levels

not only initiate, support and make assisting enterprises in conducting these works but would serve them as examples of the creative and effective application of international and national standards for quality systems. Managerial bodies that certify their quality systems would be able to increase the authority and image of their organizations in the region.

In solving the problem of choosing whether to certify the existing system or not, it should be taken into consideration that the quality system certification aims to ensure consumer confidence in the fact that the organization has certified quality system is able to consistently provide products or services, which quality satisfies consumers. Let attention to the order statistics of domestic consulting companies in recent years indicates that the service in creating a quality management system is the most demanded [4, p. 273].

The organization and work on the implementation of quality management and their preparation for certification are not an end in itself but the means to achieve the main goals of state technical policy in the field of standardization, metrology, and certification. Substantiated planning of indexes of quality, deadlines, and certification training programs will improve the quality and efficiency of work performed and services. Successful certification of quality systems will help to increase the efficiency of application of ISO 9000 enterprises and organizations strengthen their credibility.

The introduction of quality management at the enterprise and ensuring its effective functioning will help:

- improve the quality and competitiveness by making it in accordance with international standards;
- reduce the release of defective products by developing measures to prevent the manufacture of defective products;
- increase productivity and staff through systematic training of all units;
- the rational use and saving all kinds of resources;
- increase the efficiency of investments;
- improving product competitiveness in the international market through the quality system certification.

Part 2. Improving the quality management system at the enterprise

Many companies still believe that is their business how they ensure the quality. But it happens as long as there are no competitors. And then the only declaration of ability to consistently provide product quality is not enough. Potential customers want to have independent and objective confirmation of this ability. Since the late 80's, the certification of quality management system exists in the whole world in accordance with special regulations containing minimum requirements for such systems.

To change a situation in Ukraine and other CIS countries is possible if to change the methods of management in the sphere of quality, due to the development in these countries of full market relations.

The company, including Ukrainian, can become qualitative only by radical reforms of its corporate culture based on the principles of total quality management – TQM (total quality management).

ISO 9000 quality standards set up a single, world-recognized approach to assessing the conditions of quality and at the same time regulated relations between producers and consumers. In other words, ISO standards are solid customer orientation to the consumer [5; 6].

At the same time, it comes about the cultural production. The formation of organizational culture on the principles of TQM is the strategic direction of development, leading to enterprise quality. But this development can be successful only in that case when projects' approach to the enterprise's quality system will be complex at the same time.

TQM assumes a high quality of all operation to achieve the required product quality. First of all, this work is related to ensuring a high level of organizational and technical production, appropriate working conditions. The quality of operation involves the validity of management decisions, planning system. The quality of operation, which is directly linked to output (the quality control processes, early recognition of defects) is of particular importance. The product quality is the part and the result of the quality operation. To make a particular product, to do the work, to do the service, it is necessary to make a number of operations, the preparatory work. The final quality depends upon the quality of operation at every stage.

It should be noted such a direction as the quality assurance management systems.

The main is that introducing an effective quality management system, the enterprise is ready to compete and create conditions for its further development.

One of the conditions to overcome the crisis, ensure sustainable development of the national economy is the improvement of the structural and functional organization and management processes of product quality. The success in the market is reached by those enterprises that are able to reconcile internal development opportunities quickly and efficiently. The enterprise has to improve their production base, optimize logistics, restructure organizational management structure, etc. [2, p. 119]. Quality Management System (QMS) can realize new opportunities of the enterprise's development. The enterprise that introduced the current effective quality management system defines major goals: improve the overall work, income, effective resource management, quality of products and services, continuous improvement of the organization.

Enterprise management is based on the process approaches. The management defines the system of processes and their owners from the leaders of all levels in accordance with the organizational and functional structure. Enterprise management system is based on both the vertical and horizontal processes. Leaders understand that quality is created at all stages of the enterprise, and are responsible for the efficiency of all systems, the execution of strategic and tactical decisions in the financial and industrial sectors. Enterprise strategy lies in strengthening its position in the market, increasing the volume of sales. Management should periodically assess the effectiveness of the enterprise by analysing the results. On the basis of the results of production and economic and financial activity, managers identify directions and methods for improving existing processes.

To ensure the effective functioning of the organization, it is necessary to define processes that are used, mechanisms of interaction, and their management. The concept of processes includes a technology process activity and a sequence of actions from the beginning to the end result. Each specialized processes is seen as a complicated process, which is created from simple ones [7, p. 133].

The management system is a consistent set of interdependent and interacting organizational and practical measures directed to implement policies and establish and achieve their goals. Organizational measures should ensure the improvement of operational processes. The effective management system should provide an estimation of risk control and increase their opportunities to improve the organization, to meet the requirements of stakeholders. The effective management

system includes organizational and practical measures. Management processes within an organization called «process-based approach» [8, p. 74].

The quality management system promotes the initiative and creativity of employees, improve product quality. To solve the problem of improving the quality of products becomes more difficult. It is necessary to put into practice an integrated, systematic approach, which can only be done through strengthening the role of information technologies.

The strategy, which defines long-term priorities of financial and economic activities implements stage-by-stage through the development, adoption, and realization of a system of balanced, reasonable, and consistent management decisions. Their estimation from the standpoint of efficiency, which is correspondent to the goals and interests of the subjects of management and established limitations, is one of the prior management functions [9, p. 92].

Information, information technologies, and other structural elements of the organization are of great importance for the enterprise. Information strategy influences the business strategy of the enterprise and gives a competitive advantage [10, p. 183].

A variety of processes requires a lot of procedures with documents. The introduction of quality management, an internal organizational documents flow complicates the organizational activity of the enterprise.

Qualitative improvement of certain areas of the organization is the goal of business processes reengineering. Reengineering is regarded as a key factor in increasing the efficiency of enterprises. The term «business process reengineering» is introduced into scientific circulation and management in the early 1990s. The need for reengineering is associated with the highly dynamic modern business world. Unfinished changes in technology, markets encourage the company to keep its competitiveness through restructuring, corporate strategy and tactics [11].

The main goal of business process reengineering at the enterprise, which is set to the constant improvement of the effective functioning, is the development and implementation of reliable and functional quality management system that will give a possibility to achieve it the maximum result at work. The aim of reengineering is specified by performing three-level system tasks. To first order tasks belongs: the implementation of a quality management system according to ISO 9001: 2015, 14001: 2004; the application of strategic management as the basis of development; organizational restructuring of the enterprise; the creation of management organization that provides regular training of staff; the formation of information and analytical support of QMS. The information support of business processes functions as a set of interrelated processes [12, p. 75].

The second order task is the introduction of technology that will fully satisfy the needs of customers, partners, and other stakeholders; the carrying out complex of works from reengineering of key business processes to ensure the quality of works and services, the increasing the efficiency of the enterprise as a whole; the forming of specialists' effective teams who solve the problem of efficient functioning of business processes in general; the harmonization of interests of all participants of the project and the efforts of management staff and employees to achieve strategic objectives by implementing a balanced indexes of quality. The third order task: the project management of processes of implementing measures of the strategic plan; the formalization of business processes of operations; the implementing of a comprehensive plan of automating business processes and the development and introduction of new services, works; the work package according to business

processes reengineering. The main tasks of business process reengineering: the change of organizational structure of the enterprise from functional to cross-functional (or team) or horizontal at senior management level and team at the level of business processes; the forming of motivational system to individual work, the initiative within the processes, the estimation and compensation for the received result; the formation of a new corporate culture based on maximum customers' satisfaction. The whole essence of business process reengineering is based on a system of fundamental changes in the organization. First, the modelling of the organization comes, and then the change of the model at the solution of specific tasks, more often it happens by decisive removing of irrational components.

Exploring reengineering, it has been determined that a key element is its careful design of such a solution of business processes, at which the «break in production», which provides a radical increase the final efficiency of the enterprise. This is where the «quantity» should be translated into «quality» because only qualitative leap allows the company to reach a whole new level and, on this basis, to develop further, using evolutionary improvement. Just this transition to more qualitative level should be considered as reengineering. At the same time, reengineering is not just a means of successful business development this is a new approach to thinking, a look at the construction of enterprise as the engineering activity. Overall, it is a process of fundamental rethinking and reconstruction of business that represents new ways of work performance. However, it should be kept in mind that the process of reengineering at the enterprises is not an isolated number of technological solutions but a part of the complex system of business transformation of the enterprises. Today the enterprise competitiveness greatly depends on the possibility of transforming the basic processes of the enterprise to support policy initiatives that can satisfy customer's requirements. The emergence of computer programs to support change management became possible after the adoption of standards describing those controls that are not inherent in quantitative measurement (business processes, structure)... The basis of the organization activity makes its business processes, which are defined by goals and objectives of the organization. The enterprise must improve its production facilities, the system of logistic support, develop by the innovative way. It provides opportunities to penetrate into new areas of activity. Processes ensure the implementation of all activities of the organization associated with the production of goods and services, which corporation makes or sells and supplies, or makes it all together [2, p. 25].

The basis of the enterprise's reengineering is business process reengineering. The enterprise is regarded as a set of business processes that create a single system. The question is not only which way the processes are linked but how their coordination is carried out. Processes can be traditionally and innovatively connected. However the units that perform these functions (processes) exist as parallel and vertically managed from a single centre, and as units that perform basic functions (processes) and coordinated with each other, as links in a horizontal process chain. As a result of business process reengineering of the enterprises, the innovative combination of business processes happen. To manage the processes as a system, it is necessary to have a clearly defined process structure, that is, build it in an interconnected manner. As each process is designed to produce results that will be used for obtaining the following results at the further stage and higher levels of production, organizational structure should achieve common objectives. The structure of the processes is defined by objectives tree structure of the enterprise. It is then that process improvement is the most effective means to achieve goals. Thus, as a result of business process

reengineering the existing functional structure of the enterprise will give way to the new structure, which formed horizontal technological ties in key business processes, led by process managers. Director General (Chief Controller of all process engineers) coordinates the work of process managers (supervisors) rather than managing multiple services, which are poorly interconnected. Because the centre of this chain is a manufacturer of products and services directly associated with the consumer, the entire business process is aimed at customer satisfaction that is such reengineering structure of the enterprise is focused on the market. Based on the analysis of the goals, objectives, and content of business process reengineering, one can determine the number of its essential properties:

1. Reengineering means bold and decisive rejection of the old dogmas, rules, and regulations. If engineering (from Eng. «engineering») means to design, invent, imagine, the reengineering – means redesigning of business processes and starting with a «clean slate».

2. Reengineering is not used to make a «cosmetic repair» and small changes in the enterprise. Reengineering – is an «innovation repair» to achieve significant improvements in the business. Reengineering – an innovative and creative process that requires creativity and initiative. It can be successfully applied only when the company's management realized the need of revolutionary change.

Reengineering – is a rejection from the functional management services for the benefit of business process management headed by process manager. Any business process starts with a study of customer needs and ends with customer service. In the process of reengineering all areas of its activities are included: marketing, corporate culture, information environment, communication, personnel management, etc. Turning to the international standards of ISO 9000 family, which are directed to the use of a process approach when developing, implementing and improving the effectiveness of the quality management system to enhance customer satisfaction, it is worth remembering that the process-oriented approach to QMS consists of systematically identifying processes and their interactions and management. In fact, QMS are rules of interaction of subdivisions within the enterprise and the formation of a competent algorithm of the whole production and business activities.

The modern view of enterprise management lies in the fact that this work is largely focused on business processes. This involves the systematic identification and management processes, and especially – people relationship management within individual processes and organization. This approach, known as Business Process Management (BPM), can significantly increase the transparency and manageability of business and improve key indicators of financial and economic activities. The organization should implement a process-oriented approach to management based on the concept of BPM. It should describe the existing processes with the aim of better understanding their purpose, find and eliminate the existing disadvantages, in other words, optimize business processes). In some cases, when an organization needs serious radical changes, the program of business process reengineering should be worked out before the implementation.

Conclusions

Under the conditions of transition to market relations, the business task lies in the further development of quality management using the accumulated national and international experience. The decisive areas of this development should become: the focus on the satisfaction of consumers; the responsibility for the quality of senior management; the implementation of careful market research, the organization of

accounting and analysis of quality costs, the laying of responsibility for product liability on specific performers; the tracking of materials and units of products throughout the production process; the continuous staff training; the use of wide arsenal of methods of TQM.

Considering this, it is advisable to improve the organizational structure of the enterprise through business process reengineering, in which all structural units will interact with each other, where it will be easier to control all business processes of the enterprise that will give the opportunity to control the quality of the output product, to optimize production processes, its analysis, to exchange information effectively, to facilitate its integration into production systems, which are used in all units of the enterprise.

Reengineering as a revolutionary method of a point or complex transformation of organization allows not simply remaining «afloat» but also it provides long-term prospects for the development and growth for Ukrainian companies.

Business process reengineering is a complex of measures on modelling business systems. Its purpose is to get rid of extra competences and functions to distribute authority and responsibilities between the specialists who have necessary value competences.

Advantages of reengineering are:

- a clear description of the enterprise and all its units;
- regulation and unambiguous definition of the results of each employee works;
- easiness of process automatization and informatization management system;
- compliance with ISO 9000 standards;
- staff reduction, a clear description of qualification requirements;
- transparency of business systems, easiness of implementation planning and budget mechanisms;
- flexibility and freedom of choice at building organizational structures.

At the present stage of development, many companies have realized that a successful business process reengineering includes more than new designing processes and their following application. The successful business process reengineering requires unity of performers and leaders who conduct changes of qualitative management personnel and staff, which actively participate in making changes and business processes with outputs corresponding to the objectives of customers and business, information technologies as conditions of radical changes that go to meet the needs to implement this initiative.

Organization of work at the enterprise should be based on such principles as optimality, dynamics, systematic, complexity, and standardization. The well-established quality management system will allow the enterprise to avoid risks, reduce the potential economic costs, to ensure the normal functioning of all departments, shops, and divisions to increase the productivity. The improvement of QMS provides for the development of:

- approaches to the development of business processes and their models;
- process-oriented organizational structure;
- system information and analytical support of QMS;
- estimation of the effectiveness of the proposed measures.

Improved quality management system at the enterprise:

- serves as a tool to track and control all processes;
- ensures the production of quality products;
- increases productivity, competitiveness;
- increases credibility;

- promotes the continuous improvement of the organization;
- ensures a confidence in the competence and recognition at the national and international levels.

References:

1. ISO 8402 (1990) . International Standard ISO/CD 8402-1, «Quality Concepts and Terminology – Part 1 : Generic Terms and Definitions : Geneva, Switzerland : International Organization for Standardization.
2. Ilyashenko S. M. Innovation Management: [Textbook] / S. M. Ilyashenko. - Sumy : University Book, 2010. – 334p.
3. Okroshko N. Quality as the only way to survive / N. Okroshko // Economy of Ukraine. - 1998. – № 2. - P. 83-85.
4. Mosiyenko T. Y. The introduction of international quality standards in the practice of national high-tech enterprises / T. Y. Mosiyenko // Business Inform. – 2013. – № 10. – P. 272-276.
5. State Committee of Ukraine (2008), «Quality Management System. Basic terms and glossary (ISO 9000: 2005, IDT): of ISO 9000: 2007. [The replacement of ISO 9000: 2001; Effective as of 2007-09-03] «, Ofitsijnyj visnyk Ukrainy, vol. 94, p. 35.
6. DSTU ISO 9001:2009. Quality management systems. Requirements (ISO 9001:2008, IDT) [ISO 9001: 2009, Quality Management System, Requirements (ISO 9001: 2008, IDT)], State Committee of Ukraine, vol. VII, 26 p. (Accessed 22 June 2009)
7. Pavlov V. I., Myshko O. V. Transformation of the quality management system of goods in Ukraine : [Monograph] / V. I. Pavlov, O. V. Myshko – Rivne: NUWGP, 2009. -202p.
8. Bulletin informational materials for Standardization, Metrology and Certification [Text] / The State Committee of Ukraine for Standardization, Metrology and Certification – 2004. – № 2. – 126 p.
9. Kryvov'yazyuk I. V. Diagnosis of the financial and economic activities of industrial enterprises : [Monograph] / Kryvov'yazyuk I.V., Kost Y. O. – NAN of Ukraine. Institute of Industrial Economics, Lutsk NTU. – Donetsk, Lutsk LNTU, 2012. – 200 p.
10. Kirilyevnina O. O. Conceptual engineering position information on the current stage of development / O. O. Kirilyevnina // Modeling of the regional economy : [collection of papers]. Ivano-Frankivsk : Plai, 2012. - №1 (19). – P.179-188.
11. Oholeva L. N. Production reengineering / L. N. Oholeva, E. V. Chernetsova, V. M. Radykovskyy. – M. : KNORUS, 2005. – 304 p.
12. Zajac N. O. Formation of business information field as a basic foundation of the implementation of business processes // Bulletin of Lviv Institute of Economics and Tourism: [collection of papers] – Lviv : LIET. – 2014. - № 9. – P. 74-78.

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КЛАСТЕРИЗАЦІЯ БАНКІВ ЗА БІЗНЕС-МОДЕЛЯМИ В СИСТЕМІ МАКРОПРУДЕНЦІЙНОГО НАГЛЯДУ

Анотація

У публікації розкрито актуальність макропруденційного нагляду як новітнього проциклічного напрямку, спрямованого на мінімізацію впливу системного ризику. Це передбачає перехід до ризик-орієнтованого нагляду з урахуванням специфіки бізнес-моделі банків. Надано типологізацію типів бізнес-моделей банків. Визначено взаємозв'язок бізнес-моделі та корпоративної стратегії банку. Запропоновано систему аналітичних індикаторів ідентифікації бізнес-моделей банків. За допомогою карт Кохонена представлено результати кластеризації українських банків. Ідентифіковано п'ять типів бізнес-моделей вітчизняних банків на основі групування за визначеними показниками.

Вступ

У сучасному світі зростають взаємозв'язки і взаємозалежність економічних систем різних країн. Інтеграційні процеси змінюють архітектуру глобального фінансового середовища, посилюючи вимоги до надійності та стійкості банківських систем, а також відповідальності центральних банків за підтримання стабільності в монетарній сфері. Угода про асоціацію України з Європейським Союзом (ЄС) покладає на державу низку зобов'язань щодо впровадження стандартів та принципів ЄС, у тому числі і в банківській діяльності. Адаптація банківського сектору України до світових та європейських стандартів зумовлює зміну стратегічних пріоритетів діяльності Національного банку України (НБУ), насамперед у сфері банківського регулювання та нагляду для забезпечення фінансової стабільності. За цих умов актуалізуються проблеми обґрунтування пріоритетних напрямів, які мають бути реалізовані НБУ для наближення вітчизняного банківського сектору до норм і правил ЄС.

Глобальна фінансова криза 2008 р. виявила неспроможність регулятивних органів ефективно проводити монетарну політику та здійснювати нагляд за діяльністю фінансових посередників. Причинами кризових явищ стали дисбаланси в економіці та грошово-кредитній сфері, зростання ризикованості діяльності учасників фінансового ринку, накопичення кредитних ризиків. Сукупна дія цих факторів призвела до стрімкого зростання системного ризику, який перетворився на реальну загрозу для банківського сектора, коли погіршення фінансового стану або банкрутство однієї ланки стає тригером

руйнування усїєї системи. Увага регулятивних органів сконцентрувалася на якїсно нових проблемах: виявленнї наростаючого системного ризику та здїйсненнї проциклїчних заходїв. Перед органами банкївського регулювання та нагляду постали новї завдання: 1) ідентифїкація чинникїв та оцїнювання системного ризику; 2) забезпечення фїнансової стабїльностї. На реалїзацію цих завдань спрямовано новий напрям державної полїтики у фїнансовїй сферї – макропруденцїйна полїтика.

Роздїл 1. Необхїднїсть та особливостї макропруденцїйного нагляду за банками

Пїд макропруденцїйною полїтикою розумїють комплекс превентивних заходїв уповноваженого органу, спрямованих на мїнїмїзацію системного ризику та пов'язаних з ним ризикїв для забезпечення стабїльностї фїнансової системи. Макропруденцїйна полїтика спрямована, насамперед, на зниження системного ризику, що трактується як їмовїрнїсть, з якою негативна подїя мїкромасштабу стане тригером для аналогїчних подїй по всїй системї. Цїлї макропруденцїйної полїтики полягають у запобїганнї фїнансовим шокам, дисбалансам, проциклїчним явищам та зростанню системних ризикїв. Серед засобїв досягнення цих цїлей: обмеження надмїрного зростання банкївського кредитування та рївня заборгованостї економїчних агентїв, зростання здатностї фїнансових їнститутїв або їх структур до поглинання можливих ризикїв за допомогою нарощування величини власного капїталу. Усї ці цїлї та заходи реалїзуються через систему макропруденцїйного нагляду.

Необхїдною умовою ефективного макропруденцїйного нагляду, спрямованого на досягнення фїнансової стабїльностї, на думку вчених з унїверситету Ворвїка (Великобританїя) [1], є гетерогеннїсть (неоднорїднїсть) банкївської системи. В Українї ж, навпаки, система банкївського нагляду мїкропруденцїйна і побудована так, щоб сприяти досягненню однорїдностї всїєї сукупностї банкїв, оскїльки вимоги та нормативи для банкїв рїзних груп практично не диференцїйованї. Хоча зараз елементи банкївської системи не гомогеннї (однорїднї), регулятор своїми дїями призводить до поступового утворення гомогенної банкївської системи. Отже, мїж складниками банкївського нагляду виникає протирїччя: мїкропруденцїйний нагляд вїдповїдає за стабїльнїсть окремої банкївської установи, тодї як макропруденцїйний нагляд спрямований на мїнїмїзацію впливу системного ризику на банкївську систему в цїлому. Для вирїшення цїєї проблеми необхїдно знайти оптимальне спїввїдношення мїж гетерогеннїстю банкївської системи та однорїднїстю банкїв, органїчно поєднавши цїлї макропруденцїйної полїтики з дїючою системою банкївського нагляду задля забезпечення ефективного та стабїльного функцїонування банкївської системи.

Сучасна концепцїя макропруденцїйного нагляду (SREP) базується на оцїнюваннї чотирьох сфер дїяльностї банкїв: 1) бїзнес-моделї; 2) системи управлїння і контролю; 3) ризику капїталу; 4) ризику лїквідностї. Це означає, що макропруденцїйний нагляд має базуватися на групуваннї (кластеризацїї) банкїв за типом бїзнес-моделей та запровадженнї диференцїйованих регуляторних вимог для виокремлених кластерїв з урахуванням домїнуючих структурних особливостей та вїдповїдних профїлїв ризикїв. Отже, вїбїр адекватного пїдходу до кластеризацїї вїтчизняного банкївського сектора, їнтерпретацїї специфїки бїзнес-моделей банкїв, визначення ефективностї тих чи

інших моделей ведення банківського бізнесу та необхідності їх трансформації є актуальним і важливим завданням сьогодення.

Особливої актуальності питання кластеризації банків та виявлення ефективних бізнес-моделей набуло у зв'язку з розпочатим НБУ процесом реформування системи банківського регулювання та нагляду згідно зі стандартами Базельського комітету. Вимоги «Базель III» по-різному впливають на різні групи банків, що може призвести до трансформації архітектури вітчизняного банківського сектора та його ресурсних можливостей. В Україні впровадження макропруденційного нагляду тільки розпочинається, і цей підхід ще не орієнтований на врахування різноманітності об'єктів, що перебувають у полі впливу регулятора.

Національним банком України, зокрема Комітетом із питань нагляду та регулювання діяльності банків, нагляду (оверсайту) платіжних систем, у 2016 р. було визначено нові критерії групування банків (рішення Комітету від 31 грудня 2015 р. № 657 [2]). Згідно із цим підходом, виокремлено чотири групи банків: 1) банки з державною часткою (в яких держава володіє часткою понад 75%); 2) банки іноземних банківських груп (банки, власниками контрольних пакетів акцій в яких є іноземні банківські установи); 3) група I (банки, частка активів яких становить більше, ніж 0,5% активів банківської системи); 4) група II (банки, частка активів яких становить менше, ніж 0,5% активів банківської системи). У групуванні НБУ критерієм диференціації є величина активів банку, однак не враховується специфіка діяльності окремих банківських установ. Окрім того, цей підхід використовується лише для надання статистичної інформації по банківській системі і не враховує корпоративну стратегію розвитку банку.

Важливість орієнтації банківського регулювання та нагляду саме на врахування бізнес-моделей зумовлена тим, що кожній бізнес-моделі притаманний власний рівень сприйнятливості окремих банківських ризиків. Реалізація тих чи інших ризиків створює загрозу фінансовій стабільності окремих банків та банківської системи у цілому, що узагальнено відображається в рівні системного ризику. Регулювання та нагляд на основі бізнес-моделей спрямовано на посилення стабільності банківської системи зі збереженням її гетерогенності. Отже, завданням цього дослідження є виявлення притаманних українській банківській системі бізнес-моделей за результатами кластеризації її елементів.

Розділ 2. Сутність та типи бізнес-моделей банків

Сьогодення вимагає виходу за рамки спрощеного поділу банків на універсальні і спеціалізовані. Зарубіжні науковці активно досліджують питання кластеризації банків і реформування системи банківського регулювання та нагляду на основі бізнес-моделей. У цих дослідженнях поняття «бізнес-модель» використовується для розуміння особливостей функціонування, які відрізняють окрему банківську установу від конкурентів, а також для того, щоб виокремити найбільш значущі фактори, що впливають на її діяльність. В узагальненому трактуванні бізнес-модель – це спосіб стійкого ведення бізнесу для створення та реалізації цінності (англ. value), отримання прибутку й формування конкурентних переваг на ринку. Бізнес-модель як спосіб ведення бізнесу відображає економічну логіку діяльності банку, показуючи як банк отримує свої доходи. Вона засвідчує його позиціонування в інституціональній структурі банківської системи в аспекті вибору способів створення додаткової вартості,

моделі формування прибутку, власного розвитку та соціального значення. Отже, ключовими елементами, які визначають зміст бізнес-моделі, є поняття бізнес-логіки, процесів створення цінності для стейкхолдерів.

Уперше ґрунтовну працю з дослідження цього питання *Regulation of European banks and business models: Towards a new paradigm* написали Р. Аяді у співпраці з П. де Гроеном та Е. Арбаком у 2011 р., де обґрунтували необхідність переходу до нової парадигми макропруденційного нагляду та регулювання діяльності банків на основі бізнес-моделей. Ці вчені й зараз продовжують досліджувати бізнес-моделі, притаманні європейській банківській системі. У праці *Banking business model monitor 2015* вони описали міграцію банків між кластерами протягом 2005–2014 рр. та дослідили трансформацію самих кластерів за цей період.

Серед вітчизняних учених О. Заруцька (2015 р.) за допомогою нейронної мережевої моделі кластеризації – карт Кохонена – представила групування банків із виокремленням напрямів їх розвитку, кожен з яких пов'язаний із конкретними профілями ризиків та стратегіями управління [3]. Г. Борніков та Г. Панасенко (2016 р.) дослідили бізнес-моделі українських банків за ознакою здатності до залучення коштів клієнтів та визначили критерії кластеризації за показниками залежності від коштів клієнтів [4]. В. Рашкован та Д. Покідіні (2016 р.) виділили шість основних бізнес-моделей, які характерні для українських банків, а також ризики, які загрожують банкам з урахуванням специфіки їх діяльності [5].

Для систематизації та зменшення варіативності технологій бізнес-моделювання О. Остервальдер та І. Піньє у 2010 р. розробили оригінальну концепцію, яка отримала назву «канва бізнес-моделі». Вчені вперше запропонували розглядати бізнес-модель у розрізі таких ключових факторів, як споживацькі сегменти, ціннісні пропозиції, канали збуту, відносини з клієнтами, потоки надходження доходів, ключові ресурси, ключові види діяльності, ключові партнери, структура витрат [6, с. 22–47]. Ці елементи було виокремлено на основі вивчення практичного досліду багатьох компаній із 45 країн. Окремо автори наголошували на взаємозв'язках виокремлених елементів. Запропоновані елементи «канви бізнес-моделі» повною мірою стосуються й банків, проте не повністю ними реалізуються.

Розуміння бізнес-моделі банку спрямоване на оцінку таких характеристик:

- надійності через створення цінності та досягнення задовільного короткострокового прибутку (протягом 12-місячного горизонту);
- стійкості в середньостроковій перспективі через підвищення ефективності та нарощування капіталу (понад трирічний період);
- стабільності протягом економічного циклу через здатність до абсорбації шоків та інновацій (більше трьох років).

Забезпечення фінансової стабільності та підвищення ефективності потребує від банків не тільки впровадження нових продуктів і послуг, а більш зваженого підходу до вибору власних бізнес-моделей, ураховуючи наслідки фінансової кризи і потребу дієвих заходів відновлення. Разом із тим банки можуть змінювати бізнес-моделі з урахуванням потреб ринку, споживачів банківських послуг, дій конкурентів, змін регуляторного середовища. Особливістю банківських бізнес-моделей є їх висока чутливість до волатильності фінансового ринку та заходів грошово-кредитної політики. Аналізуючи кластери банків, сформовані на основі однорідних бізнес-моделей, та порівнюючи їх фінансову стійкість, регулятор має можливість відслідковувати

ризиків і загрози, а також завчасно виявити небажані бізнес-моделі та вивести їх із системи. На підставі підсумкової оцінки бізнес-моделі банку наглядовий орган зможе висунути обґрунтовані вимоги до банку щодо корегування його капіталізації, ліквідності чи рівня ризикованості.

К. Гелбрейт наголошує на необхідності забезпечення відповідності бізнес-моделі обраній банком стратегії, яка є первинним фактором його успіху на ринку [7]. Стратегія концентрується на позиціонуванні банку та його послуг, які відрізняють його з-поміж конкурентів, а бізнес-модель показує взаємодію банку з іншими учасниками ринку. Бізнес-модель слід розглядати як реалізацію стратегії банку з огляду на його внутрішню структуру (клієнти, пропозиції, інфраструктура, фінанси), процеси та системи.

Найбільш влучна кластеризація банків за бізнес-моделями, на нашу думку, наведена Р. Аяді, П. де Гроена та Е. Арбака, які у своїй праці сформувавши методологію дослідження та критерії розподілу банків [1; 19–22]. Хоча в 2011 р. авторами було виділено чотири основні бізнес-моделі європейських банків [8], але вже у дослідженні 2015 р. європейська банківська система характеризувалась п'ятьма моделями [6]. Зміни відбулися за рахунок розмежування кластеру «Роздрібні банки» на два типи: тип I та тип II. Європейський центральний банк та Банк міжнародних розрахунків згодом запропонували власне бачення типових бізнес-моделей банків у Європі (рис. 1).

Розглянемо детальніше групування банків за бізнес-моделями, запропоноване Р. Аяді, П. де Гроеном та Е. Арбака.

Модель 1 – роздрібні сфокусовані банки, які виділяються з-поміж інших банківських моделей тим, що традиційні ресурси (депозити клієнтів) займають близько 70% у пасивах, тоді як кредити фізичним та юридичним особам становлять близько 80% активів. Ці банки майже не проводять діяльності із залучення та розміщення ресурсів на ринку капіталів.



Рис. 1. Класифікація бізнес-моделей європейських банків

Джерело: складено за [9; 17–19; 1; 8]

Модель 2 – роздрібні диверсифіковані банки типу I. Ця бізнес-модель стосується теж роздрібних банків, але різниця порівняно з першою моделлю

полягає у тому, що активи є більш диверсифікованими – близько 30% інвестовано в портфель цінних паперів, а 10% від сукупних активів припадає на міжбанківські кредити. Ресурсна база при цьому є подібною до моделі 1 – переважно депозити клієнтів.

Модель 3 – роздрібні диверсифіковані банки, тип II. Порівняно з двома попередніми моделями роздрібних банків значну частину ресурсів банків цієї банківської моделі становлять боргові зобов'язання – 43%, тоді як в активах переважають кредити, надані клієнтам.

Модель 4 – оптові банки. Ця бізнес-модель характеризується суттєвою часткою міжбанківських кредитів у пасивах, а також суттєвою їх часткою у портфелі активів. Значну частку в активах також займають цінні папери, тоді як кредити клієнтам становлять лише 20% в активах банку.

Модель 5 – інвестиційні банки: до них віднесено найбільші банки за активами, які припадають у середньому на один банк цього кластеру, а також це найбільший кластер за сукупними активами порівняно з іншими. Портфель інвестиційних банків на 60% складається з торговельних активів (цінних паперів) та на 5,2% – із деривативів. Серед пасивів переважають боргові зобов'язання.

Цілком природно, що виокремлені бізнес-моделі європейських банків не залишаються сталими, а продовжують еволюціонувати. Відповідно до таких показників, як «депозити», «торгові активи», «деривативи», спостерігається така їх кластеризація: роздрібна модель (HSBC, UniCredit, RBS та ін.) – 42,2%, 32,9%, 15,6%; інвестиційна (Deutsche Bank, Barclays, BNP Paribas та ін.) – 23,0%, 64,7%, 51,1%; універсальна (Crédit Agricole, Dexia, Hypo Real Estate та ін.) – 23,8%, 43,8%, 18,5 %. Частка банків, які напередодні або під час кризи змінили власну модель, не перевищила 7% (модель 2/модель 3 або навпаки) та 3% (модель 1/модель 3 або навпаки) та 3% (модель 1/модель 2 і модель 1/модель 3). Так, банк ABN Amro послідовно протягом 2006–2009 рр. змінив модель із роздрібною й інвестиційною на універсальну, а Commerzbank – із універсальною (2006–2008 рр.) на інвестиційну в 2009 р. Роздрібний банк RBS у 2007 р. прийняв універсальну модель, у 2008–2009 рр. – інвестиційну, а в 2012 р. має намір скоротити власні активи, зважені за ризиком, до 111,6 млрд. дол. США, у т. ч. через часткову відмову від брокерської діяльності й операцій на ринку акцій [10].

Дослідження бізнес-моделей європейських банків актуалізує питання щодо можливості їх перенесення в українську банківську систему. Очевидно, що такий підхід неприйнятний, адже через нерозвиненість фондового ринку, ринку капіталів окремі бізнес-моделі або будуть характеризуватися мізерною часткою в загальній кількості банків та сукупних активів банківської системи, або будуть просто відсутні. Звертаючись до зарубіжного досвіду, необхідно орієнтуватись, насамперед, на принципи поділу, однак спиратися слід, по-перше, на інші критерії поділу та систему показників, по-друге, виділяти зовсім інші бізнес-моделі, характерні саме для вітчизняної практики.

Відмінності між критеріями виділення бізнес-моделей у європейській практиці та в українській банківській системі досить суттєві, незважаючи на те що обидві кластеризації засновані на характеристиках складників банківських портфелів та джерел формування ресурсів банків. Так, європейські дослідники поділяють активи і пасиви банку на роздрібні (агреговане значення залучених та розміщених грошових коштів серед юридичних і фізичних осіб) та ринкові

(боргові запозичення на ринку капіталів та активи, розміщені на ринку капіталів – міжбанківські кредити та цінні папери) (рис. 2).

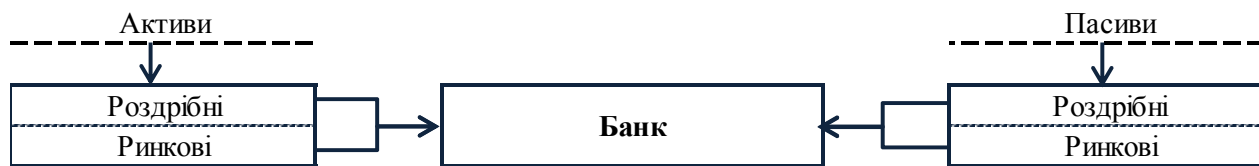


Рис. 2. Критерії ідентифікації бізнес-моделей

Джерело: розроблено авторами за [1]

Вітчизняні вчені інакше групують характерні джерела пасивів банку та класифікують портфелі, оскільки в умовах нерозвиненості фондового ринку та ринку капіталів виокремлювати ринкові активи та пасиви не доцільно. Тому підходи до кластеризації вітчизняних банків концентруються на поділі роздрібних¹ контрагентів на корпоративних (юридичні особи) та власне роздрібних (фізичні особи) (рис. 3). Також під час кластеризації враховується величина власного капіталу та субординованого боргу. Однак останній критерій, на нашу думку, не доцільно включати до кластеризації, адже капіталізація банку враховується під час визначення його фінансової стійкості, але ніяк не залежить від обраної банком бізнес-моделі.

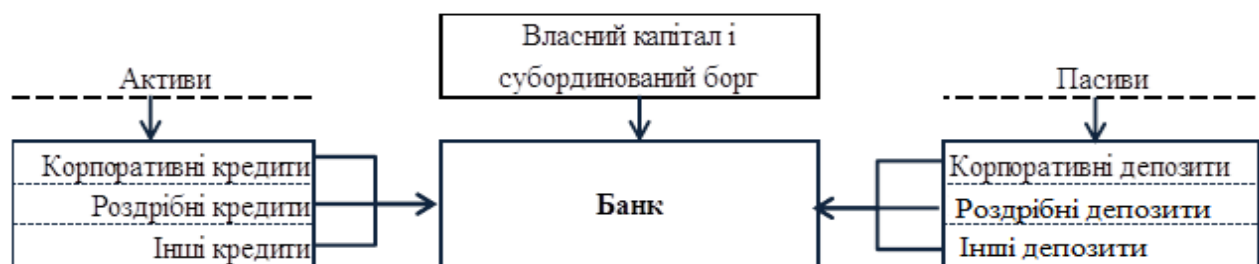


Рис. 3. Критерії ідентифікації бізнес-моделей за працями В.Рашкована та Д. Покідіна

Джерело: розроблено авторами за [5]

Звертаючись до проблеми кластеризації банків, слід відзначити, що у вітчизняній банківській системі протягом останнього часу відбулося багато ключових перетворень, мали місце кілька хвиль зміни динаміки кількісних та якісних індикаторів функціонування, сталися структурно-інституційні зрушення. Так, зростання базових макроекономічних параметрів банківського сектору упродовж 2003–2008 рр. змінилося їх спадом у 2009–2012 рр., а тенденція відновлення банківського сектору в 2013 р. була призупинена через воєнні дії. У 2015–2016 рр. відбулися суттєві інституційно-функціональні перетворення, які супроводжувалися виведенням неплатоспроможних банків із ринку. Таким чином, досить рельєфно проявилися тенденції, характерні для вітчизняного банківського сектору.

1. Стрімке та значне скорочення кількості банків. Проте ця тенденція не є притаманною виключно вітчизняній практиці. Напередодні кризи кількість банків у США скоротилася на 40%; у Німеччині – на 55%; у Франції за 20 років

¹Прим. авторів – роздрібні клієнти в розробках і дослідженнях зарубіжних авторів агрегують як юридичних, так і фізичних осіб оскільки в них присутнє ще одне важливе джерело ресурсів – ринок капіталів та напрям формування портфелю – цінні папери, що обертаються на фондовому ринку.

– на 68%. У Великобританії за 1994–2004 рр. кількість банків зменшилася на 56%, в Італії – на 28%; в Іспанії – на 16%. В Японії також спостерігається скорочення кількості кредитних інститутів. Як правило, така тенденція зумовлена або перенасиченістю ринку (наприклад, у Німеччині), або збільшенням концентрації капіталу в умовах незмінної кількості банківських відділень (наприклад, у Франції).

2. Укрупнення банківського бізнесу шляхом концентрації та консолідації капіталу. За величиною концентрації капіталу банківський сектор вже досяг оптимальних значень, установлених НБУ. Зростання рівня концентрації зумовлено як об'єктивною потребою банків у розширенні бізнесу і, як наслідок, відповідним нарощуванням рівня капіталізації, так і адміністративними вимогами щодо величини мінімального розміру власного капіталу банку.

Проведені дослідження показали, що вітчизняний банківський сектор залишається структурно неоднорідним як за розміром активів та джерелами ресурсів, так і за характером власного капіталу, спектру послуг, особливостями діяльності. Історично в Україні склався такий тип інституційної структури, який включає велику кількість самостійних середніх та малих банків. На початку 2014 р. в Україні функціонувало 180 банків, які дотримувалися різних стратегій ведення бізнесу та мети присутності на ринку. Це такі типи банків: розрахункові, або «сплячі» (частка ліквідних активів понад 40%); корпоративні, які спеціалізуються на кредитуванні корпоративних клієнтів (частка кредитів нефінансовим корпораціям у портфелі кредитів становить понад 50%); кептивні, які обслуговують інтереси власників (частка власного капіталу в пасивах перевищує 60%); клірингові («банки для банків») – частка коштів інших банків у пасивах становить понад 20%, частка активів, розміщених в інших банках, також більше 20%; дочірні іноземні банки (частка коштів клієнтів нерезидентів займає більше 40% пасивів, велика частка валютних активів); банки, що спеціалізуються на обслуговуванні зовнішньоекономічної діяльності (частка валютних активів перевищує 40%); банки, які спеціалізуються на інвестиційній діяльності (середній розмір портфеля цінних паперів перевищує 40% активів); універсальні банки – фінансові конгломерати (значний обсяг власного капіталу, диверсифікований банківський бізнес); малі банки без певної спеціалізації (немає домінуючої спеціалізації ні за активними, ні за пасивними операціями); проблемні банки (частка проблемних активів перевищує 40%); неактивні банки (майже немає діяльності ні за активними операціями, ні за пасивними); мобільні банки без відділень (Fintech), що набувають популярності у світі.

Розділ 3. Ідентифікація типів бізнес-моделей вітчизняних банків

Глобальні економічні дисбаланси, фінансова та політична криза, військові дії на сході України виявили всі накопичені в українській банківській системі проблеми, у тому числі й щодо чіткого бачення та розуміння бізнес-моделі. Увага до необхідності їх ідентифікації посилилася й у зв'язку з переходом НБУ до кластерної системи ризик-орієнтованого нагляду. НБУ прагне ідентифікувати банки не стільки за розміром активів, скільки за характером (бізнес-моделлю, профілем) їх діяльності. На початку вересня 2015 р. НБУ поділив вітчизняні банки на кластери. Найбільші банки (I і II групи) поділено на **три кластери: державні банки, великі приватні банки і банки, які входять до міжнародних банківських груп**. У листопаді 2015 р. була прилюднена новація НБУ щодо кластеризації невеликих банків III та IV груп

(92 банки з 123 працюючих в Україні станом на 1 жовтня 2015 р.), які поділено на п'ять кластерів: ринкові (43 банки), кептивні (12), неактивні (14), схемні (9) та ризикові (14 банків) та надано його пропозиції щодо майбутніх дій із тим чи іншим кластером (рис. 4).

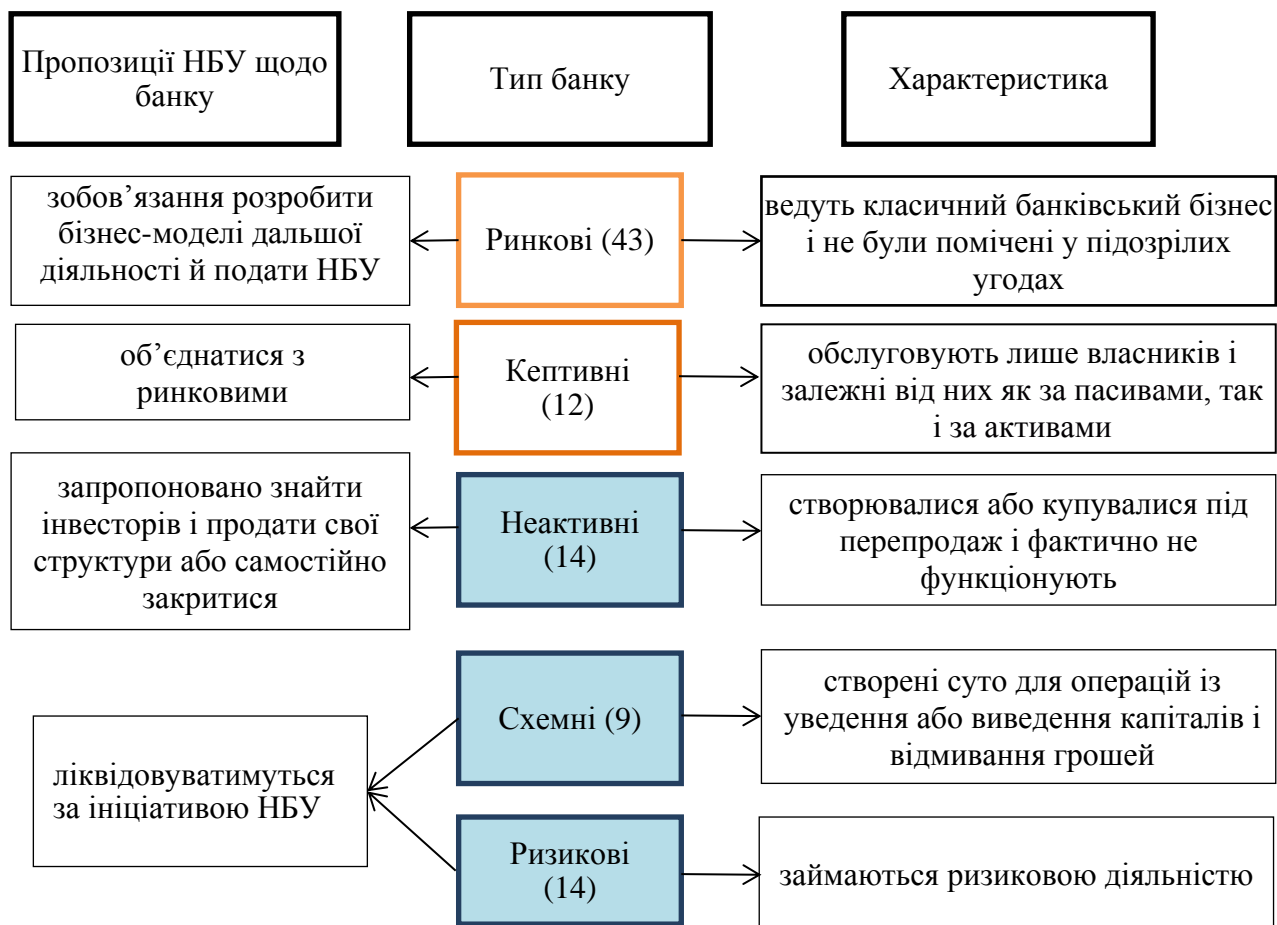


Рис. 4. Кластеризація банків III та IV груп в Україні за підходом НБУ

Джерело: складено авторами

Значна фрагментація банків за розмірами та потенціалом призвела до появи ринкової ніші в більшості тих банків, на кожен з яких припадає не більше 1% активів банківського сектору (табл. 1). Такі банки часто залежать від кількох крупних клієнтів, що мають одного власника з банком. Відповідно вони схильні видавати більш ризикові кредити підприємствам своєї групи і мають вищий ризик банкрутства. За співвідношенням кредитів та депозитів показник використання коштів клієнтів для кредитування є дуже високим у неактивних банків, що може свідчити про відмивання грошей та кредитування де-факто пов'язаних із банком осіб.

Очевидно, що така кластеризація виявилася недостатньо вдалою. По-перше, потребує уточнення поняття «кептивний банк», яке в зарубіжних джерелах тлумачиться як установа, котра на 100% є дочірньою структурою або фактично належить їй, розташована зазвичай в юрисдикції пільгового оподаткування, виконує функції банку лише в інтересах однієї юридичної особи та її клієнтів і постачальників [11], а сам термін не має чіткого негативного значення.

Характеристики кластерів банків III–IV груп в Україні (на 01.10.2015)

Кластер	Кількість банків	Активи, млн. грн.	Частка в активах III–IV груп, %	Обсяг депозитів фізичних осіб млн. грн.	Відношення активів до депозитів
Ринкові	43	84 206	66%	21 996	3,82
Кептивні	12	7 048	6%	2 036	3,46
Неактивні	14	4 000	3%	162	24,69
Схемні	9	11 310	9%	2 552	4,43
Ризикові	14	20 892	16%	7860	2,65
Усього	92	127 456	100%	34 606	4,03

Отже, будь-який вітчизняний банк із місцевим капіталом із великою ймовірністю може розглядатися іноземними інвесторами як банк із моделлю кептивної установи, не маючи можливості рівної конкуренції з великим іноземним капіталом. По-друге, нагляд на основі ризиків передбачає визначення профілю цих ризиків та рівня впливу потенційного дефолту банків на системну стабільність, тому для нагляду більш доцільно диференціювати банки саме за масштабами системного ризику, а не за рівнем кептивності. Варто здійснювати кластеризацію банків із поділом за рівнем системної важливості, бізнес-моделлю, а всередині таких кластерів – диференціацію за рівнем ризику.

Достатньо цікаві результати аналізу краху українських банків за кластерами бізнес-моделей протягом 2008–2016 рр. отримано Г.П. Бортніковим (табл. 3), які показали, що саме такі універсальні та схемні (проблемні) банки є загрозою для стабільності вітчизняної банківської системи в кризові періоди. Найбільш надійною виявилася роздрібна модель ведення банківського бізнесу.

Показники краху українських банків, згрупованих за бізнес-моделлями протягом 2008–2016 рр.

Бізнес-модель	2008-2010	2014-2016	Разом	Частка	Приріст
Корпоративні	2	11	13	12%	5,5
Роздрібні	2	6	8	7%	3,0
Універсальні	2	15	17	15%	7,5
Схемні (кептивні)	40	35	75	66%	0,9
Усього	46	67	113	100%	

Джерело: складено за [12]

У 2016 р. фахівцями НБУ було запропоновано нову кластеризацію банків України та виділено шість типових бізнес-моделей [5]:

- роздрібні – характеризуються переважною часткою кредитів та депозитів фізичних осіб;
- домогосподарства-корпорації – значна частка депозитів фізичних осіб у пасивах, проте в активах переважають кредити, надані юридичним особам;
- універсальні – збалансування активів та пасивів, окрім кредитів, у портфелі також перебуває значна частка цінних паперів;

- корпоративні – переважно банки займаються обслуговуванням корпоративних клієнтів;
- інвестиційні – більшість операцій не кредитні, найменший за чисельністю кластер;
- невизначені/заморожені – до цього кластеру увійшли банки, бізнес-модель яких досить складно визначити.

Для визначення бізнес-моделей НБУ використовує шість показників структури балансу із застосуванням моделі Кохонена та адаптує їх за професійними судженнями на основі ще семи показників. Специфіка розрахунку показників НБУ полягає у тому, що всі індикатори в процесі коригування співставляються з активами.

Разом із появою кризових явищ закінчився період бурхливого розвитку банківської сфери, змінивши цільові орієнтири діяльності банків на стійкість і надійність, де головним показником стає не завоювання частки ринку, а співвідношення доходів та витрат за прийнятного рівня ризику. На зміну екстенсивному шляху розвитку приходять якісне зростання, яке забезпечується новими бізнес-моделями. Слід зазначити, що традиційно вітчизняним банкам не притаманна схильність до зміни бізнес-моделі. Як правило, вони надають перевагу універсальній стратегії, яка насправді виявляється «депозитно-кредитною пірамідою», та прагнуть до посилення ринкової позиції.

Однак зі зміною умов зовнішнього середовища більшість банків, у першу чергу державні та з іноземним капіталом, радикально змінили свою стратегію, прийнявши рішення згорнути роздрібний напрям банківського бізнесу в Україні. Складна економічна ситуація змушує банки шукати шляхи оптимізації своєї діяльності, відмовлятися від масштабних інвестиційних проектів, яким і був розвиток роздрібною мережі в Україні. Водночас банки продовжують розвивати напрям корпоративного бізнесу. Інвестиційні банки через нерозвиненість фондового ринку та ринку капіталів фактично відсутні. Найбільша частка цінних паперів, переважно державних, сконцентрована в портфелі державних банків або малих банків, які через концентрацію на операціях із цінними паперами мають значну залежність від міжбанківських запозичень та перебувають у небезпечній зоні. Роздрібний напрям іноземних банків в Україні розвивався переважно на основі франчайзингової (партнерської) схеми. Завдяки тенденції до зменшення кількості банків та їх укрупнення зараз у вітчизняній банківській системі функціонують банки, різні за розмірами, бізнес-стратегіями та з неоднорідною фінансовою стійкістю. Ідентифікація типових бізнес-моделей банків у банківській системі України має базуватися на аналізі їх діяльності за значущими критеріями з виокремленням спільних інтервалів для проаналізованих показників, що дасть змогу віднести той чи інший банк до певної групи (кластеру).

Банки змінюють свої бізнес-моделі, підлаштовуючись під потреби ринку, дії конкурентів, регуляторне середовище. У різних типів банків різна реакція на зовнішні умови. Оскільки вітчизняний банківський сектор представлений досить різними банками, то оцінку впливу різноманітних факторів на діяльність вітчизняних банків доцільно проводити на агрегованому рівні для різних груп банків. Для формування основи для виокремлення кластерів банків зі спільними характеристиками щодо стратегії управління та надійності використаємо інструментарій структурно-функціонального, а саме метод нейронних мереж – карти Кохонена. Цей інструментарій має низку переваг:

- 1) урахування агрегованого впливу широкого кола факторів, що характеризують ту чи іншу бізнес-модель;
- 2) урахування різного ступеня впливу однакових чинників на ймовірність банкрутства різних кластерів банків;
- 3) можливість отримати алгоритм автоматичної класифікації сукупності банків на довільне число кластерів на основі вирішення оптимізаційної задачі;
- 4) використання під час аналізу матриці кластерних відхилень вирішує проблему, коли система показників для різних об'єктів має однакову структуру, проте різна за значеннями;
- 5) існує можливість дослідити еволюцію стереотипів поведінки окремих банків та зміну складу кластерів банків.

Таблиця 4

Аналітичні індикатори кластеризації банків за бізнес-моделлю

Група показників	Показник	Специфіка розрахунку
Індикатори структури активів банків	Частка кредитів в активах банку	Кредити: усі надані банком кредити, включаючи кредити фізичним, юридичним особам та міжбанківські кредити
	Частка кредитів, наданих юридичним особам у кредитах, усього	Кредити, надані юридичним особам, розраховуються з урахуванням резерву під знецінення заборгованості (від'ємне значення)
	Частка кредитів, наданих фізичним особам	Кредити, надані фізичним особам, розраховуються з урахуванням резерву під знецінення заборгованості (від'ємне значення)
	Частка МБК у кредитах наданих	Міжбанківські кредити, надані іншим установам, розраховуються з урахуванням резерву під знецінення заборгованості (від'ємне значення)
	Частка ЦП в активах банку	Сума вартості цінних паперів зменшена на резерв під знецінення
Індикатори структури ресурсної бази банків	Частка коштів НБУ в пасивах	Частка коштів НБУ: рефінансування, надане національним банком комерційному
	Частка коштів юридичних осіб у пасивах	Сукупність строкових та депозитів до запитання юридичних осіб (за винятком банків) у національній та іноземній валютах
	Частка коштів фізичних осіб у пасивах	Сукупність строкових та депозитів до запитання фізичних осіб у національній та іноземній валютах
Індикатори джерел прибутку банків	Частка процентних доходів	Частка чистих процентних доходів у доходах, усього
	Частка комісійних доходів	Частка чистих комісійних доходів у доходах, усього

Джерело: складено авторами

Модель кластеризації банків за картою Кохонена¹ є своєрідною динамічною системою координат для інтерпретації змін показників кожного банку. Зауважимо, що карти Кохонена офіційно визнані європейською спільнотою та банківськими регуляторами як інструменти незалежного пропорційного розподілу банків.

Кластеризація проведена за показниками, які адекватно характеризують бізнес-модель банківської установи. Зважаючи на неоднорідність української банківської системи за розміром інститутів, що її представляють, у методиці використано відносні показники (табл. 4). Задля глибшого розуміння значення результатів дослідження додатково проведено кластеризацію відповідно до показників Міжнародного валютного фонду, що дає уявлення про фінансову стійкість конкретного банку або банків, які формують певний кластер у системі відповідно до їх бізнес-моделі.

Кількість кластерів за кожним періодом та за кожним критерієм кластеризації дорівнює 4. Це зумовлено кількома чинниками. По-перше, під час аналізу динаміки (міграції банків) з одного кластеру до іншого доцільніше використовувати однакову кількість кластерів для ефективного аналізу. По-друге, дотримано технічні індикатори правильності вибору кількості кластерів. Кластеризація банків проведена за допомогою програмного забезпечення Deductor Studio 5.0 Academic методом обробки даних під назвою «Карти Кохонена». Відповідно, для перевірки доцільно використовувати матриці «щільності влучання» та однорідності розташування кластерів. Матриця «щільності влучання» показує кількість банків, які потрапили до однієї ячейки – чим більш однорідною є ця матриця, тим ефективніше проведена кластеризація (рис. 5).

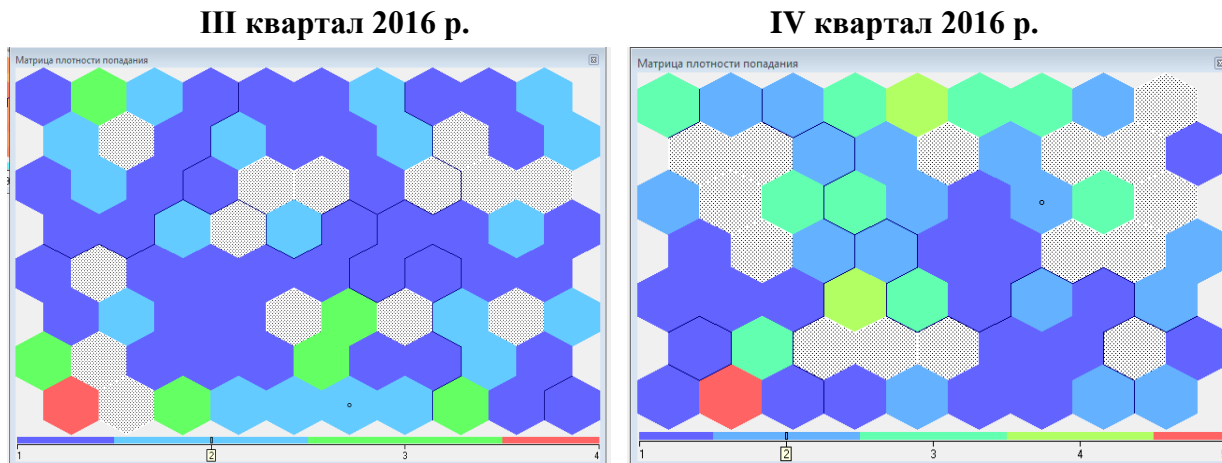


Рис. 5. Матриці щільності влучання по періодах та критеріях кластеризації

Джерело: побудовано авторами

Кожна точка карти – це проекція місця точки звітності деякого банку в 10-мірній системі координат, що відповідають структурним показникам, обраним для аналізу бізнес-моделі. Банки з близькими значеннями всіх показників займають на карті сусіднє положення. Водночас у кутах карти розташовані найбільш специфічні, відмінні від інших об'єкти. Однорідність

¹ Теуво Кохонен, фінський математик, який досліджував нейронні мережі.

розташування кластерів характеризується тим, чи є кластери «розірваними» по мапі, чи розташовані в одному діапазоні.

За підсумками проведеного аналізу отриманих матриць нами було зроблено висновок про оптимально проведену кластеризацію методом порівняння з раніше отриманими результатами кластеризації емпіричним шляхом. Наступним етапом є перевірка особливостей формування кластерів також емпіричним шляхом. На прямокутній карті Кохонена (рис. 6) визначається чотири альтернативні напрями спеціалізації розвитку банків. Правий нижній кут карти належить проблемним банкам. Верхній правий займають роздрібні банки. Уся права частина карти належить банкам із високими процентними ставками та перевагою щодо обслуговування фізичних осіб. Нижній лівий кут карти займають ефективні банки, залежні від міжбанківських ресурсів, значна частина з них – це банки з іноземними інвестиціями. У верхньому лівому куті карти розташовані «сплячі» і кептивні банки, більшість з яких є малими за розмірами активів і тісно пов'язаними з бізнесом вітчизняних акціонерів. Ліва сторона карти – це банки з низькими процентними ставками та орієнтацією на обслуговування юридичних осіб.

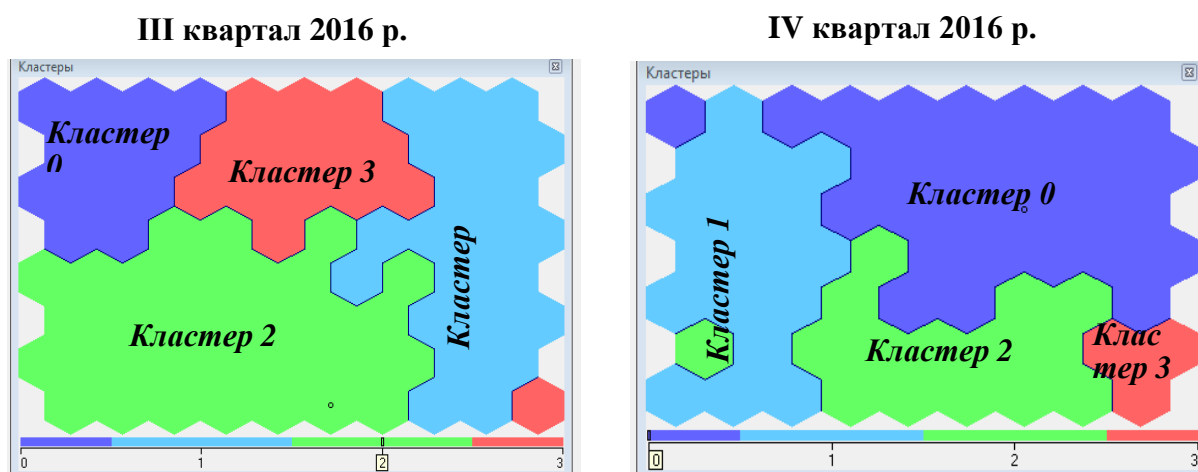


Рис. 6 Матриці отриманих кластерів за аналітичними показниками

Джерело: побудовано авторами

Визначено, що чотири кластери для кожного критерію та для кожного періоду дають найкращий результат щодо фізичної однорідності розташування кластерів. Також ця кількість кластерів лежить в оптимальному діапазоні кількості кластерів: від трьох до шести [8, с. 108].

Отже, за отриманими результатами у кожному періоді як за бізнес-моделлю, так і за фінансовою стійкістю банки поділено на чотири кластери відповідно до подібності за обраними критеріями. Статистичні характеристики більшості банків свідчать про те, що ці банки орієнтовані на надання класичних банківських послуг. Доведено, що у посткризовому періоді для банків характерна висока частота зміни бізнес-моделей на більш надійні та ефективні. Також ураховано потужність кластера в абсолютних величинах та питому вагу окремого кластера у банківській системі. Аналіз за агрегованими показниками кластера і на основі цього виділення найбільш характерних значень за критеріями кластеризації показав, що цей аналіз доцільно проводити на основі медіани, а не середнього арифметичного значення. Медіана на відміну від останнього показника нівелює вплив аномальних значень і дає змогу визначити значення, притаманне найбільшій кількості об'єктів у кластері залежно від їх

розподілу (значення, що розташоване в середині ранжованого ряду вибірки). Графічно основні характеристики за критеріями, притаманними окремим кластерам відповідно до медіанного значення, зображено на діаграмі (рис. 7).

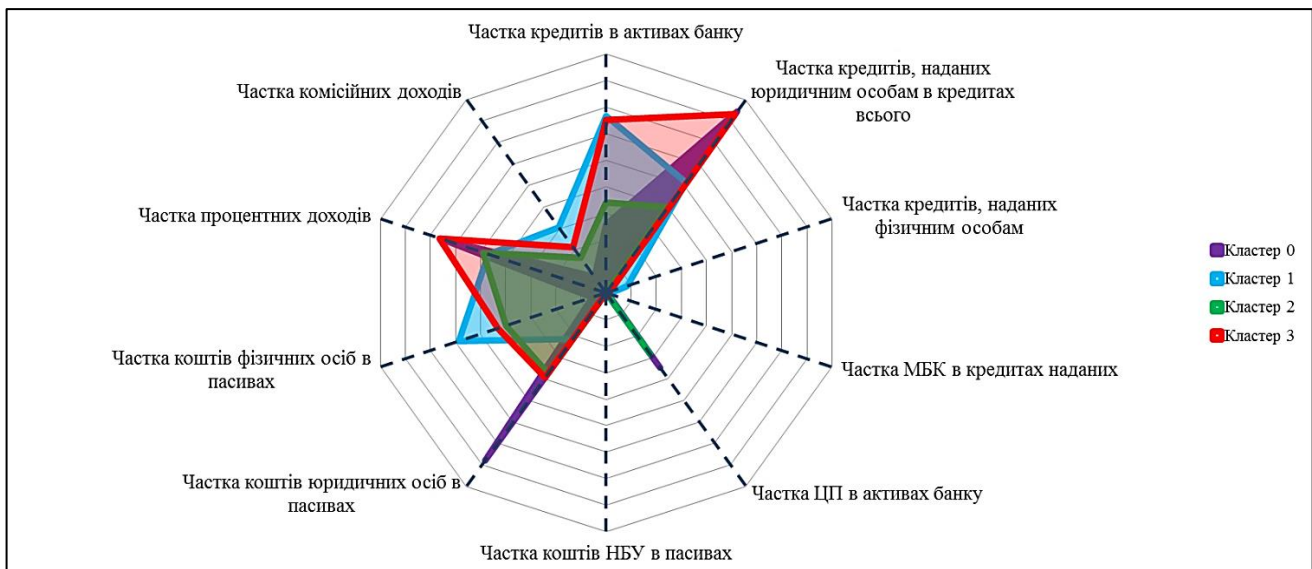


Рис. 7. Листкова діаграма кластерів, сформованих за бізнес-моделлю за III квартал 2016 р.¹

Джерело: побудовано авторами

Із діаграми наочно видно, що кластери виділяються з-поміж інших за переважанням тих чи інших джерел формування ресурсів та їх розміщення. У наступному періоді кластери дещо змінили свої характеристики. Також змістилися відповідності за номерами кластерів (рис. 8).



Рис. 8. Листкова діаграма кластерів, сформована за бізнес-моделлю за IV квартал 2016 р.²

Джерело: побудовано авторами

¹Крок позначки на рис. 7 та рис. 8 становить 10%.

² Із діаграми виключено значення процентних і комісійних доходів кластеру III, оскільки вони є аномальними (що заважає репрезентативному відображенню інших даних) і дорівнюють 324,14% та 96,95% відповідно.

За результатами дослідження, спрямованого на виділення основних типових для банківської системи України бізнес-моделей, було виокремлено такі кластери (загальну характеристику наведено в табл. 6):

- корпоративні – як у пасивах, так і в активах орієнтуються виключно на юридичних осіб;
- роздрібні – висока частка ресурсів, залучених від фізичних осіб, та найвища частка кредитів, наданих фізичним особам, із-поміж інших кластерів;
- універсальні – характеризуються високою диверсифікацією активів, у т. ч. високою диверсифікацією кредитів за контрагентами;
- ресурсоутворюючі – найчисельніша група банків, їхньою особливістю є залучення ресурсів як від фізичних, так і від юридичних осіб, проте розміщення майже виключно серед підприємств;
- проблемні – кластер, що виділився у IV кварталі 2016 р. і до складу якого увійшли лише три банки, які при цьому характеризувалися незадовільною фінансовою стійкістю¹.

Таблиця 6

Характеристики банківських кластерів, сформованих за бізнес-моделлю

Період	Кластери	Назва	Характеристика
3 квартал	Кластер 0	Корпоративні	У пасивах та активах переважають операції з юридичними особами, велика частка цінних паперів у портфелі
4 квартал	Кластер 1	Корпоративні	У пасивах та активах переважають операції з юридичними особами, велика частка цінних паперів у портфелі; зросла питома вага кредитів у портфелі банків
3 квартал	Кластер 1	Роздрібні банки	Висока частка кредитів наданих фізичним особам, та більше 50% ресурсної бази сформовано за рахунок коштів фізичних осіб
4 квартал	Кластер 3	Проблемні	Характерне погіршення стану активів, збільшення частки цінних паперів у портфелі, суттєва частка рефінансування НБУ у пасивах
3 квартал	Кластер 2	Універсальні банки	Активи та пасиви диверсифіковані за контрагентами, в т.ч. висока частка наданих міжбанківських кредитів
4 квартал	Кластер 2		
3 квартал	Кластер 3	Ресурсоутворюючі	Активи недиверсифіковані, сформовані переважно з кредитів наданих юридичним особам, ресурсна база збалансована
4 квартал	Кластер 0	Ресурсоутворюючі	Збалансування ресурсної бази (порівню кошти юридичних і фізичних осіб), в активах переважають кредити надані юридичним особам, велика частка міжбанківських кредитів наданих

Джерело: побудовано авторами

Аналізуючи отримані кластери, ми дійшли висновку, що отримані номери кластерів не співвідносяться між собою за якісними характеристиками у III та IV кварталах. Єдиний кластер, що не змінив свою позицію, – це II кластер: універсальні банки, які характеризуються повною диверсифікацією як активів, так і ресурсів за джерелами. Проте в період масового виведення банків із ринку (2014–2015 рр.) найбільше було виведено саме універсальних банків – 62% від загальної кількості. Хоча банки, що входять до цього кластеру, називаються універсальними, частка кредитів, наданих фізичним особам, є доволі низькою, як і у цілому по банківській системі. Портфель цих банків складається практично в однакових частках як із кредитів, так і з цінних паперів, тобто є найбільш диверсифікованим із-поміж усіх кластерів.

Найбільшим за потужністю кластером є III у базовому періоді та 0 кластер у поточному (IV кварталі). Цей кластер названий ресурсоутворюючим, ресурсна

¹ Зокрема, «Діамантбанк» у подальшому було визнано НБУ неплатоспроможним.

база є диверсифікованою за контрагентами, проте близько 80% кредитів надається саме юридичним особам. У III кварталі нами було виділено кластер роздрібних банків, який характеризувався ресурсною базою на більш як 50% утвореною саме з депозитів фізичних осіб, а також банки що входять до цього кластеру, мали високий відсоток споживчих кредитів. Проте вже у IV кварталі 2016 р. у цьому кластері залишилося лише три банки, які характеризуються незадовільним фінансовим станом і були виділені у кластер «Проблемні банки». Особливістю цього кластеру є висока питома вага рефінансування НБУ в пасивах, медіанне значення цього показника досягло 8,64%. Також нами було виділено кластер під назвою «корпоративні банки», які як у пасивних, так і в активних операціях орієнтуються на юридичних осіб.

За результатами проведеного дослідження виявлено загальні тенденції, які спостерігаються в банківській системі зараз. Аналіз кластерів у IV кварталі 2016 р. показав, що кредитні портфелі банків 0 та I кластеру складаються з кредитів, наданих юридичним особам практично на 100%, тоді як частка кредитів, наданих фізичним особам, спадає. Проте частка фізичних осіб у пасивах має тенденцію до зростання в усіх кластерах, що є підтвердженням повернення довіри населення до банківської системи та позитивним фактом. Окрім того, кредитування юридичних осіб за рахунок заощаджень фізичних осіб є, безперечно, позитивним фактом і вказує на позитивні зрушення в економіці. У IV кварталі 2016 р. зросли частка міжбанківських кредитів порівняно з попереднім періодом та частка коштів НБУ в пасивах у всіх кластерах.

Лише реальна підтримка клієнтами може підтвердити доцільність та ефективність окремих напрямів і стратегій розвитку банків, тому фактично на ринку банківських послуг, як і на будь-якому іншому, співіснують більш та менш ефективні, ризикові, внутрішньозбалансовані суб'єкти. Саме фактичний розподіл ринку підтверджує ґрунтовність вибраних цілей та ефективність їх досягнення.

Висновки

У сучасному макропруденційному нагляді бізнес-моделі відіграють важливу роль, оскільки дають змогу розуміти та зберігати гетерогенність елементів банківської системи, ідентифікувати та об'єктивно оцінювати ризики банку, на основі цього будувати ризикоорієнтовану систему банківського нагляду. Наявність чіткої, математично обґрунтованої методики розподілу банків за спеціалізованими кластерами дає змогу формалізувати підхід до сегментації банківського сектору. В основу такої методики покладено побудову карти Кохонена, яка є обґрунтованим інструментом кластеризації банків та аналізу структури банківської системи, дослідження характеристик її сегментів та основою для побудови ефективної моделі нагляду за діяльністю окремих груп банків.

Отримані результати дослідження дали змогу зробити висновок про доцільність зміни методології макропруденційного регулювання на основі диференційованих підходів до встановлення нормативних показників діяльності банків відповідно до специфіки виявленої бізнес-моделі. Така диференціація сприятиме зниженню системного ризику та підвищенню фінансової стабільності банківської системи.

Список використаних джерел:

1. Мікропруденційне та макропруденційне регулювання // AvinashPersaud // Уорвік, 2016 [Електронний ресурс]. – Режим доступу : https://www2.warwick.ac.uk/research/warwickcommission/financialreform/report/chapter_2.pdf.
2. Офіційний сайт Національного банку України, Метадані МФВ [Електронний ресурс]. – Режим доступу : https://www.bank.gov.ua/control/uk/publish/article?art_id=25852020.
3. Заруцька О.П. Структурно-функціональний підхід до аналізу фінансової стійкості банку / О.П. Заруцька // Вісник Національного банку України. – 2011. – № 4. – С. 34–37.
4. Панасенко Г.О., Бортніков Г.П. Модель бізнесу українських банків в залучені коштів клієнтів / Г.О. Панасенко, Г.П. Бортніков // Економіко-математичне моделювання соціально-економічних систем. – 2016. – № 21. – С. 228–254 [Електронний ресурс]. – Режим доступу : [file:///D:/Downloads/emmses_2016_21_15%20\(2\).pdf](file:///D:/Downloads/emmses_2016_21_15%20(2).pdf).
5. Рашкован В., Поکیدін Д. Кластерний аналіз бізнес-моделей українських банків: застосування нейронних мереж Кохонена // В. Рашкован, Д. Поکیدін // Вісник НБУ. – 2016 [Електронний ресурс]. – Режим доступу : <https://bank.gov.ua/doccatalog/document?id=42352928>.
6. Остервальдер А. Построение бизнес-моделей: настольная книга стратега и инноватора / А. Остервальдер, И. Пинье ; пер. с англ. ; 3-е изд. – М. : Альпина Паблишер, 2012. – 288 с.
7. Casadesus-Masanell R., Ricart J. E. From Strategy to Business Models / Long Range Planning. – 2010.– vol. 43. – S. 204.
8. Banking Business Models Monitor 2015 Europe // Rym Ayadi, Willem Pieter De groen, Ibtihel Sassi, Walid Mathlouthi, Harol Rey, Olivier Aubry, 2015 IRCCF. – Монреаль, 2016 [Електронний ресурс]. – Режим доступу : <https://www.ceps.eu/system/files/Banking-Business-Models-Monitor-Europe-2015.pdf>.
9. Regulation of European banks and business models: Towards a new paradigm // Rym Ayadi, Willem Pieter De groen, Emrah Arbak. – Брюссель, 2011 [Електронний ресурс]. – Режим доступу : http://aei.pitt.edu/47688/1/Bank_Regulation_in_the_EU.pdf.
10. Пантелєєва Н.М. Інноваційні бізнес-моделі банків як відповідь на виклики та наслідки фінансової кризи / Н.М. Пантелєєва // Фінансовий простір. – 2013. – № 3(11). – С. 70–76 [Електронний ресурс]. – Режим доступу : <https://fp.cibs.ubs.edu.ua/files/1303/13pnmibb.pdf>.
11. Captive bank // BubusinessDictionary.com [Електронний ресурс]. – Режим доступу : <http://www.businessdictionary.com/definition/captive-bank.html#ixzz3tU3cFeU0/>.
12. Бортніков Г.П. Моделі бізнесу банків / Г.П. Бортніков // Матеріали круглого столу кафедри менеджменту банківської діяльності КНЕУ «Перезавантаження банківської системи: особливості менеджменту та макропруденційний мандат НБУ» 29.11.2016 [Електронний ресурс]. – Режим доступу : http://kneu.edu.ua/userfiles/Credit_Economics_Department/KMBD/KR%20STIL%2029%2010%202016/bortnikov.pdf.

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UPDATING THE STRATEGY OF BUSINESS MANAGEMENT IN THE CONTEXT OF THE DEVELOPMENT OF ENTERPRISES IN THE SPHERE OF AGRICULTURAL MECHANICAL ENGINEERING

Summary

The main problems of the machine-building industry development are investigated. The analysis of change dynamics of the manufacturing volume of agricultural machinery main types in Ukraine is carried out. The offer structure at the agricultural machinery domestic market is defined. Questions of enterprises formation strategy as one of the essential components of strategic management are

considered. The scheme of management decisions adoption in forming the development strategy of the enterprise is offered. The main stages of management strategy of agricultural engineering enterprises are characterized. It is established strategic opportunities of practical implementation of the development strategy for the enterprises of the agricultural engineering industry.

Introduction

In conditions of integrating the national economy into the world economy and increasing competition in the domestic market, there is a acute problem before domestic agricultural engineering enterprises of finding an effective management system that would have been set to ensure their competitiveness through the use of complex domestic measures to adapt to market conditions that are constantly changing. According to these changes and operating conditions of the enterprises, managerial decision-making is changing and there is an urgent need for the application of strategic management. At the same time, the new management paradigm is based on increasing adaptability and effectiveness of economic systems in changing market environment. In this regard, a special relevance is acquired by the search for alternative decisions in the system of strategic enterprises management, the role and the significance of the development and implementation of business strategy are increasing. Therefore, when forming an effective control system of the modern enterprise in the sphere of agricultural engineering enterprise, the main attention has to be concentrated on the formation of strategic assets of the enterprise, providing a stability of its development, and also formation and use of competitive advantages in the context of strengthening its strategic position.

The perspective of the development of the enterprises in the sphere of agricultural engineering enterprises is thoroughly lit in professional literature. In particular, the operation of enterprises of agricultural engineering industry became a subject of researches of T. O. Tsarova, Ia. F. Navornyskyi, M. V. Malchyk, O. S. Yakymenko, N. P. Karachyn, M. P. Voinarenko. Questions of management strategies are discussed in the works of I. Ansoff, M. Meskon, A. Tompson., O. I. Kovtun, Z. Ie. Shershnov, T. S. Muliar, R. O. Poberezhnyi, L. V. Sokolova, O. V. Kolisnyk.

Noting a high level of the theoretical data processing of problems, it should be noted that there is a number of questions, concerning scientific and methodical support for the enterprise management and its interrelation with development strategies, which still remain unresolved in crisis tendencies of development of agricultural engineering industry.

Part 1. Analysis of the enterprises' activity of agricultural engineering industry

A feature of the modern development of industrial production is the forcedness of functioning in the conditions of a difficult political and economic situation in Ukraine, which is displayed on the activity of interconnected complexes, branches, and spheres, each of which is in close dependence on another. According to it, an activity in one sphere is capable of improving or deteriorating the economic situation in another one.

In particular, among industries, the considerable attention is paid to mechanical engineering, because the production of cars, except own attractiveness and importance, forms a basis for the effective economic activity of other sectors of the economy, due to providing their active part of fixed assets. For Ukraine, in view of the advance in the agrarian sector, the important place in the structure of the industry is taken by agricultural engineering industry. As this branch makes essential changes

to the process of economic reproduction providing technical requirements of the agricultural enterprises and also contributes to the development of agricultural and food branches, which are strategically important, as the state ensures food safety.

However, instability of the national economy has amplified imbalances of all production, commercial, and investment processes, financial opportunities of both consumers and domestic manufacturers of agricultural machinery have noticeably decreased.

According to experts, almost for 40% over the last two years, there was a reduction in output of cars and the equipment for agriculture and forestry in Ukraine (Fig. 1).

However, the enterprises of this branch are in active search for a solution to a problem of negative impact minimization of consequences of the financial crisis and a difficult economic situation, restoration of the pre-crisis situation in the market, and ensuring new competitive advantages in the long term prospects.

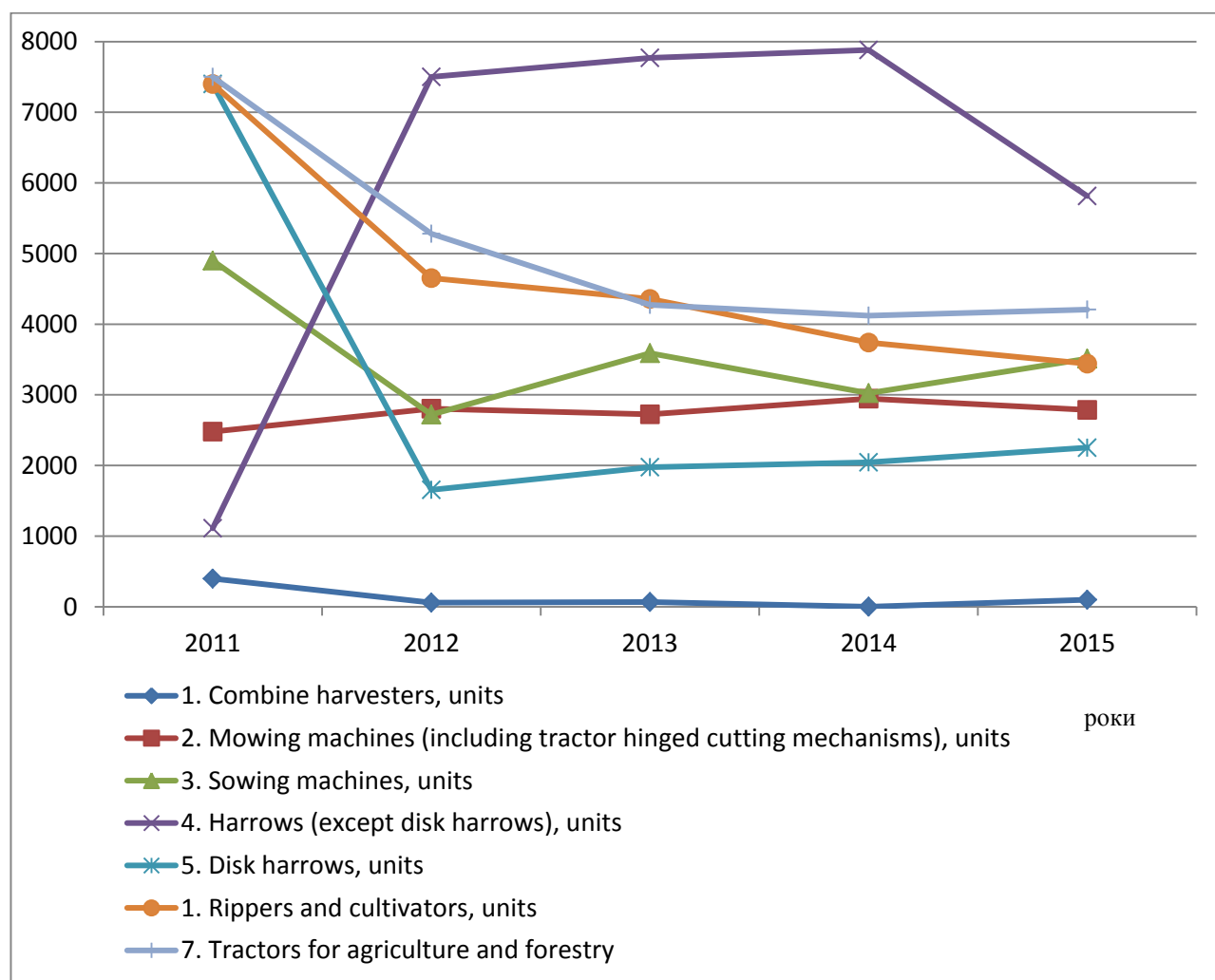


Fig. 1. Change dynamics of the manufacture of agricultural machinery main types in Ukraine, 2011-2015

Source: compiled due to: [1]

According to results of the carried out analysis of change dynamics of manufacture of main types of machines for agriculture in Ukraine in 2011-2015 (Fig. 1.), there is found an extremely negative dynamics of the output reduction of all types of agricultural machinery. Though during certain periods, a partial improvement of

factors has been traced, so in 2015 productions of combine harvesters, disk harrows, and seeders grew.

However, to implement further trend towards increasing production and achieving competitive advantages of domestic producers of agricultural machinery can be effective only if their business plan is developing constantly and there are continuous technical and technological improvements. Noting the increasing agricultural market volumes of Ukraine, there is a growing need to meet domestic market demands, involving the use of modern agricultural techniques and the implementation of advanced technologies. The offer in the agricultural machinery market of Ukraine is formed now by domestic automobile manufacturers, official representatives of foreign companies, and certain entrepreneurs (Table 1).

Table 1

**Purchase of new agricultural machinery
by agricultural enterprises in Ukraine, 2012-2015 [2]**

Category of power	Name of the producer / Years	2012	2013	2014	2015
up to 40 Kw, unit.	«Ahromash»	6	3	2	1
	«Belarus»	29	16	20	19
	«HTZ»	8	2	7	11
	«Foton»	6	19	7	15
	Others	40	44	23	43
from 40 to 60 kW, unit.	«Ahromash»	15	5	3	12
	«Belarus»	253	232	108	131
	«Kyi»	6	1	1	1
	«MTZ»	124	88	57	52
	«HTZ»	4	5	5	2
	«IUMZ»	4	1	1	1
	Others	52	39	39	23
from 60 to 100 kW, unit.	«Ahrotron»	39	41	27	21
	«Ahrofarm»	11	1	4	3
	«Belarus»	772	688	459	517
	«Kyi»	24	23	16	21
	«MTZ»	335	225	122	138
	«IUMZ»	10	3	1	2
	«Case»	13	9	17	28
	«John Deere»	57	40	21	17
	«New Holland»	34	38	30	41
	Others	128	118	84	96
over 100 kW, unit.	«Belarus»	165	153	88	79
	«Kyi»	7	16	1	11
	«LTZ»	5	4	2	1
	«HTA»	23	18	21	37
	«HTZ»	86	85	154	164
	«Case»	111	206	94	123
	«Fendt»	15	17	24	43
	«John Deere»	280	307	172	185
	«New Holland»	107	108	74	92
	Others	241	203	121	164

The capacity of domestic agricultural machinery market for today, by separate estimates, can make about 9-10 billion UAH and even more that in addition is confirmed by the growth of cars import for agrarian production. In such a situation, the domestic agricultural machinery market familiarizes itself actively with foreign manufacturing companies, which consider the Ukrainian market as one of the most perspectives in Europe. Particularly about 60% of import agricultural equipment is operated in some farms.

Having analysed the structure of agricultural machinery purchases on the example of tractors, we can see that, during the period from 2012 to 2015, demand for production of rural mechanical engineering enterprises has decreased in general. Although the number of the acquired agricultural machinery of foreign manufacture makes 81.2% that by 4 times exceeds volumes of an expenditure of funds for the domestic equipment. Consumers are ready to make investments in the acquisition of more expensive equipment of foreign production, which differs from domestic analogues in certain technical and economic performances [3, p. 108].

Therefore, in the category of tractors up to 40 kW, the leading positions are taken by the Minsk tractor plant production and Chinese «Foton» – respectively 19,5% and 22,62%. The domestic manufacturer of HTZ since 2014 has had the growing tendency of sales though insignificant and Agromash in 2015, conversely, sold only 1 unit. This situation is caused by the relatively high price at a relatively low quality.

In the category of 40-60 kW, an undisputed leader is Belarus – more than 85%, as well as in the category of 60-100 kW – nearly 78%. The most popular models proven for years are MTZ-82 and Belarus-892. In the same category, 60-100 kW, it is possible to note rather high rates of sales of such brands as Case, John Deere, and New Holland. At rather high price, these tractors have advantages: quality and comfortable conditions. Hampering braking factor of farms transition from Belarus into more comfortable and productive tractors is a rather high price. For example, in 2015 at the average, the price of MTZ-82 is 425-430 000 UAH the cost of an analogue of production of Case made about 910 000 UAH, that is 2.5 times higher.

In category over 100 kW for the analysed period, there are most sales in the John Deere Company – well-known company in Ukraine for a long time, even since purchases under guarantees of the state in the early 90s. HTZ and Case take respectively the second and third place [4, p. 67].

It should be noted that the product range about 70% of the equipment of foreign manufacture and only 30% of the equipment of domestic manufacture are presented in the Ukrainian agricultural machinery market today. We will notice that, on the one hand, it demonstrates that there is a growing solvent demand for qualitative agricultural machinery in Ukraine. Though it is quite a weak argument, considering that the domestic agricultural engineering industry with a further growth import risks to be enshrined in the category of depressive and subsidized branches of the domestic economy for a long time.

However, demand for high-technical and high-performance equipment of foreign manufacture in Ukraine is caused by the active development of agricultural holdings, which constantly increase land bank and have considerable financial means [5]. The vast majority of medium-sized manufacturers are forced to buy agricultural machinery, which was already in use.

Analysing current state and tendencies of the domestic agricultural engineering industry, it is noted their essential division into leading enterprises, which could update the production in time, and the inefficient enterprises, which have continued

to function by the principle of a lag effect. In particular, O. S. Yakymenko also adhered to similar conclusions [6, p. 142] (Table 2).

Table 2

Comparative characteristic of the agricultural engineering enterprises

Criterion	Leading enterprises	Inefficient enterprises
Amounts of financing of Research & Development	High share of expenses on Research & Development	Practically aren't financed
Workload level of production capacities	Up to 80%	30-50%
State of fixed assets and equipment, level of technological re-equipment	There is a continuous updating of the machinery and the equipment	Practically re-equipment isn't carried out
Availability of engineering manpower	70%	40%
Development and implementation of own leasing programs	Implemented	Not implemented
Ability to attract credit funds	There is a possibility of attracting soft loans	Inaccessibility of credit funds
Development of a network of technical service	High level of development	Not developed

Despite the general crisis state of this branch, in general, Ukraine succeeded to keep separate branches of agricultural engineering, which are able to compete in the market due to the relatively lower cost of production and existence of perspective developments on more acceptable for a domestic agricultural producer based on the price to quality ratio.

Among the most effective leading enterprises of agricultural engineering, it should be noted PJSC Kharkiv Tractor Plant and State Enterprise Production Association O. M. Makarov Southern Machine-Building Plant (tractors), PJSC Umanfermmash (the soil-cultivating and beet-harvesting equipment), PJSC «Berdyansk» Ahrotehservice (harvesters for cleaning sunflower, rotor mowers, mechanical grain loaders), CJSC Vinnytsia Experimental Plant, LLC Veles Agro (production of tillage and sowing machines), JSC Gidrosyla (hydraulic systems), LLC Tekhna (the equipment for farming poultry), JSC Boguslavska Silhosptekhnika (spraying machines for field crops), JSC Hmelnikselmash (mineral fertilizer placers) PJSC Fregat Plant (sprinkling machines for watering of crops) [7].

Despite the complexity of the situation, the domestic manufacturers are trying to be active. For example, HTZ declares plans for drawing up its production in the European Union. The plant also upgrades the line, introducing its tractors for farmers. The well-known Khersonmash has introduced a new technology of dyeing and has developed new accessories and harvesters for corn and sunflower. Bilotserkivmash has brought to the market the unit for the introduction of waterless ammonia.

However, there are few progressive enterprises; nowadays the activity of most of them is associated with mechanical engineering and only repair of machinery and equipment, which are not primary activities anymore. As neatly N. P. Karachin marks out «... deterioration in demand for the equipment for agriculture has resulted in the

need of search by machine-building enterprises of new kinds of activity for the purpose of bankruptcy prevention. In particular, more active enterprises have marketed other additional or non-core products, have offered services of the available equipment, and the enterprises which did not have such opportunity have chosen the rent-seeking or mixed behaviour type» [8, p. 116].

According to the present tendencies of development of branch in the context of the conducted research, we will note the potential and threats of the development of domestic agricultural engineering industry in the sphere of influence of standard and legal regulation by the state of development conditions of the branch. When analysing the list of threats, we considered only those, which are extremely urgent and have a system character. At a research of potential, there are considered determinants inherent on at the moment and which reflect potential today's opportunities of the internal and external existence of the enterprise [9].

The main obstacles to the development of agricultural engineering enterprises in Ukraine are: slow introduction of new fixed assets; considerable dependence on import of more competitive production; insufficient level of development of information and communication networks; inability to adapt quickly to changes in a world environment; lack of investments; low innovative capacity of the enterprise; dependence on import accessories; inadequate support of the state; deepening of scientific and technological lag of production; high credit rates; uses of expensive technologies; shortage of highly qualified personnel; lack of the weighed policy and strategy at the enterprise.

The prospects of development of domestic agricultural engineering industry are caused by the production potential for production of the machinery and equipment for agriculture and processing of agricultural production; a great potential demand in the domestic market; close and long relationships between the enterprises of the branch, a possibility of providing the accompanying services.

Summing up the aforesaid, reorientation of the domestic enterprises of agricultural mechanical engineering to release of high-quality technical means, which conform to the international standards and can compete with foreign analogues, – extremely difficult financially, scientific, and a labour-consuming task but also it is very important as its non-performance will inevitably lead not only to closing of international markets for domestic production but also to loss of the national consumer who can pass completely on more perfect and productive equipment and machinery of foreign manufacture.

In this regard, a special relevance is acquired by the need of strategic management of activity of the enterprises on the basis of scientific methodology of anticipation of their prospects and tendencies of the development. The effective instrument of perspective management of the machine-building enterprise activity is the formation of the development strategy, which will be directed to the development of the purposes of their achievement of providing an effective strategic position.

Part 2. Theoretical foundations of the management strategy formation of agricultural engineering enterprises

Considering the especially important role of the agricultural engineering for the agrarian sphere of the state and still the big unpredictability of the market situation development increased by financial and economic crisis, we consider necessary on the basis of the carried-out analysis of an economic situation in this branch to offer certain recommendations about the improvement of its state. Therefore, we consider that productive functioning of the enterprises of this branch provides the following

conditions: profitability, effective management, assessment, and the analysis of the factors influencing the achievement of economic effect, identification of reserves for maximizing the efficiency of productions, timely control of the activity. All this is a basis for the development of an optimum strategy of the enterprise, which will give the chance of forecasting of future parameters of functioning and development of the enterprise, and also react quickly to changes in the internal and external environment. The international experience shows that ability to create the effective mechanism of realization of strategic management is the most important factor of effective functioning and sustainable development of the modern enterprises.

Strategic management carries out a large number of tasks of the strategic analysis, development, realization, and control of realization of the enterprise strategy, on the basis of which it is possible to define the current state and prospects of the enterprise development. Strategic management concerns all system of the organization of management of the enterprise development during the long-term period of time so that as much as possible to use chance and opportunities and to avoid danger, which arises in its external environment [10].

In spite of the fact that strategic management is a means of successful survival in crisis conditions, in practice most of the national producers presented to the fields of agricultural engineering use operational management, which considerably contributes to the deterioration of their situation (Table 3).

Table 3

Comparison of strategic and operational management [11, p. 25]

Characteristic	Operational management	Strategic management
Mission and purpose	Production of goods and services for obtaining the income from their realization	Survival of the organization in the long term by means of establishment of the dynamic balance with an environment allowing to solve problems of the persons interested in the activity of the organization
Object of concentration of management attention	Look inside the organization, search for ways of more effective use of resources	Look outside the organizations, search for new opportunities in a competitive fight, tracking, and adaptation to changes in the environment
Taking into account the time factor	Focus on the short-term and medium-term perspective	Focus on the long-term perspective
Basis of building management system	Functions and organizational structures, procedures, equipment, and technology	People, systems of information support, market
Approach to human resources management	Employees are a resource of the organization, they are executives of separate works and functions	Employees are a basis for the organization, its main value, and a source of welfare
Criterion of management efficiency	Profitability and rational utilization of productive capacities	Timeliness and accuracy of the reaction of the organization to new market demands and changing environment

In the modern conditions, improving operation of the agricultural engineering enterprises is impossible without performance of a number of strategically important tasks, which are grouped in the following directions: increase in competitiveness and investment appeal of a machine-building complex; development of domestic market and support of export; develop domestic machine-tool construction; improvement of the structure of a machine-building complex; assistance on the development of results of scientific, developmental and technical and technological developments for the innovative development of agricultural engineering enterprises, growth of personnel potential. Therefore, there is a need for the development of strategic management at each machine building enterprise.

Strategic management is the kind of activity associated with the organization of continuous process of development, adjustment, and introduction of a set of the strategies at the enterprise for ensuring competitive firmness, future profitability, and achievement of other strategic objectives in the conditions of market instability of the environment, especially external taking into account its rapid changes, threats and opportunities, and also strengths and weaknesses of the enterprise.

It is known that a basis of strategic management includes a number of the interconnected concrete provisions, which can concern any field of activity of the enterprise strategy. We share a position of O. I. Kovtun that strategy is a plan of alternative adaptive actions (though actually these are actions themselves or even a search (a plan) for actions) to gain by the enterprise of an advantageous position in the market and achievements of steady competitive advantage for (with purpose) ensuring future profitability [10]. The scientist notes that the development of the effective strategy of the enterprise has to begin with the formation of its strategic vision and the choice of the development directions.

The strategic vision of the enterprise defines technologies, target audiences, geographical and commodity markets, perspective opportunities and lines, which it has to receive, get and establish for ensuring future profitability. Well, meaningful strategic vision prepares the enterprise for the future, helps to establish the long-term directions of the development, and indicates an intention of the enterprise to develop business in a certain direction [12].

In fact, the choice of the strategy means that the enterprise chooses the concrete direction from all possible ways of the development and ways of action, which open before it. A well-developed strategy is the foundation of the quality, the strong competitive position, and the formation of such an organization, which through improving the management structure and increasing organizational culture could operate successfully in tough market conditions.

The process of the development of the strategy, which includes strategic planning and strategic management, allows:

- support towards the future thinking and behaviour methods;
- coordinating decisions and actions in the field of marketing;
- serves to inform employees about the objectives and necessary resources;
- motivating employees if the achievement the objectives of the enterprise depends on the achievement of their personal goals (career, salary);
- creating prerequisites for an assessment and control of results [13].

In order to develop a successful development strategy of a particular company, you need a clear understanding at what point in this period of time it is. It is also necessary to define such important elements of its activity as a mission, competitive advantages, features of the organization of business, sales markets where the firm, manufacture (service), resources, structure, the production program, organizational

culture, which in the process of the economic activity implementation have to reach a synergetic effect. In this course, observance of methodological fundamentals of synergetics is considered extremely important: the system has to carry out the movement in nonlinear area of the space; need for the openness of the system, the exchange energy, and the information stream between external and internal environment; achievement of the coherence of the processes proceeding in the system; obligatory presence in the system of thermodynamic situations; ability of the system to have several ways of evolution [14].

The process of the development and the implementation of the strategy of the enterprise in scientific literature taking into account a significant amount of concepts of the strategic management process are presented differently. I. Ansoff, M. Meskon, and A. Thompson's concepts are well-known, however, all of them have a unique logical algorithm, and distinctions are shown by extent specification. Thus, summarizing scientific practices has allowed establishing a standard algorithm of the management decisions adoption when forming the strategic development of the agricultural engineering enterprises (Fig. 2).

The offered algorithm combines both the main functions on the development and strategy realization of the mechanical engineering enterprises and also the major actions for their practical embodiment. We will consider in more details each of the given stages and we will find out their general characteristics.

Stage I is targeting. The process of strategic planning, a starting point, as a rule, is a formation, a justification, the choice or view of the mission of the agricultural engineering enterprise. On the basis of the mission of the enterprise taking into account those market requirements, which it tries to satisfy better than competitors are concretized their strategic objectives.

Stage II is an analysis. The purpose of this stage is evaluating the level of development of the enterprise on the basis of definition and justification of the necessary and sufficient number of factors that show the status of the environment development of the machine-building enterprises. The result of this stage is formed and a reasonable set of factors that reflect the status of the environment development of the engineering companies, taking into account the impact of external and internal environment differences for enterprises [15].

Stage III is a choice of the strategy. The choice of the strategy defines justifications of that strategy from a set of alternatives, which is accepted by the enterprise for the realization as optimum considering its effectiveness and riskiness. At the same time, the enterprise has to carry out an assessment of the chosen strategy from the point of view of correctness while choosing the strategy of major factors, which determine possibilities of the final implementation of the strategy.

Stage IV is a development of the strategy. At this development stage of the strategy in the form of the business plan, the generalized assessment of the influence of all factors is given, the position of the enterprise in the market, the directions of strategic segmentation, features of strategic set management are defined, there are situations and strategic tasks and possible solutions.

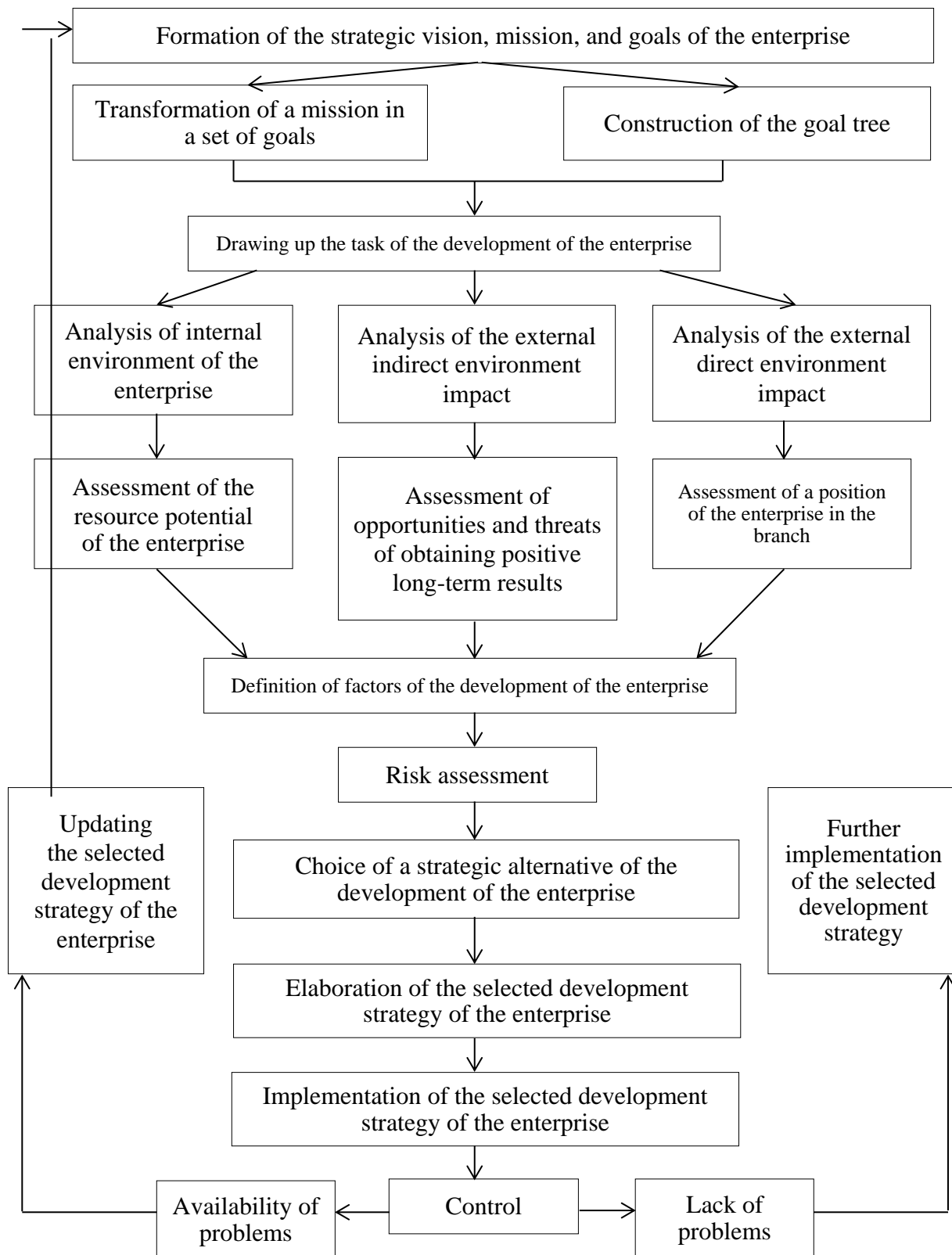


Fig. 2. An algorithm of the management decisions adoption when forming a strategic development of agricultural engineering enterprises

Source: compiled by the author, due to [12, 13]

Stage V is an implementation of the strategy. The main objective of the stage is: forming the strategic plan for the realization of the competitive strategy, which includes: development (research and improvement) of the organizational structure

intended for the distribution of duties and responsibility when performing certain tasks for the purpose of ensuring performance of the strategy; choosing (viewing and improvement) an enterprise management system, establishing methods of its adaptation to requirements of strategy; developing domestic and foreign policy and tactics of the enterprise; setting up the mechanisms of ensuring strategic business management; forming a plan of actions in unforeseen circumstances. The organizational structure of the enterprise acts as the instrument of realization of the developed strategy [16]. This stage results in defining perspective priority measures implementing the competitive strategy, which rating is determined by a complex assessment, characterizing the importance of each measure and deviation factors, which defines it. It is necessary to notice that only at effective implementation of the chosen strategy the enterprise will be able to achieve the strategic objectives, to fix the competitive positions in the market, and to provide further sustainable development in the conditions of the modern unstable competitive environment.

Stage VI is a control and an assessment. Controlling the implementation of the strategy is aimed at providing qualitative feedback through a constant tracking of the received results, comparing the purposes and preparing the conclusions about the efficiency of the operating strategy. The assessment consists of the definition of possible consequences of the chosen strategy implementation.

Stage VII is forecasting. The final stage, which is after assessing the effectiveness of the strategy, there is a correction of actions, which can concern both implementation strategy process and change of the strategy and even the goals of the enterprise.

We will note that each machine-building enterprise is under various operating conditions, therefore, implementation of considered above stages of an algorithm of management decisions adoption when forming strategic development will be successful when the managerial staff, at all levels of organizational structure of the enterprise, understands clearly objectives, reacts flexibly to changes, makes the least conflict solutions, and focuses on achieving the common goal. This task promotes the development of overall enterprise strategy, which refers to a system of interrelated strategies of its units to improve the situation and ensure long-term operation of the business.

Thus, stated above gives grounds for the following conclusion: practical realization created on the developed algorithm of strategy of management to the agricultural engineering enterprises will give the chance to achieve the planned strategic objectives, to strengthen the market positions in the future, and will allow to increase release of machine-building production on volumes and the nomenclature; to minimize influence of negative consequences of quick changes and uncertainty of the environment; to increase a share of domestic machine-building production in domestic market; to expand export deliveries; to increase competitiveness of production; to increase overall performance of branch; to accelerate restoration of fixed assets on the basis of increase in the volumes of investment into a machine-building complex and increase in level of investments in technological innovations; to increase labour productivity and level of the salary at the enterprises and in the organizations of a machine-building complex; it is essential to reduce probability of bankruptcy; to form the conditions providing social stability in regions, for which mechanical engineering is one of the key branches of the economy.

Research has given the chance to prove that the formation of strategic management at the agricultural engineering enterprises is imperative, which has to be based on integrated system approach, as the avowed focus of the world economy on

«knowledge and innovations» economy demands continuous monitoring and systematization of factors forming the condition of a business environment.

Conclusions

The analysis of domestic agricultural engineering industry indicates that the branch remains technically imperfect, and insufficient development of the domestic market in the future can become a powerful factor of decrease in growth rates of industrial production. A significant amount of production is made with the use of outdated technologies, the level of power consumption of production is high, and separate types of the manufactured equipment at «exit» from the enterprise are obsolete in comparison with foreign analogues. Such a situation is caused by the lack of accurately expressed strategic orientation, flexibility, and adaptability to quick changes of the external environment. To overcome these problems, the agricultural engineering enterprises need to develop an accurate development strategy, which is one of the essential components of strategic management.

The developed approach to the formation of the management strategy of the agricultural engineering enterprises provides an application of SWOT-analysis of their activity, which, in turn, is based on the use of the cluster analysis, an assessment of competitive advantages, the determination of probable approach of threats from an external component of the competitive environment, and their influence on the activity of the enterprise.

Implementation of the algorithm of acceptance management decisions, specified in the article, when forming strategic development of the agricultural engineering enterprises, will promote a minimum negative impact of the environment, to significant improvement all indicators, which characterize not only financial and economic activity but also competitiveness of production, and will be provided by stability of the enterprise in general.

Strategy compliance with conditions of a certain area, purposes, potential and resource opportunities, advantages of the agricultural engineering enterprise are effectively formed, including the long-term action programs on functional activities and directed to the effective implementation that will provide the enterprises the survival and continuous development. Therefore, forming new thinking at heads has to be guided by the formation of the environment for successful perspective activity by means of new approaches to the formation and implementation of the enterprise strategy that is the cornerstone of strategic management.

References:

1. Official Website of the State Statistics Service of [Electronic resource]. – Access mode: https://ukrstat.org/uk/operativ/operativ2007/pr/prm_ric/prm_ric_u/ipv2013_u_bez.html
2. Statistical bulletin «Purchase of Technical and Material Resources for Production Needs of the Agricultural Enterprises» in 2012-2015. [Electronic resource]. – Access mode: https://ukrstat.org/uk/druk/publicat/Arhiv_u/07/Arch_kmt_bl.htm
3. Tsarova T. O. Innovative technological development of the machine-building in Ukraine / T. O. Tsarova // Economic Bulletin of the National Technical University of Ukraine. «Kyiv Polytechnic Institute». – 2015. – № 12. – P. 468–476.
4. Navrotskyi Ia. F. The current development of agricultural machinery [Text] / Ia. F. Navrotskyi // Economic Analysis: Coll. Science. Labor / Ternopil National Economic University; Editorial Board: V.A. Derii (chief), and others. –
5. Ternopil: Publishing and printing center Ternopil National Economic University, «Economic thought», 2015. – Volume 19. – № 3. – P. 63-69. – ISSN1993-0259.

6. Malchyk M. V., Popko O. V. Marketing researches of the state and prospects of development of the agricultural machinery market in Ukraine – [Electronic resource]. – Access mode: <http://dspace.nbu.gov.ua/bitstream/handle/123456789/113927/26-Malchik.pdf?sequence=1>
7. Yakymenko O. S. Features of strategic management of the agricultural engineering enterprises development / O. S. Yakymenko // *Recent economic problems*. – 2013. – № 9. – P. 138–144.
8. Voinarenko M. P. Applied principles of investment of the of agricultural engineering enterprises. – [Electronic resource]. – Access mode: <http://www.economy.nayka.com.ua/?op=1&z=5523>
9. Karachyna N. P. Concept of development of domestic machine-building enterprises in the context of safety of their economic behavior / N. P. Karachyna // *Актуальні проблеми економіки*. – № 3(117). – 2011. – С. 115–130.
10. Karachyna N. P. Functioning of the branch of agricultural mechanical engineering of Ukraine and potential of its development Функціонування галузі сільськогосподарського машинобудування України та потенціал її розвитку – [Electronic resource]. – Access mode: <http://karachyna.vk.vntu.edu.ua/file/2bd6369c3fe521e8e4c0244cab6a5ea5.pdf>
11. *Strategies of the enterprise: monograph* / Kovtun O. I. – Lviv: Publishing house of Lviv Commercial Academy, 2008. – 424 p.
12. Shershnova Z. Ie. *Strategic management: Textbook*. – 2nd ed., Revised. and add. – К .: KNEU, 2004. – 699 p.
13. Savchenko Iu. T. Establishment of the development strategy of machine-building enterprises in a chain of deliveries [Electronic resource]. – Access mode: http://ena.lp.edu.ua:8080/bitstream/ntb/29526/1/049_316_324.pdf
14. Muliar T. S. Establishment and implementation of enterprises' strategies [Electronic resource]. – Access mode: http://nbuv.gov.ua/UJRN/znptdau_2013_2%286%29__35
15. Kolesnikov A. A. Synergetic theory of management: concepts, methods, development tendencies [Electronic resource]. – Access mode: <http://cyberleninka.ru/article/n/sinergeticheskaya-teoriya-upravleniya-kontseptsiimetody-tendentsii-razvitiya>
16. Poberezhnyi R. O. Formation of the development strategy of machine-building enterprise on the basis of the balanced system of factors [Electronic resource]. – Access mode: http://repository.kpi.kharkov.ua/bitstream/KhPI-Press/17677/2/dysertatsiia_2015_Poberezhnyi_Formuvannia.pdf
17. Sokolova L. V. Kolisnyk O. Scientific and methodical approach to formation of management strategy of small enterprises [Electronic resource]. – Access mode: <http://dspace.uzhnu.edu.ua/jspui/bitstream/lib/10963/1.pdf>

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THE METHODOLOGY OF BUSINESS PROCESS MODELLING IN PHARMACEUTICAL ENTERPRISES MANAGEMENT

Summary

The study's aim is to consider the modern directions business processes modelling in pharmaceutical enterprises management. The research determines problems of functioning of pharmaceutical industry in Ukraine. It classifies the main business

processes of the pharmaceutical enterprises by taking into account the specifics of the industry. The analysis of domestic developments in business process management of pharmaceutical enterprises is conducted by using the economic-mathematical and simulation methods. The study justifies the necessity of using a multi-approach paradigm of simulation modelling and fuzzy expert systems of approximate reasoning as a complex method of researches. The software platforms for implementing the recommended mathematical apparatus are viewed. The current directions of research for the future are identified.

Introduction

At the present stage of the development of the domestic economy, a special importance is attached to the improvement of the efficiency of the functioning of industrial enterprises as the main business entities at the micro level. The transition from a functional to a process management paradigm attracts attention to the basic business processes that determine the final indicators of their activities. Under these conditions, researches of supply-side business processes, taking into account the specifics of industries, are central to the list of management tasks facing enterprise management.

Despite significant development problems, the pharmaceutical industry of Ukraine is one of the spheres of the industry with the highest potential for innovative growth. Ukraine ranked fourth among the CIS countries in the consumption of pharmaceutical products. At the end of 2016, the volume of pharmacy sales of all categories of goods reached 60 billion UAH for 1.6 billion packs, which indicates the growth of the market in both monetary (at the level of 21.9%) and in natural (5.7%) expression [20]. At the same time, in the total number of producers operating on the pharmaceutical market, only a third part is domestic enterprises. According to statistics, the needs of Ukrainian consumers are provided medications of their own production on average by only 25%, while 75% are medicines of foreign production [20]. Structure of pharmacy medicines sales for the period 2014-2016 years is shown in Figure 1.

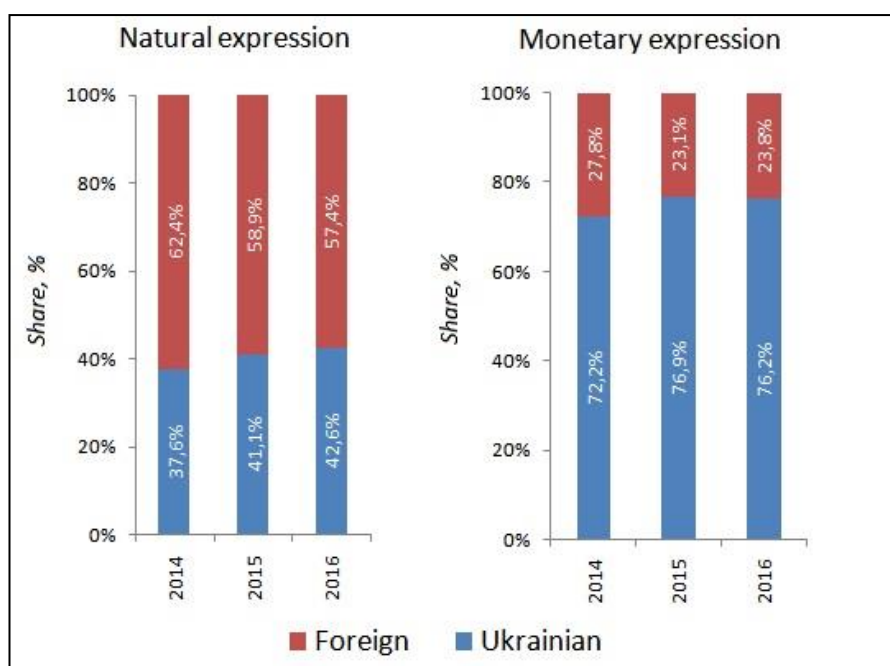


Fig. 1. The structure of pharmacy medicines sales for the period of 2014-2016 years

Source: [20]

Among factors, constraining the pharmaceutical market growth, one can note its imbalance in monetary and natural expression, the excess of supply over demand and the high degree of fragmentation. The effectiveness of domestic producers is affected by the inadequate use of the resource potential and lack of a quality management system. High level of competition, import dependence, tight state regulation with insignificant financing, insufficient volumes of attracted investments are exacerbating the problems of the enterprises of the pharmaceutical industry.

The researchers and practitioners have devoted a significant number of works to a wide range of tasks of the functioning of pharmaceutical enterprises, among them [1-4; 6; 9; 11; 12; 16-19; 23-25; 28-33] and others. At the same time, full-fledged research is impossible without the involvement of a serious mathematical apparatus.

A highly competitive environment with a significant degree of entropy, intensive changes in the supply of new products and market demand, the seasonal component, special requirements to storage and transportation of medicines etc. are put forward significant requirements to the mathematical basis of research pharmaceutical enterprises activities: flexibility, adequacy of real objects, optimal complexity, promptness of obtaining the necessary results of calculations. In this regard, it is advisable to conduct an analytical review of existing developments in this field.

The necessity to take into account the specifics of the functioning and development of pharmaceutical industry in Ukraine limits further analysis of results by studying the works only Ukrainian specialists and authors of the CIS member countries.

Part 1. Analytical review of the solved tasks and used mathematical apparatus

At the present stage of development of market relations, the commercial success of a pharmaceutical enterprise depends not so much on the efficiency of production management, as on the quality of organized business processes. The corporate strategy is developed on the basis of the solving problems in logistics, management, and marketing.

Analytical review of the literature on existing models and methods of managing business processes of pharmaceutical enterprise allowed distinguishing the following groups:

- assortment management;
- analysis of demand for products;
- forecasting of sales volumes;
- inventory management;
- pricing management;
- logistics optimization;
- planning of costs and incomes;
- assessment of competitiveness;
- risk analysis.

A system analysis is a complex approach to study the business processes of a pharmaceutical enterprise, it is mainly used in practice research of assortment management, forecasting of sales volumes, inventory management, pricing management, assessment of competitiveness and risk analysis [4; 16; 17; 19; 28-30].

The business process of assortment management of a pharmaceutical enterprise is sufficiently studied among domestic and foreign authors. As a rule, optimization of the commodity assortment is carried out, using the operations research methods (linear and nonlinear programming), statistical and simulation modelling, methods of game theory.

The study [3] highlights the idea of initial problem decomposition and its reduction to the approved mathematical programming methods with limitations that reflect the probabilistic nature of the problem. In the study [28], the key indicators for assessing the assortment management effectiveness indicators are singled out and analysed. In the study [25], the assortment optimization tasks are solved by using the dynamic assortment classification model, which is based on the cluster analysis methods and the retail network organization principles of the pharmaceutical enterprise. In the study [5], the author applies the game theory to choose a preferred supplier and the simplex method for order nomenclature forming from the selected supplier, which allowed automating the decision-making process and significantly simplifying the algorithm for choosing the supplier and forming his order through the use of a two-level analysis.

The pharmaceutical enterprises' assortment policy is formed on the basis of studying the market demand for finished products. The specificity of the industry implies the presence of non-stationary processes, the necessity to take into account seasonal variations and territorial needs in various medicinal products (depending on the ecology of the region and the frequency of related diseases).

In view of this, the mathematical apparatus of research of this business process group is presented, mainly, by statistical and simulation modelling. The sources [17; 24; 31] analyse the demand for pharmaceutical products using the system dynamics and discrete event modelling in the AnyLogic software environment, justify the application of the demand function normal distribution, study the dependence of demand volume on the determined factors as a linear function with the demand curve construction and definition of its elasticity.

The methods of statistical modelling, the method of dynamic indicators and the time series research methods are mainly used for forecasting sales volumes. So, in the research [32], the author studies the sales volume as a random event and conducts series of statistical tests, the set of obtained results are processed by mathematical statistics methods that allow obtaining an approximate estimate of the sales level.

In the work [24], a special attention is paid to studying consumer behaviour and forecasting the dynamic sales volume to maximize the satisfaction of needs by using the trend-based extrapolation method. Trend-based extrapolation includes: collection of empirical information from historical indicators; the choice of the optimal function form (logarithmic, exponential, parabolic or straight line equation), describing the indicated series taking into account its smoothing and equalization; calculation selected parameters or the extrapolation function; implementation of the forecast for the future to the selected function. In the study [28], the author analyses the time series of sales to determine the seasonality of each product. Next, he analyses the estimate of the accuracy of forecasting for categories of seasonal and non-seasonal products. Statistical processing of results is carried out using the Fisher and Sheffe criteria. From the researcher's point of view, for the forecasting of seasonal medicines sales, the method of extrapolation with taking into account seasonal variations is the most optimal and for the forecasting of non-seasonal medicines sales method of simple extrapolation should be used.

The traditional direction of economic business processes research is the inventory management tasks solution in relation to various industries enterprises. However, for pharmaceutical companies that have a clearly defined specificity of maintaining stock levels (accounting for the medicines shelf life and special requirements for storage conditions), these studies are not very broad.

Simulation modelling as a method of pharmaceutical enterprise inventory management is used in studies [4; 21; 25; 28; and 31]. They offer a technology for

constructing a simulation mathematical model of inventory management that is based on a system approach and allowing building adequate models in the changing market of medicines. Statistical methods and models of inventory management have found application in studies [24; 28 and 30]. Thus, for the purpose of modelling the process of managing material flows and products inventories, the characteristic features of the pharmaceutical market commodity mass as a whole and product groups, in particular, were identified, taking into account the consumer properties medicines specific features and medical products. In the research [11], the author proposes the application of game theory methods in managing the processes of creating optimal stocks of raw materials, billets, and packing in warehouses and pharmacies.

One of the urgent problems arising in the field of the pharmaceutical industry is pricing. The industry specificity presupposes a flexible, ever-changing policy for the pharmaceutical products pricing, taking into account the influence a large number of factors of the external and internal environment.

The most significant contribution to the solution of this problem belongs, in our opinion, to A. Stepanov [28]. The author's works reveals the complex of issues such as: the justification of the methodology for assessing price changes in the pharmaceutical market; the description of algorithms for determining the base prices and approaches to individual price proposal formation on pharmacies; the systematization of time series of price changes; the implementation of a client-oriented price control strategy for price-sensitive pharmacy organizations.

A large class of pharmaceutical logistics management tasks is solved by using the operational research methods (linear and nonlinear programming, transport tasks) [6; 11; 30; and 32]. This is a complex approach to modelling the overall task of commodity circulation optimal management in a multilevel logistics network as a set of interacting economic-mathematical models of optimization and forecasting managerial logistics solutions. The economic-mathematical model of the optimal goods distribution by warehouses is aimed at minimizing the company's costs associated with inter-warehouse transportation. The scarce goods management model takes into account the penalty size for short delivery, allows reducing the amount of goods reserved for a particular customer, prioritizing the most important of them.

The recent years, developments in the pharmaceutical logistics management field include the use of simulation methods. In studies [1; 28; 31; and 33], the various models' modifications of pharmaceutical products warehouses are presented, in particular, the authors study the problems of commodity items placement in the warehouse (splitting into slots) and selection opportunities of the optimal routes for pre-order production and further products shipment.

In practice, specialists use time series analysis and economic-statistical methods in order to plan costs and incomes [2; 11]. The authors are proposing a technique for forecasting the pharmaceutical company performance indicators on the basis of one-dimensional time series. Correlation-regression analysis is used to study the impact of commodity turnover on the circulation costs level (pair correlation) and the group structure of commodity turnover on the level of circulation costs (multiple correlation). With the help of this technique are analysed the labour productivity, the number of personnel, the level of trade overlaps depending on the commodity turnover, its structure and a number of factors reflecting the under-investigation process specificity. Planning of circulation costs level is carried out based on the established in analysis baseline indicators of the reporting year taking into account the expenditure levels dynamics over a number of years.

Among the researchers dealing with the problems of assessing the pharmaceutical enterprises' competitiveness, it should be noted, in our opinion, the authors of researches [12; 18; 23; and 29]. Their works reflect interesting approaches to the application methods of statistic, dynamic indicators, and game theory.

So, in works [18; 23] an effective mechanism is proposed to strengthen the financial-investment potential of the pharmaceutical industry in Ukraine by the cluster formation method. Clusters are seen as an important precondition for increasing the competitiveness, productivity, and success of both a single pharmaceutical enterprise and the industry as a whole by providing improved services, knowledge infrastructure, co-financing, risk sharing. The clusters development in the pharmaceutical industry allows the goals and tasks coordination to participants in the pharmaceutical regional cluster in order to achieve a synergistic effect of cluster member's innovative activity development, the introduction of original medicines, the latest technologies for their production, modern management methods, medicines promotion organization in the Ukraine's pharmaceutical market and beyond.

The author of the research [29] shows the necessity to improve and carefully model competitiveness management systems that take into account flexibility, rapid response to changes in the internal and external environment that ensure a high level of competitiveness in the short and long term. The research is based on the application of applied economic-statistical methods: data grouping, comparative analysis method, organizational-structural modelling, expert evaluation method.

In the work [12], the estimation of pharmaceutical enterprise competitiveness is proposed by means of a business game. In the gaming environment, the unity of knowledge principle is effectively realized. Wherein, knowledge is acquired not abstractly but in the real process of information support for game actions participants, in the dynamics of the business game plot development, in the formation holistic image of a professional situation.

With regard to risk assessment, traditionally numerous studies are conducted on the basis of medical institutions. In the direction of the risk analysis associated with the production and marketing of pharmaceutical products, the research methods' implementation is based on simulation approaches [9]. The given work is devoted to problems of risk estimation on the basis of simulation stochastic modelling, in it the algorithm of a risk quantitative estimation based on simulation. The author suggested a classification of the main risk factors, presented analyses of the approaches to quantifying risk based on simulation modelling. He showed that the main approaches, which take into account the features of innovative projects, are methods based on the stochastic graphs analysis. The author suggested a mechanism for constructing business processes information models in the stochastic graphs form with cycles to study the influence of risk factors on the innovative projects' efficiency.

Thus, based on the review we can conclude that the most applicable mathematical apparatus are investigating operations methods, statistical, and simulation modelling. Concerning the latter, it is necessary to emphasize a limited number of typical complex developments. The prevailing are applications aimed at researching narrowly specialized spheres of pharmaceutical industry entities activity.

As for the nomenclature of tasks solved by using economic-mathematical and simulation methods, it is rather limited and does not fully meet the necessity of managing the main industry business processes.

The literature review on the problems under consideration of the pharmaceutical industry and the various research methods application is presented in Table 1.

Table 1

The literature review on the application of the mathematical research apparatus in the tasks of business process management in the pharmaceutical industry

	Assortment management	Analysis of demand for products	Forecasting of sales volumes	Inventory management	Pricing management	Logistics optimization	Planning of costs and incomes	Assessment of competitiveness	Risk analysis
Simulation modelling	[28]	[31]		[4; 21; 25; 28; 31]		[1; 28; 31; 33]			[9]
Statistical methods and models	[25]	[17]	[28; 32]	[24; 28; 30]	[28]		[2; 11]	[18; 23; 29]	
Methods of linear programming	[3]					[6; 11; 32]			
Methods of time series research			[28]		[28]		[2].		
Method of dynamic indicators		[24]	[24]						
Methods of game theory	[4]			[11]				[12]	
System analysis	[19; 28]		[4; 30]	[28]	[17]			[29]	[16]

Specific gravity of the solved problems in the investigated field is presented in Figure 2.

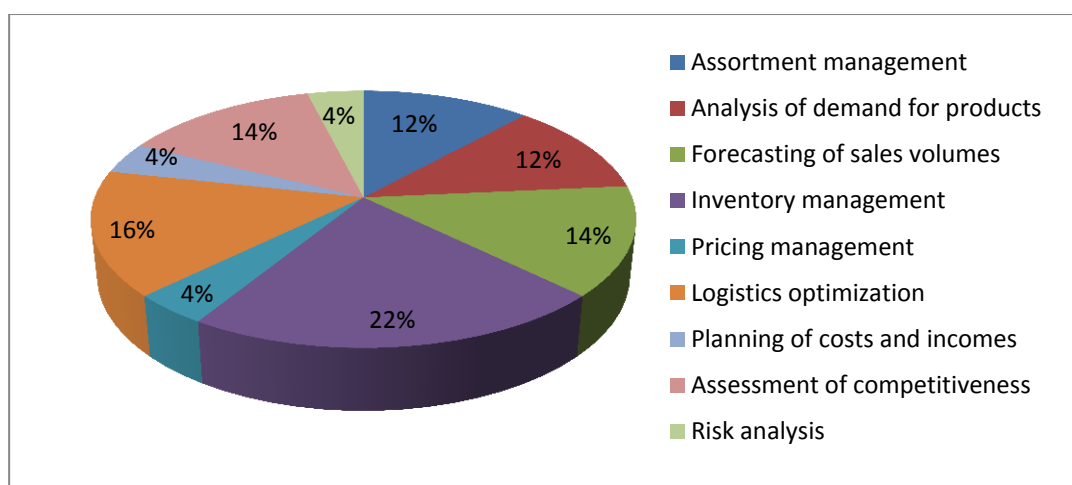


Fig. 2. Specific gravity of the solved problems

Source: the author's development

The specific gravity of the used mathematical methods for solving various problems in the pharmaceutical industry management is presented in Figure 3.

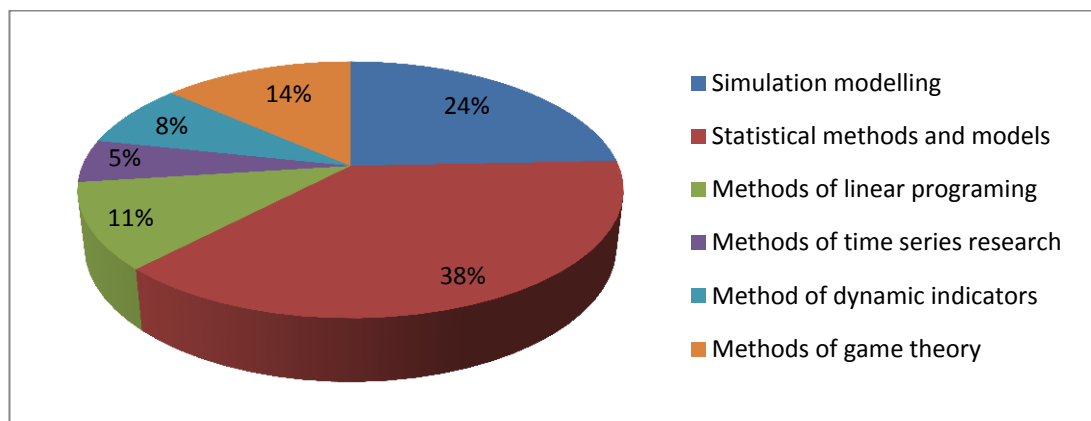


Fig. 3. Specific gravity of the used mathematical methods

Source: the author's development

The above review does not consider the application methods of fuzzy mathematics and expert systems because the authors do not know any significant applications (domestic origin) of this apparatus in the study area.

The functioning of pharmaceutical enterprises as complex economic systems requires a comprehensive solution of diverse tasks arising in the external and internal environments their activities. This, in turn, requires the involvement of a diverse mathematical apparatus that allows obtaining solutions from different viewpoints.

Part 2. Simulation modelling and expert systems – complex apparatus of researches

Conditionally, the whole set of applied methods can be divided into quantitative and qualitative, proceeding from the results that they are able to provide. The authors consider this division is justified from the viewpoint of the factors of nature, affecting the final activities results of the enterprises under study: quantitative – factors that can be completely formalized; qualitative – factors that are subject to formalization only partly or are not amenable to at all. If the class of the first one is relatively applicable in practice (which is confirmed by the above review), the second one is represented very little or not represented generally. However, the attraction of fuzzy mathematics methods and expert systems (ES) based on the fuzziness apparatus can provide interesting and even unexpected results that have a significant impact on the management decisions taken.

With regard to quantitative methods, the industry specifics require the construction of stochastic models that are flexible enough, with a parametric setting that can take into account the pharmaceutical market dynamics and, accordingly, the production-marketing processes. The modern approach that meets the set tasks is simulation modelling, which, according to the results of the presented analytical review, gradually finds its place in the mathematical research arsenal.

According to the authors, the symbiosis of simulation modelling and the expert systems apparatus (for example, fuzzy expert systems of approximate reasoning) can become an analytical basis for making managerial decisions in the pharmaceutical industry.

Simulation can implement a significant set of tasks, in particular, due to the modular and open nature of models, it is possible to attract various methods (for example, optimization methods) in individual model blocks.

In the methodological plan at the present development stage of simulation modelling, three main approaches are allocated [5; 8; 10; 13-15; 22; and 26]:

- System Dynamics modelling;
- Discrete Event modelling (process-centric);
- Agent-Based modelling.

The discrete event approach is used, as a rule, at the operational and tactical level. System dynamics provides a high level of abstraction and can be used to solve strategic tasks. The spectrum of agent-based models application includes tasks of any abstraction level. The discrete event approach looks at the system from the top down, analysing it at the system level. Agent-based modelling is the bottom-up approach: the model focuses on the behaviour of individual objects.

Discrete event modelling provides a detailed simulation object representation; the dynamics of its development is determined by generating elementary events in a certain sequence. The process of simulation is a dynamic system transition from one state to another based on the event concept. When using this approach, the task of the researcher is to describe events changing the system state and determine the relationship between them.

With the help of this approach, for example, the managing production processes of specific medicinal products can be modelled, it will solve the operational scheduling tasks, warehouse stocks management of raw materials and finished pharmaceutical products and so on, that is tasks requiring a high detail degree.

Stream simulation methods are used when the simulation object dynamics is determined in the evolutionary changes form, without the reproduction of individual elementary events. Objects models are represented in this case as the interaction of diverse flows. The flow concept provides for a high degree of processes aggregation that occurs at the research object.

The flow approach is implemented based on the method of system dynamics proposed by Jay Forrester in the early 1960s [10]. Fundamental notions of the method are the flows and fund concepts (accumulator, reservoir). The simulation object is represented as a dynamic system consisting of funds interconnected by flows. The content of the funds is measured by their level, and the intensity of the flows is determined by the tempo or speed of funds contents movement.

These notions are sufficiently universal and can be easily interpreted in terms of the subject area being researched. For example, in the form of funds can be: individual pharmaceutical production units or departments apparatus of enterprise management; raw materials or finished products warehouses; distribution links – pharmacies, wholesale pharmaceutical companies, medical-preventive institutions; advertising budget in the framework of enterprise marketing strategy; the incoming investments volume, pharmaceutical companies settlement accounts, distributors including importing firms and so on.

Flows can reflect various processes – material, financial, information, human resource movement and other. Their paces are determined by management decisions forming based on information about the state of the levels. As flows can be: orders for the medicines production; production process capacity; deliveries of finished products to the enterprise warehouses and to the pharmacy network; sales intensity in the retail network, by specific pharmacies; raw materials supply; enterprise financial

flows; cash flow on settlement accounts; logistic business processes; labour resources movement in enterprise units, sales system and so on

The researching purpose an object with help the system dynamics method is to study the dynamic features of the system, its behaviour in time for a given initial state and control parameters values.

Agent-based modelling is the relatively new modern approach in simulation modelling. The agent-based model defines the investigated object in the form of separate specified active subsystems (agents). From the viewpoint of practical use, the agent-based modelling studies the decentralized agent's behaviour and its effect on the behaviour of the entire system as a whole [5, 13, 14 and 22]. The developer enters agent parameters, determines their behaviour and model environment, and establishes the relationships between agents and the environment of their operation during the construction of the agent model.

Agent-based models purpose is to get an idea of the global rules, the general system behaviour based on assumptions about the individual behaviour of individual active objects and their interaction in the system. Such models are used for the decentralized systems study, their functioning dynamics are determined not by global rules and laws but, on the contrary, global rules and laws are the results of group member's individual activity.

Thus, the method basis is not to find the optimal economic equilibrium but to determine the nature of complex phenomena and processes. Emergent behaviour is the result of the system elements interaction. In this regard, the correct reproduction of behaviour and elements interaction mechanisms has a great importance.

Medicines buyers, orders for the production of specific nomenclature items, medicines packages, distributors, raw material suppliers and others can act as agents in the studied subject area. A whole tasks complex of marketing pharmaceutical enterprises management can be solved used the agent-based approach since its specificity corresponds to the ability to reproduce changes in the pharmaceutical market, in particular, seasonal fluctuations in demand, price changes, actions of competing firms.

The choice of a methodological approach to modelling ultimately depends on the tasks specific and the ultimate objectives of the study. At the same time, in real practice, there is a constant need for a combined use of different approaches within a single model that is in multi-approach modelling [14; 22].

The necessity of using a multi-approach paradigm of simulation modelling arises in the following cases:

1. The simulated system contains various objects, the modelling of which implies the use of different approaches.
2. Within one model is a necessity the variation of different abstraction levels.
3. It is easier to describe individual parts of the model by using different approaches.

Modern simulation modelling involves a symbiosis of diverse information technologies with a developed graphical interface and results animation, provides a significant basic concepts choice of formalization and structuring simulated systems and processes.

The dominant special simulation software platforms are GPSS, BPsim, PowerSim, Ithink, Simplex, Modul Vision, Triad.Net, CERT, ESimL, Simulab, NetStar, Pilgrim, MOST, COGNITRON, ARENA, AnyLogic, and others.

One of the most common is the AnyLogic system, which supports all the above approaches on a single platform in recent years [5; 13; and 15]. The examples of

simulation models in the pharmaceutical enterprises' management and their sales systems implemented on multi-approaches platforms are in [21; 31].

In our opinion, one of the productive directions analyses of the pharmaceutical companies business processes implementation complementing the quantitative results of simulation experiments can be considered the attraction of approximate reasoning fuzzy expert systems, for example, the fairly common shell of CLIPS and its numerous clones, in particular, FuzzyCLIPS [26; 32].

The using fuzzy expert systems advantages are briefly considered on the example of FuzzyCLIPS:

1. The system allows taking into account the vagueness of the input variables, that is, the primary facts, which influence the final results of various economic situations arising in the pharmaceutical enterprises' production and distribution activities. Within the system, it is possible to describe the membership functions of the fuzzy variables used, that is, to define fuzzy sets within the framework of universal factors (facts) sets. Wherein, the number of fuzzy variables is not limited. Different types of membership functions can also be used.

2. In the system along with the fuzzy, it is possible to complex use of clear variables (not requiring the assignment of membership functions). Thus, the set of factors (facts) that make up the knowledge base maximally reflects the real the object under study state from the viewpoint of the influence diverse nature factors on its activity.

3. By the conclusion of the consultation, the user receives diverse results. First, it is a fuzzy result, that is, the dynamics of the possible process development. Secondly, there is a clear result obtained during the transformation of fuzzy resultant dynamics, concentrating the researcher's attention on the most probable area of finding the future result.

4. The system does not require any special knowledge from the user (except knowledge of the subject domain), it is easy to master. In other words, apparatus under study can be used by non-professionals.

5. A flexible built-in meta-component is available. This is important because the ES explains the mechanism of its reasoning and conclusions after the process of analysing the situation described by the user. Wherein, the user can ask fuzzy questions.

6. The main operational characteristics of the system are portability, capacity, and ability to expand.

7. The system has a friendly user interface. User communication with the system is realized in a limited natural language by using a multi-window interface.

Various foreign studies have shown that the influence of qualitative factors on the resulting economic indicators can be much stronger and more prevalent than the influence of quantitative factors. In addition, it can be multidirectional influences. In such conditions, an adequate assessment of the investigated business process development can be formed only through an all influences complex analysis.

The use case library formation and storage is the user-friendly feature of expert systems. The experience of past expert consultations and the results of really accepted management decisions are taken into account by the ES in the logical reasoning course and the recommendations formation to users. This feature perfectly complements the capabilities of powerful simulation platforms (such as AnyLogic) for storing the numerous model runs results, carrying out various experiments types (for example, sensitivity estimation, optimization, parametric experiments, and others).

The joint operation of the above mathematical apparatus can be included in the contour of decision support systems at the pharmaceutical enterprises level and the industry as a whole because it facilitates the formation database and knowledge base in relative to the dynamic development of the business processes under study.

Conclusions

The results of the analysis carried out allow making a number of conclusions and proposals.

For stable development and dynamic growth of the Ukrainian pharmaceutical market, an important condition is an increase in the efficiency of the domestic pharmaceutical enterprises functioning. The attracted mathematical tools play an important role in improving the business processes management of the studied objects.

The review of the most significant developments in the sphere in question allowed generalizing the main using directions mathematical methods and models in the context of the solved problems with their assignment to certain business processes management groups. The analysis carried out showed the uneven coverage of business processes by research involving mathematical tools. Among the problems often solved are the tasks of assortment management, the forecasting of sales volumes, inventory management, and logistics optimization. The most common mathematical apparatus is methods of operations research, statistical, and simulation modelling.

In general, the existing level of attracting special mathematical tools is clearly insufficient taking into account the analysis a set of directions and tasks to be solved. Further dynamic industry development dictates the necessity for a wider and more systematic use of the modern mathematical base, as an analytical basis for the adoption of operational and strategic management decisions.

In line with the problem posed, the involvement of a complex research apparatus (simulation modelling and fuzzy expert systems of approximate reasoning) is seen as relevant and expedient.

Simulation models are training apparatus for the development and adoption of management decisions can be used as a day-to-day device for tracking the various business processes progress in order to identify bottlenecks in time and to take action to eliminate them. The expert systems recommendations will supplement the picture of the forecasted facilities development in the conditions of an uncertain, fuzzy pharmaceutical market environment.

The proposed toolkit inclusion in the pharmaceutical companies IT infrastructure will significantly improve the efficiency of business process management at the operational and strategic levels.

References:

1. Babina O. I. Development of an optimization simulation model to support the warehouse systems planning processes / O. I. Babina // *Computer Studies and Modelling*. – 2014. – T. 6. – № 2. – p. 295–307.
2. Baldin V. V. Statistical analysis and forecasting of the pharmaceutical trading company activities : Dis. cand. econ. sciences : 08.00.12 / Baldin Victor Victorovich. – Moscow, 2002. – 164 p.
3. Bautov A. N. Formation and calculation of the optimal assortment for random demand / A.N. Bautov // *Marketing in Russia and beyond*. – 2003. – № 3. – P.18–31.
4. Belousov E. A. Logistic approach to inventory management : Dis. cand. farm. sciences: 15.00.01 / Belousov Evgeniy Aleksandrovich. – Kursk, 2004. – 134 p.

5. Borschev A. V. From system dynamics and traditional simulation modelling to practical agent-based models: causes, technologies, tools [Electronic resource] / A. V. Borschev. – Access mode: <http://www.gpss.ru/paper/borshevarc.pdf>.
6. Brodeckiy G. L. Method of decision tree for multicriteria optimization in supply chains / G. L. Brodeckiy // *Logistics today*. – 2008. – № 5. – P. 320–329.
7. Chastikov A. P. Expert systems development. CLIPS environment / A.P. Chastikov, T. A. Gavrilova, D. L. Belov. – Spb: BHV-Petersburg, 2003. – 608 p.
8. Cysar I. F. Modelling the economy in Ithink_Stella. Crises, taxes, information, banks / I. F. Cysar. – Moscow : DIALOG_MIFI, 2009. – 224 p.
9. Demkin I. V. Management of innovation risk based on simulation modelling. Basic approaches to the assessment of innovation risk / I. V. Demkin // *Problems of risk analysis*. – 2005. – T. 2. – № 3. – P. 249–273.
10. Forrester J. Fundamentals of enterprise cybernetics / J. Forrester. – Moscow : Progress, 1971. – 765 p.
11. Gorenkov V. F. Economy of the pharmaceutical enterprise / V. F. Gorenkov // *Chemistry (pharmaceutical activities)*. – Minsk : BSU, 2012. – P. 29–38.
12. Gromovik B. P. Development of the business game methodology «Pharmacy competitiveness evaluation» [Electronic resource] / B. P. Gromovik, K. I. Pushak, S. I. Tereschuk. – Access mode: http://www.provisor.com.ua/archive/2003/N18/art_14.php.
13. Ivashkin Y. A. Multi-agent simulation of large systems / Y. A. Ivashkin. – M.:MSUAB, 2015. – 238 p.
14. Katalevskiy D. Y. System dynamics and agent modelling : the necessity for a combined approach [Electronic resource] / D. Y. Katalevskiy. – Access mode: <http://simulation.su/uploads/files/default/incomplete-katalevsky.pdf>.
15. Kiselyova M. V. Simulation modelling of systems in AnyLogic environment / M. V. Kiselyova. – Ekaterinburg: USTU. – UPI, 2015. – 258 p.
16. Kovalenko A. V. Risk management of a pharmaceutical company : Dis. cand. econ. sciences:08.00.13/Kovalenko Aleksandr Vladimirovich.–M.:2009.–173p.
17. Lisovskiy P. A. A system approach to planning the assortment of the pharmacy network / P. A. Lisovskiy // *New pharmacy*. – 2012. – №2. – P. 37–43.
18. Matviiv O. V. Pharmaceutical industry clustering as the strengthening method of it financial-investment potential / O. V. Matviiv // *Current problems of economics*. – 2014. – № 8. – P. 81–89.
19. Mnushko Z. N. Marketing in Pharmacy / Z. N. Mnushko, N. M. Dihtyareva. – Kharkov, NFUU: Golden Pages, 2008. – 536 p.
20. Pharmacy market of Ukraine by the results of 2016: Helicopter View [Electronic resource]. – Access mode: <http://www.apteka.ua/article/398728>.
21. Pozhidaev V. A. Simulation model development for managing the pharmaceutical company inventory [Electronic resource] / V. A. Pozhidaev. – Access mode: <https://www.hse.ru/edu/vkr/182595452>.
22. Pyosikov E. B. Complex multi-agent models of analysis and risk management of a virtual enterprise [Electronic resource] / E. B. Pyosikov, A. V. Dorogin. – Materials of IMMOD -2013. – Access mode: <http://www.anylogic.ru/articles>.
23. Sagaydak-Nikityuk R. V. Create a pharmaceutical clusters in Ukraine based logistics management and international quality standards / R. V. Sagaydak-Nikityuk, O. V. Posylnikova // *Farmitek*. – 2011. – № 3. – P. 24–31.
24. Savelyeva Z. A. Basis of economic planning and forecasting / Z. A. Savelyeva, O. V. Kartashova // *Pharmacy economics basics*. – M., 2003. – P. 23–35.
25. Shabelnik T. V. Models marketing-oriented pharmaceutical enterprise management : Dis. dr. econ. sciences : 08.00.11 / Shabelnik Tatyana Vladimirovna. – Poltava, 2016. – 383 p.
26. Sokolovskaya Z. N. Application models of system dynamics: Monograph / Z. N. Sokolovskaya, O. A. Klepikova. – Odessa : Astroprint, 2015. – 308 p.
27. Sokolovskaya Z. N. Expert systems in economic research: Monograph / Z. N. Sokolovskaya. – Odessa : Astroprint, 2005. – 240 p.
28. Stepanov A.S. Methodological approaches to the work optimization of regional wholesale pharmaceutical organizations (on example of Far East) : Dis. cand. farm. sciences : 14.04.03 / Stepanov Aleksey Sergeevich. – M., 2014. – 313 p.

29. Tretyakova E. A. Conceptual modelling of the competitiveness management dynamic system of pharmaceutical industrial enterprises / E. A. Tretyakova // Bulletin of Perm University. Series «Economics». – 2013. – issue 2. – P. 42–51.

30. Umnova S. A. Modelling of material management processes at the pharmaceutical market enterprises : Dis. cand. econ. sciences : 08.00.13 / Umnova Svetlana Aleksandrovna. – Ivanovo, 2013. – 199 p.

31. Zahodyakin G. V. Using simulation methods in the Anylogic software environment for solving logistics tasks in the pharmaceutical industry / G. V. Zahodyakin, A. S. Degtyaryov // Successes in chemistry and chemical technology. – 2011. – T. XXV. – № 13(129). – P. 50–54.

32. Zubov N. N. Mathematical methods and models in pharmaceutical science and practice / N. N. Zubov, S. Z. Umarov, S. A. Bunin. – SPb: Publishing house of Polytechnic. University, 2008. – 249 p.

33. Zyazin O. N. Modelling of the commodity circulation processes based on the information system of the pharmaceutical trade network : Dis. cand. econ. sciences : 08.00.13 / Zyazin Oleg Nikolaevich. – SPb, 2001. – 168 p.

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INFLUENCE OF CORPORATE CULTURE ON LABOUR POTENTIAL MANAGEMENT AT INDUSTRIAL ENTERPRISES

Summary

The article overviews scientific approaches to defining the essence of corporate culture. Basic levels and types of corporate culture are characterized. It is pointed out the required components of enterprise corporate culture. The most significant features and specifics of the formation and development of corporate culture are considered. It is found the impact of corporate culture on the management of labour potential and revealed its benefits of development based on corporate culture. Basic techniques that quantify the impact of corporate culture on working capacity and efficiency of the enterprise are investigated by the author.

Introduction

The experience of market economy countries is a convincing proof that corporate culture is a significant lever of labour potential quality and increasing the innovative activity of companies' and organizations' employees. Corporate culture creates value orientations behaviour management and employees of the enterprise, uniting them in a common aspiration to full flowering of the organization, image formation team capable of developing and implementing advanced, original ideas, and innovations [1].

Corporate culture creates behaviour value orientations of the company's management and employees, uniting them in a common aspiration to achieve the

well-being of the organization, image formation of the team capable of developing and implementing advanced, original ideas, and innovations [1].

Formation of positive corporate culture can be observed at the enterprises with stable development and where expression of positive features outlined culture is stable or temporarily unstable (culture is focused as on the development of production, as on the social development of the team).

However, it is typical for the most of the Ukrainian enterprises to have examples of underdeveloped corporate culture or corporate culture focused only on the implementation of production issues [2]. Domestic enterprises also do not pay enough attention to corporate culture in the context of labour potential management at the enterprises; as a result, it determines the relevance of the study.

Development of scientific approaches to studying the impact of corporate culture on the process of labour potential management is reflected in the works of domestic and foreign scientists: S. Adams, Yu. Anisimov, B. Batutyn, D. Bohynia, A. Voronkova, V. Vroom, A. Hrishnova, Y. Davydov, B. Daniuk, P. Drucker, A. Yehorshyn, H. Zakharchyn, A. Kibanov, T. Kytsak, A. Kolot, E. Libanova, E. Lawler, N. Lukianchenko, I. Mazhura, V. Maslov, A. Maslow, H. Nazarova, V. Nykyforenko, V. Petiukha, L. Porter, A. Pryhozhyn, R. Rutenher, M. Semykina, T. Solomanidina, V. Spivak, L. Shaulska, E. Shein, S. Shekshnia, etc. Despite the strong theoretical achievements in the field of the problem, the issue of labour potential based on corporate culture has superficial study and requires the thorough processing.

Strong corporate culture combines all the elements of enterprise philosophy based on the strategic concept of development and goals achievement. It is a kind of «moral code of conduct» for the employees who come into corporate relations in the process of management. Corporate culture is not static or once for all established form of corporate relations. Vocational personnel adaptation depends on its flexibility at the enterprise.

Part 1.1. General characteristics of the corporate culture at the enterprise

The first reference to the concept of enterprise culture is dated from 1936 and belongs to M. Sheriff, when he talked about the concept of «social norms». In the late 60s, the terms «culture» and «climate» in the company were widely used by many researchers. But in the 80s, the concept of corporate culture firmly gained a leading position in the literature on the theory of enterprise [4].

Currently, there is no single approach to the interpretation of the concept of «corporate culture». Various scientists often use terms such as «organizational culture», «enterprise culture», «culture of the organization», «firm culture» for its characteristics [5, p. 69].

Synthesis of the scientific literature shows that most researchers refer to the concepts such as «organizational» and «corporate» culture. By adapting different approaches to these categories, they can be grouped accordingly [6, p. 43–44]:

1. Corporate and Organizational Culture – identical concepts (J. Greve, K. Cameron, J. Kother, A. Kennedy, T. Diehl, L. Shevchenko, A. Blinov). For example, K. Cameron and R. Quinn connect the concept of corporate and organizational culture in their works, not focusing on the differences. Therefore, they use the same interpretation of terms such as «excellent value», «belief», «norms», «tacit agreement» on how to implement and conduct the joint activities shared by all team members.

2. Corporate culture is a part of the organizational culture (R. Ackoff, F. Sharkov, L. Kolesnikov, V. Shcherbina, V. Yevtushevskiy). If we compare this point of view with the above one, we can conclude that it is less popular as it does not contain enough theoretical bases for its development and distribution. Thus, as per R. Ackoff, organizational culture is divided into corporate, consulting, partisan and business; while corporate culture reflects the autocracy relationships typical for traditional corporate with centralized management structure. Russian scientist F. Sharkov examines the corporate culture as a part of the organization, including all organizational elements in the concept of corporate culture.

3. Organizational culture is the basis for the development of the corporate one. (Zh. Nestorenko, A. Kapitonov). It is believed that organizational culture was originated during the industrial stage of development of society and corporate culture was born during post-industrial and MNC formation stage. Therefore, it can be concluded that organizational culture was the starting point for the further transformation of the new quality of civilization's cultural space.

4. Corporate and organizational culture both are specific concepts (D. Bukenen, V. Voronkov, A. Hashenko M. Levkin). According to this point of view, the determined concepts are shown as separate and sometimes overlapped in its entirety.

In our opinion, the most appropriate for business managers is an understanding that corporate and organizational culture is different, mutually independent concepts. This vision can be explained by the fact that most of the organizational cultures are imperative that appears in the documents, orders, etc., while the corporate culture is the values that are inherent in the company and in behaviour, interaction, the perception of enterprises environment. That corporate culture can have an imperative character because of its specificity [7, p. 106]. This explains the need for a clear definition of «corporate culture».

Thus, V.A. Spivak defines corporate culture as a system of material and spiritual values that interact with each other and reflects the personality of the enterprise, identifies the behaviour, interaction, and communication between the workers themselves and with the environment [8, p. 27].

According to L.V. Barabanova, corporate culture is a well-formed system of guiding principles and technologies in the active life of the enterprise [9].

H.P. Chaika assets that corporate culture should be considered as a system of basic values and standards of organizations that define the rules of conduct for its personnel, business style, rituals, symbols. The content of corporate culture is a «system of values, rules, and norms of behaviour in a particular organization, this is a system of relationships and communication between people that work in it» [10, p. 201].

T.O. Chernyshova and T.A. Nemchenko interpret the essence of corporate culture as a specific form of interdependent system existence that includes a hierarchy of values that predominate among employees, and totality of means prevailing in it at some stage of development [11, p. 85].

In summary, we can conclude that corporate culture is a system of values and beliefs shared by every employee and determine its behaviour and operation of the enterprise.

Leading specialist in management E. Shein identified a number of phenomena that are almost always associated with the corporate culture: behavioural aspects of communication people (language, customs, traditions, rituals); collective norms (unwritten standards and values adopted by the enterprise); official rules (publicly stated principles that the enterprise tries to follow); formal philosophy (various

ideological and political principles governing the activities of the enterprise); unwritten rules of the enterprise; climate (feeling passed the enterprise by external circumstances and forms of interaction of employees); established skills (demonstration of certain skills when performing tasks); way of thinking (shared by employees thinking that determines perception, thought, and language of business); common understanding (arise when enterprise members are dealing with each other); metaphors and integrated symbols (ideas, feelings and images, through which the enterprise describes itself).

According to the author, corporate culture provides a level of stability that is something that is shared by all employees. It must be deeply processed and very stable. E. Shein considers that the essence of corporate culture is «stability», which he defined as a set of guidelines developed to solve the problems of external adaptation and internal integration, shared by all its participants, and quite worked out to give them an example of behaviour, way of thought, and feelings to solve these problems by new members of the enterprises [12].

It is believed that the enterprise has a culture when it has a history that determines the formation of collective basic concepts. Enterprises that are characterized by a high turnover or a history of the little substance may not produce collective representation and do not form a corporate culture. Therefore, the corporate culture of any enterprise is usually considered at three levels: artefacts, values, and basic beliefs.

The first level – the level of artefacts, including all those phenomena that can see, hear and feel when entering a new culture. The key elements of the artefacts are: language, technology and business products, style (clothing), the manner of communication, emotional atmosphere, myths and history, rituals, ceremonies and more. Also, they are the behaviours of personnel and related organizational processes. The level of artefacts can be seen but is very difficult to explain.

The second level is based on the declared values – a reflection of someone's original ideas about what is it, and how it differs from what it should be. Maintaining of allegiance of once declared values leads to their transformation in beliefs, norms, and rules of conduct. A set of values that found the actual implementation in organizational philosophy or ideology can serve as benchmark or model behaviour in complex or uncertain situations.

The third level is determined by the basic idea that is so obvious that the variation of behaviour is minimized and their change is difficult. The integrated basic concepts sometimes are called «world map» or «mind map». If people share the same basic idea, they feel comfortable, if different ones they feel discomfort [13].

Consequently, the level of corporate culture is covering all sorts of collective values, norms and rules of conduct used by the carriers of this culture to represent both themselves and the others.

Despite the variety of approaches, scientists identified the following duties (conventional) components of the corporate culture of the enterprise:

- priority values that people appreciate in their lives and life of the enterprise: status, titles, promotion, work itself;
- confidence in leadership, success, their strength, mutual assistance, ethical behaviour, fairness, etc.;
- communication system and language communication, i.e. the use of oral, written, nonverbal communication, abbreviations, gestures etc.;
- time perception, attitude to it and use of it: workers time accuracy, temporary compliance regulations, and encouragement for this;

- the relationship between people differing in age and gender, status and power, experience and knowledge, religion and nationality, as well as ways and methods of solving conflicts that are arisen;

- the process of employee's development and training, procedures for informing employees, order participation in training programs, the meaning of training process used by the enterprise;

- work ethic and incentives, work ethic and responsibility for assignments; division of labour and performance of official duties; design and cleanliness of the workplace; quality of work; and evaluation of compensation; ways of promotion;

- appearance, clothing, nutrition, submitting themselves at work, business style [14].

In our opinion, the above-mentioned elements are an integral part of the corporate culture and fully reflect its essence. With an overall picture of the development of corporate culture elements, managers can make decisions on further action and development. To be effective, the implementation of management solutions simplifies the understanding of the phenomenon, introducing changes in corporate culture necessary to distinguish between types of corporate culture and assess their importance [6].

Analysing the types of corporate culture, the researchers singled out a «unifying» theoretical framework, which would fit the main approaches to the study of the phenomenon of corporate culture, not levelling with the integrity of each position. We believe that very interesting and useful appears the scheme of four types of corporate culture:

1. Clan culture. In the workplace, it is created the friendly atmosphere, like a big «family». Enterprise holds on commitment and traditions, focusing on the long-term benefit of improving individuals and attaches great importance to the high degree of cohesion and staff morale. These enterprises encourage and stimulate teamwork, participation, and consent of people to achieve stability.

2. The culture of Adhocracy, under which, the business is a dynamic and creative workplace where people are willing to take risks. The essence of the organization is a commitment to experimentation and innovation with the activities at the «front edge» and success is the production of unique new products and/or services. Enterprise encourages personal initiative and freedom.

3. The hierarchical culture is a very formalized and structured place to work, where crucial is supporting of the slow progress of the enterprise, which combines formal rules and official policy. Long-term goals are to promote stability and performance of basic operations.

4. Market culture, in which the enterprise that is focused on results, cares primarily about the performance of set goals. Employees compete among themselves and executives are harsh, tough, and demanding competitors to achieve the goal. The success of the enterprise determined the terms of market penetration and market share size. It is very important competitive pricing and market leadership [15].

Despite a large variety of types of corporate culture, we must pay attention to the fact that no enterprise has a single type of corporate culture. Typically, existing corporate culture at enterprises is an original mix of the above types [6].

With the formation and development of corporate culture, it is necessary to take into consideration its most important features and specifics:

- multilevel, which is to create multiple levels of management, such as corporate, industrial, the level of the process chain, the level of the individual unit;

- multithreading, the activities of the enterprise are divided into streams, each of which is the object of control. In particular, businesses can operate within the flow of executive, financial flow, information flow, personnel flow, etc.;

- magnitude, which is to use the largest possible number of similar universal management at various levels and in various streams of the system;

- synergism manifested in all multicriteria levels of management and facility management flows to achieve common goals of the enterprise. Here the main role is given to managers. Therefore, it is definitely worth to start improving the corporate culture of the enterprise itself, so that people better learn patterns of behaviour through imitation. The manager should be a model, role model, setting an example of this attitude, this behaviour, which is expected to consolidate and develop subordinates [16].

Thus, the corporate culture of the enterprise is one of the most important strategic tools of the modern manager. It should include all elements of the enterprise: the strategy and objectives related to customers and business competitors.

Part 1. 2. Enterprises potential labour management based on corporate culture

Studying the experience of developed countries and scientific thought proves that the disclosure of the creative possibilities of a human, his aspirations to implement skills, employment, and innovation activity can be achieved on the basis of the implementation of corporate culture [17]. The corporate culture of the enterprise allows to solve two key problems: first, establishing the best relations with the enterprise environment (external adjustment); secondly, to promote stable and productive staff work in partnership (internal integration) [18, p. 6].

To ensure the successful implementation of any changes at the enterprise and maximize the value of labour potential require focused management of corporate culture. The ability to manage corporate culture should become mandatory competence of managers, as its correct formation is an essential factor in the success of the enterprise. The presence of jurisdiction is a necessity, though not sufficient condition for quality management. Hence the main problem is the need to determine the correct, most appropriate for the enterprise corporate culture and, most importantly, change according to priorities [19].

The main goal of corporate culture is to provide its own socioeconomic system by using a staff. Achieving the main goal of corporate culture is possible by increasing employment potential and leads to higher personnel competence that ultimately provides the growth of enterprise profits. This is due to the fact that more competent workers can perform the work at the new facility, with the progressive method to generate new ideas and creative approaches, to take the initiative and propose a new rational decision.

The employment potential can be defined as the aggregate limit of combined professional and personal characteristics, creativity, employee motivation, and ability to develop at this time. The employment potential, in fact, is the difference between the maximum possible impact of the employee under the most favourable conditions and efficiency in the existing conditions at a given level of competence in a given time. Importantly, the employment potential is a vector quantity, i.e. a low value of one component cannot be compensated by other high value. Labour vector potential can change direction (i.e., character development – increase or decrease) of the form (straight, exponentially, as a sine wave, etc.). The task of the corporate culture is to set the right direction and nature of the employment potential for this enterprise [20].

The existence of the impact of corporate culture on labour potential management company proves its function:

- providing employees with organizational identity, identification of internal picture of the enterprise and its core values, which serves as an important source of self-identification as a staff team (affects the level of competence and work mentality – the components of labour capacity);
- assistance to new employees quickly adapt and contribute to the effective work correctly perceive phenomena occurring at the enterprise, through knowledge of the basic principles of corporate culture (impact on organization and labour activity);
- stimulating the expression of individual and collective responsibility in fulfilling these objectives, particularly in innovation (affects mobility and ability to develop innovations [7]).

As a result of the functions of corporate culture management system provides enterprise labour potential formation of internal and external communications system expands knowledge.

Enterprises labour potential management may change gradually under the influence of applied tools that provide a consistent employee self-awareness of their role in the management and participation in achieving division outcomes and businesses in general.

All instruments that form appropriate corporate culture are divided into two types. Tools of the first type belong to self-oriented workers (through the consciousness of their role) on the outcomes of their activities related to the objectives of the enterprise, the target job profile and self-esteem work. Tools of the second type of technology evaluation results of work involving employees, as well as evaluation of business and personal qualities of the staff responsible for the functions performed in a holding position.

So, the first kind of tools aiming at achieving the objectives of employees on the basis of their merits watching their own activities, and the second is improving labour motivation to return each specific job within achievement of these goals [21].

The effectiveness of labour potential depends on the existing social and psychological conditions at the enterprise, the system of industrial relations, management style, and motivation, which generally forms the culture of the enterprise. The level of influence of corporate culture on the employment potential can be defined as: low, medium, and high.

The low level of the corporate culture impact on the enterprise and labour potential management indicates a lack of support for the chosen strategy. Basic values and norms of behaviour do not enhance the effectiveness of the enterprise and, in particular, do not raise the motivation of employees.

Medium level of impact of corporate culture on the employment potential is a sign of the need to strengthen support strategy. The results of the companies are on the average market level, there is potential for growth.

The high level of corporate culture influence the quality of labour potential of enterprise demonstrates the strong support the chosen strategy, a high degree of division of property «stakeholders», the successful realization of corporate goals, sustainable development, a high quality of working life of staff, innovation orientation. This is a powerful corporate resource development tool for influencing both the domestic and the external environment of the enterprise. It can be argued that in such circumstances a corporate culture is a significant competitive advantage and enables significantly affect the quality of labour potential [22].

According to local scientist H.L. Chaika, depending on the impact of culture on corporate culture, the overall performance of the enterprise can be discussed about its either positive or negative role.

Positive – is stimulating the efficiency of the enterprise and its development, negative – when it interferes with effective functioning and development.

Given the formation of a positive corporate culture when each worker sees himself as a subject whose vocational employment affects the overall performance of the enterprise determines the strategy and its development; aware of personal responsibility for the overall product of joint activity; focuses on the search, development, selection, and implementation of the most appropriate ways to carry out its activities; linking their professional and career development of personality; personal mutual adequacy and collective criteria of the activity [10].

In addition, positive corporate culture must meet the following requirements: a continuous process of training employees, formation of their high moral standards of conduct; combining the value system of the individual worker with the system of values of enterprises; training of personnel in the deep belief and faith in their work, their leader, their comrades and equipment; encourage autonomy and innovation activities of employees; close relationship between all members of the team, a healthy moral and psychological climate; control system by management; simultaneous combination of flexibility and hardness of the enterprise [23, p. 238].

Labour potential management based on corporate culture enables businesses to receive a number of benefits, both for employees and for the enterprise itself. These advantages are reflected in Fig. 1 [24].

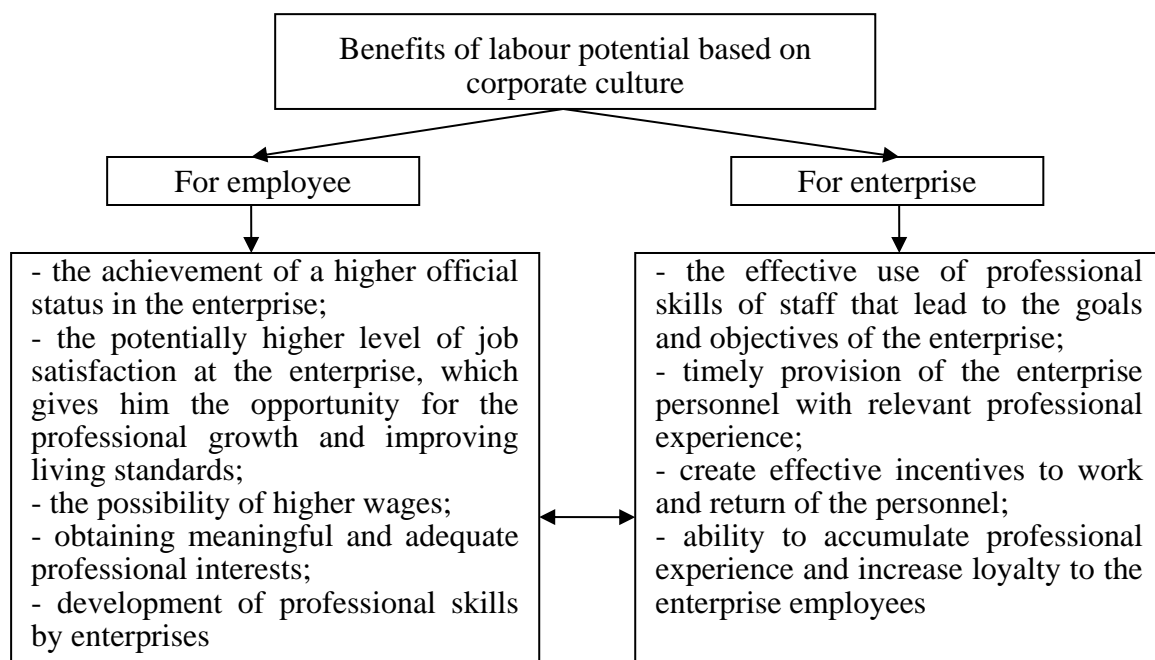


Fig. 1. Advantages of labour potential based on the corporate culture of the enterprise

Consequently, corporate culture can significantly affect labour behaviour, self-motivated employees, enrichment or depletion (degradation) of the employment potential of the company. In turn, the employment potential directs impact on the final results of the company. Therefore, the determination of the corporate culture that reflects its impact on the efficiency of the labour potential of the enterprise is important for business entities.

There are various techniques that quantify the impact of corporate culture. Some authors believe that this indicator may be the level of labour discipline (LLD), which is calculated as [25]:

$$LLD = (Ne - Ne.viol.) / Ne \cdot (PFw.t. - Al.w.t.), \quad (1)$$

where Ne – the average number of employees, $Ne.viol.$ – a number of employees who have committed violations of labour discipline; $PFw.t.$ – planned fund of working time; $Al.w.t.$ – a number of inner shifts and full day loss of working time due to violations of labour discipline.

This indicator is used for a hierarchical structure that is not currently the most progressive.

An important factor in assessing the effectiveness of corporate culture is a factor of satisfaction of employees ($Fs.e.$) [25]:

$$Fs.e. = 1 - (Nd.o. / Ne), \quad (2)$$

where $Nd.o.$ – the number of workers dismissed from the enterprise on their own; Ne – the average number of employees during the same period.

This indicator is the most important, as creative and promising employees always want to work in the enterprise, where they can apply their skills. Such an employee is important to be interested, enthusiastic, feel satisfaction from the work. Therefore, the opportunity to keep productive employee is an indicator of the quality of corporate culture.

Also comprehensively evaluate the effectiveness of the corporate culture of the enterprise by using the method of situational scoring. Each characteristic of corporate culture has assigned a score on a five-point scale.

Assessing each of the selected features and giving it a score, they are summarized as the following [25]:

$$\sum I = I_1 + I_2 + I_3 + I_4 + I_5 + \dots + I_n, \quad (3)$$

where I – characteristics of corporate culture; n – a number of characteristics to be considered.

This grade is given to show how each selected characteristic is reflected in the following scale: 5 – high performance, 4 – very good, 3 – average achievements, 2 – on the edge of necessary, 1 – very weak results.

Then it is calculated the impact factor of corporate culture (Ci) on the performance of the enterprise [25]:

$$Ci = \sum I / 5n, \quad (4)$$

In general terms, efficiency (E) of any system can be represented by an indicator of the ratio of output (R) received by the system to costs in the form of inputs that lead to this result (C), the impact of corporate culture on efficiency can be expressed as follows [25]:

$$E = Ci \cdot R / C, \quad (5)$$

If all the selected parameters to analyse corporate culture at the enterprise were assessed in five points, the impact factor of the culture equals 1. This indicates that the enterprise created a culture that best contributes to the efficiency of the enterprise.

Thus, corporate culture has an impact on the labour potential management of the enterprise, allowing it to focus all departments and all employees on the general objectives, improve staff initiative, ensure commitment to the common cause, and facilitate communication.

Conclusions

Scientific approach research shows that the greatest difficulty is the classification the concepts of «corporate culture» and «organizational culture» as often «interchangeable». In most scientific works of domestic authors, these concepts are not separated (you can find works where they are used simultaneously).

Summarizing these definitions, it is established that the corporate culture is the system of values, beliefs, ideas, perceptions, expectations, active principles, norms of behaviour, traditions, rituals, which are formed at the enterprise and accepted by its majority of the personnel.

It is found that corporate culture affects as the process of labour potential management, so the enterprise in general. The higher the level of corporate culture, the lower the level of the staff needs to have a clear regulation of activity, the directives, guidelines, detailed diagrams, and detailed instructions. In addition, the higher level of corporate culture, the higher the prestige and competitiveness.

The low level of corporate culture influences the number of negative social and economic consequences: wages arrears, deteriorating of social relationships, high staff turnover, violation of labour discipline, low interest of staff in the results of their work, disparity of conditions and job safety, and low staff innovation activity.

Based on the approach to determine the effectiveness of the enterprise, there are emphasized the key figures of the corporate culture effectiveness: economic (productivity, profit, profitability) and psychosocial (labour activity, employment satisfaction, enterprise stability, and wear-and-tear). The effectiveness of the enterprise in the context of the impact of corporate culture on the labour potential can be evaluated using the following indicators: sales growth, employee turnover rate, creative activity coefficient, innovations and skills implementation rate, satisfaction rate at the enterprise.

References:

1. Semykina, M.V. (2013). Fenomen korporatyvnoyi kultury v systemi sotsialnykh vazheliv yakisnoho rozvytku trudovoho potentsialu [The phenomenon of corporate culture in the social instruments of labour potential quality]. *Upravlinnya ekonomikoyu: teoriya ta praktyka*. – Managing the economy: theory and practice, 343–353 [in Ukrainian].
2. Kytsak, T.H. (2007). Osnovni napriamy formuvannya korporatyvnoyi kultury na pidpriemstvi [Main directions of corporate culture at the enterprise]. *Formuvannya rynkovoyi ekonomiky – Market economy formation*, 5, (pp. 27–29). Kyiv: KNEU [in Ukrainian].
3. Liubomudrova, N.P., Smolinska, N.V., Hrybyk, I.I. (2009). Rol orhanizatsijnoyi kultury v zabezpechenni efektyvnoyi trudovoyi adaptatsiyi personalu pidpriemstva [The role of organizational culture in providing the effective labour adaptation of personnel]. *Visnyk Natsionalnoho universytetu «Lvivska politekhniky»*. *Problemy ekonomiky ta upravlinnya*. – Bulletin of the National University «Lviv Polytechnic». *Problems of Economics and Management*, issue 640, 327–333 [in Ukrainian].
4. Kozlov, V. V. (2009). *Korporativnaya kultura* [Corporate culture]. – Moscow: Al`fa-pres [in Russian].
5. Apostoliuk, O. (2016). Korporativna kultura yak instrument efektyvnoho menedzhmentu pidpriemstva v pidvyshhenni joho konkurentospromozhnosti [Corporate culture as a tool for effective management of the enterprise in competitiveness improving]. *Ekonomichnyj chasopys Skhidnoievropejskoho natsionalnoho universytetu imeni Lesi Ukrayinky*. – Eastern Economic Journal of Lesia Ukrainka National University, 2, 68–73 [in Ukrainian].
6. Mikhov, L. I. (2015). Sutnist ta zmist korporatyvnoi kultury [The essence and content of corporate culture]. *Visnyk Berdianskoho universytetu menedzhmentu i biznesu – Berdiansk University of Management and Business Bulletin*, 3, 42–46 [in Ukrainian].
7. Kovalenko, N.V., & Mova, O.V. (2013). Teoretychni aspekty korporatyvnoi kultury ta yiyi vplyv na trudovyj potentsial ukrainskykh pidpriyemstv [Theoretical aspects of corporate culture

and its impact on the employment potential of Ukrainian enterprises]. *Ekonomika. Menedzhment. Pidpriemnytstvo. – Economics. Management. Business*, 25(2), 103–111 [in Ukrainian].

8. Spivak, V.A. (2001). *Korporativnaia kultura [Corporate culture]*. – St. Petersburg : Piter [in Russian].

9. Barabanova, L.V., & Sardak, O.V. (2011). *Upravlinnya personalom [Personnel management]*. Kyiv : Centr uchbovoyi literatury [in Ukrainian].

10. Chajka, H.P. (2005). *Kultura dilovoho spilkuvannia menedzhera [Business communication manager culture]*. Kyiv : Znannya [in Ukrainian].

11. Chernyshova, T.O., & Nemchenko, T.A. (2010). *Deyaki aspekty korporatyvnoi kultury orhanizatsii [Some aspects of the corporate culture of the organization]*. *Naukovi pratsi KNTU. Ekonomichni nauky. – Scientific papers of KNTU. Economic Sciences*, issue 17, 328–330 [in Ukrainian].

12. Sheyn, E.Kh. (2002). *Organizatsionnaya kul'tura i liderstvo [Organizational culture and leadership]*. – St. Petersburg : Piter [in Russian].

13. Tarasova, O.V., & Marinova, S.S. (2013). *Korporatyvna kultura yak instrument efektyvnoho menedzhmentu pidpriemstva [Corporate culture as a tool for effective management of the enterprise]*. *Ekonomika kharchovoyi promyslovosti. – Economy Food Industry*, 3, 28–32 [in Ukrainian].

14. Dyakiv, O.P. (2010). *Osnovni skladovi formuvannya korporatyvnoi kultury v orhanizatsii [The main components of corporate culture in the organization]*. *Formuvannya rynkovoyi ekonomiky. Spets. vyp. Sotsialno-trudovi vidnosyny: teoriya ta praktyka – Market economy formation. Special issue. Labour Relations: theory and practice.* (Vol. 3), (pp. 94–100). Kyiv : KNEU [in Ukrainian].

15. Kapitonov, E.A., & Zinchenko, G.P. (2005). *Korporativnaia kultura: teoriya i praktika [Corporate culture: theory and practice]*. Moscow : Al'fa-Press [in Russian].

16. Voronkova, V.H., Belichenko, A.H., Popov, O.M. (2006). *Upravlinnia liudskymy resursamy : filosofski zasady [Human Resource Management: philosophical principles]*. Kyiv: Profesional [in Ukrainian].

17. Hrishnova, O.A., & Holiaka, O.M. (2007). *Korporatyvna kultura ta stratehiya pidpriemstva: vzyemozviazok ta vzyemoobumovlenist [Corporate culture and strategy of the enterprise: interrelation and interdependence]*. *Formuvannya rynkovoyi ekonomiky – Formation of market economy*, (Vol. 2, part I), (pp. 176–186). Kyiv: KNEU [in Ukrainian].

18. Voronkova, A.E., Babiak, M.M., Koreniev, E.N., Mazhura I.V. (2006). *Korporatsii: upravlinnya ta kultura [Corporation: management and culture]*. Drohobych: Vymir [in Ukrainian].

19. Stus, V.O. *Korporatyvna kultura yak efektyvnyj instrument upravlinnya pidpriemtvom [Corporate culture as an effective enterprise management tool]*. Retrieved from http://ukrlogos.in.ua/10.12.2015_25.pdf [in Ukrainian].

20. Kravchenko, V.O. (2011). *Orhanizatsiynna kultura yak skladova rozvytku personalu [Organizational culture as part of personnel development]*. *Visnyk Donetskooho universytetu. Seriya: Ekonomika i pravo, spetsvyp. – Bulletin of Donetsk University, Series: Economics and Law, special issue.* (Vol. 1). Retrieved from <http://www.stationline.org.ua/ekonom/64/9357-organizacijna-kultura-yak-skladova-rozvitku-personalu.html> [in Ukrainian].

21. Holovatyi M.F., Lukashevych, M.P., Dmytrenko H.A. (2004). *Upravlinski aspekty sotsialnoi roboty [Administrative aspects of social work]*. Kyiv : MAUP [in Ukrainian].

22. Zerkal, A.V. (2015). *Perspektyvy pidvyshhennya yakosti upravlinnya personalom kriz pryzmu korporatyvnoi kultury [Prospects for improving the quality of HR management through the prism of the corporate culture]*. *Investytsii: praktyka ta dosvid. – Investment: practice and experience*, 24, 45–48 [in Ukrainian].

23. Kompaniyets, V.V., Polova, V.V. (2012). *Vplyv orhanizatsiynoi kultury na rozvytok pidpriemstva [The impact of organizational culture on enterprise development]*. *Visnyk ekonomiky transportu i promyslovosti. – Bulletin of economy and transport industry*, 39, 236–239 [in Ukrainian].

24. Zakharchyn, H.M. (2011). *Korporatyvna kultura [Corporate culture]*. Lviv: Novyi svit-2000 [in Ukrainian].

25. Zhilina, L.N., Chalova, D.D. (2014). *Vliyanie korporativnoj kul'tury na ekonomicheskuyu effektivnost kompanii: zarubezhnyj opyt [Corporate culture influence on the economic efficiency of the company: foreign experience]*. *Mezhkul'turnye kommunikacii. – Intercultural communication*, 149–157. Retrieved from <http://cyberleninka.ru/article/n/vliyanie-korporativnoy-kultury-na-ekonomicheskuyu-effektivnost-kompanii-zarubezhnyy-opyt.pdf> [in Russian].

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УПРАВЛІННЯ ФІНАНСОВИМИ РИЗИКАМИ ЯК ЕЛЕМЕНТ ФІНАНСОВОЇ БЕЗПЕКИ СУБ'ЄКТІВ ПІДПРИЄМНИЦТВА

Анотація

Запорукою ефективного функціонування суб'єктів підприємництва є забезпечення їх фінансової безпеки. Досягнення поставленої мети можливо за умов створення дієвої системи управління фінансовими ризиками на підприємстві. Розкрито характеристики різновидів фінансових ризиків й обґрунтовано методичні основи управління ними як основного елемента системи фінансової безпеки суб'єктів підприємництва. Зроблено висновок про необхідність формування цілісної системи управління ризиками, яка охоплює комплексний фінансовий аналіз, прогнозування прибутку та банкрутства. Запропоновано стратегію діяльності суб'єктів підприємництва за допомогою збалансованої політики управління фінансовими ризиками для забезпечення фінансової безпеки.

Вступ

За умов жорсткої та недобросовісної конкуренції, глибоких зрушень у системі економіки, нестабільної політичної ситуації вплив фінансових ризиків став особливо відчутним і зумовлює складність процесу адаптації вітчизняного сектора економіки до таких вимог ринку. Саме така ситуація розхитує стабільність функціонування підприємства, ставить під загрозу його подальшу успішну діяльність і приводить до фінансових труднощів, спричинених фінансовими ризиками.

За таких обставин особливого значення набуває проблема пошуку методів, важелів та інструментів управління фінансовими ризиками суб'єктів підприємництва, які б формували дієвий механізм їх економічного зростання і стали б запорукою фінансової безпеки. Остання характеризує захищеність суб'єктів підприємництва від негативного впливу фінансових ризиків на спроможність швидко та ефективно реагувати на різноманітні загрози.

Над проблемою оцінки та управління фінансовими ризиками, з огляду на фінансову безпеку суб'єктів підприємництва, працює значна частина практиків і вчених-економістів, серед яких Г.І. Башнянин [1], І.О. Бланк [2], Л.І. Донець [3], І.Ю. Івченко [4], Г.І. Румянцева [5; 6], О.О. Терещенко [7] та ін. Серед

зарубіжних науковців над темою працювали А. Сміт [8], Й. Шумпетер [9], А. Маршалл [10], А. Пігу [11], Ф. Найт [12] та ін.

Значний внесок у розвиток теорії та практики ризику зробили американські економісти – лауреати Нобелівської премії К. Ерроу, Г. Марковіц, У. Шарп, Дж. Акерлоф та ін. [14, с. 9].

Проте, незважаючи на значний науковий доробок, у наукових працях вітчизняних та зарубіжних учених не повністю розкрито всю сукупність проблем, які стосуються формування комплексної системи мінімізації фінансових ризиків для фінансової безпеки суб'єктів підприємництва. Це актуалізує потребу в подальшому пошуку напрямів удосконалення управління фінансовими ризиками суб'єктів господарювання в забезпеченні їх фінансової безпеки.

Розділ 1. Управління фінансовими ризиками як елемент системи фінансової безпеки суб'єктів підприємництва

Необхідність реалізації ефективного управління ризиками суб'єкта підприємництва потребує детального дослідження особливостей кожного виду ризиків.

Так, фінансові ризики відіграють найвагомішу роль у загальному портфелі ризиків підприємств. Вони становлять найбільшу частину сукупних господарських ризиків підприємств і впливають на різні аспекти господарської діяльності. Рівень фінансових ризиків зростає зі збільшенням обсягів і диверсифікацією фінансової діяльності. Зростання ступеня впливу фінансових ризиків на результати фінансової діяльності суб'єктів підприємництва пов'язано зі швидкою зміною економічної ситуації в країні і кон'юнктури фінансового ринку, розширення сфери фінансових відносин, появою нових фінансових технологій та інструментів [6, с. 259].

Фінансовий ризик – це ймовірність настання в процесі господарської діяльності непередбачуваної фінансової ситуації, що може призвести до відхилення від поставленої цілі: до фінансових утрат, в окремих випадках – до банкрутства підприємства, а з іншого боку – до фінансової вигоди.

До того ж фінансовий ризик можна розглядати як імовірність настання непередбачуваної ситуації під час діяльності суб'єкта підприємництва, що може призвести до відхилення від поставленої мети, фінансових утрат (утрати залучених ресурсів, недоотримання доходу, ін.), а іноді й банкрутства [6].

Фінансові ризики мають об'єктивні засади через невизначеність зовнішнього середовища стосовно до підприємства. Зовнішнє середовище містить об'єктивні економічні, соціальні і політичні умови, у рамках яких підприємство проводить свою діяльність. Невизначеність зовнішнього середовища зумовлена тим, що залежить від множини змінних, поведінку яких не завжди можна точно передбачити (пропозиції на товари, кошти, фактори виробництва, багатоваріантність сфер використання капіталів, різноманітність критеріїв переваги інвестування коштів, обмеженість інформації тощо).

Для здійснення ефективного управління фінансовими ризиками та за умов наявності їх розмаїття нами уточнено класифікацію фінансових ризиків, що містить такі класифікаційні ознаки: за видами; за характерним об'єктом; за комплексністю дослідження; за джерелами виникнення; за фінансовими наслідками; за характером прояву у часі; за можливістю передбачення та за можливістю страхування (рис. 1).

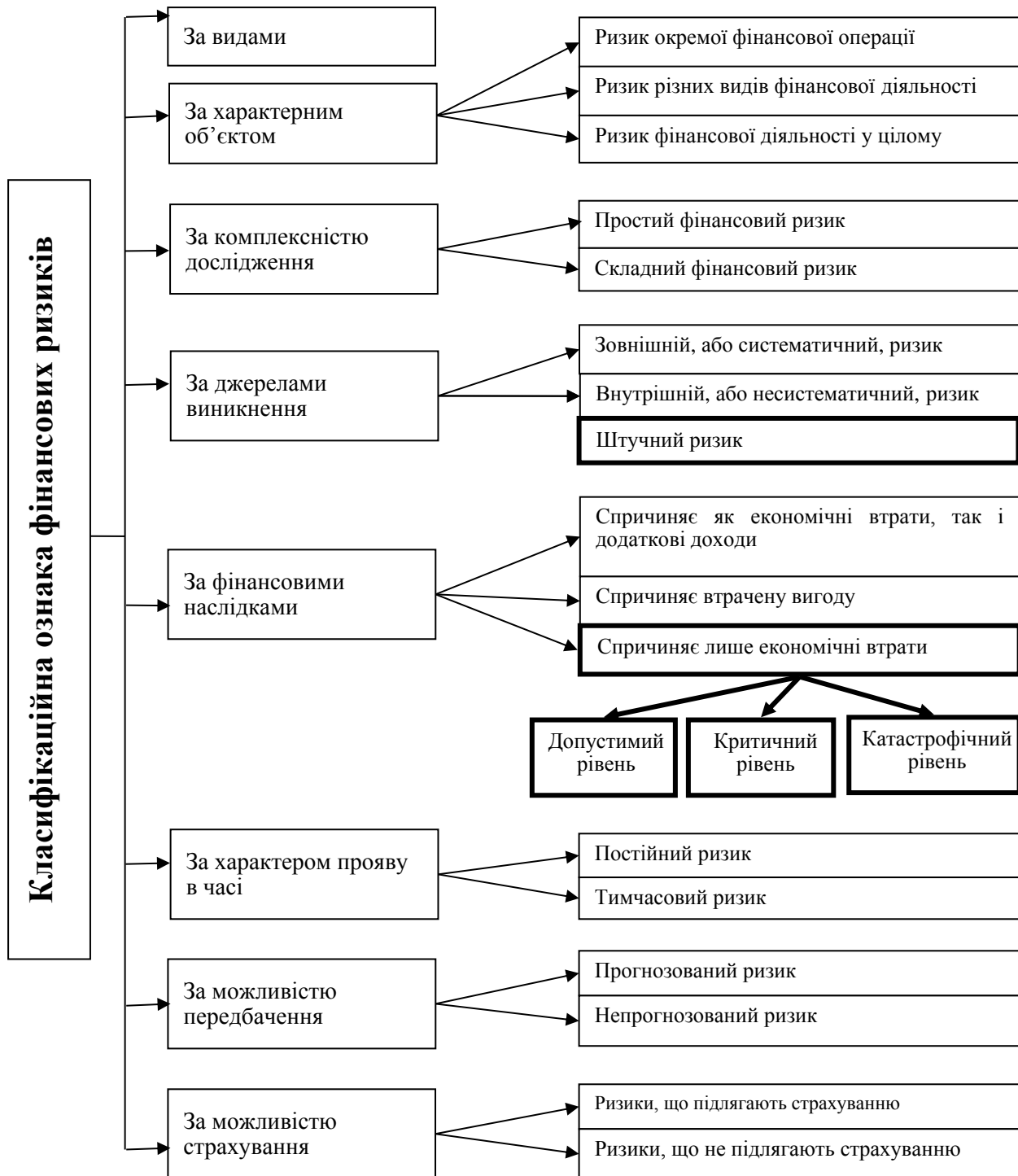


Рис. 1. Класифікація фінансових ризиків

При цьому слід зазначити, що інноваційна діяльність, використання новітніх технологій та нових фінансових інструментів буде породжувати нові види ризиків, розширюючи цю класифікаційну ознаку:

– ризик неплатоспроможності (або ризик незбалансованої ліквідності) підприємства. Цей ризик генерується зниженням рівня ліквідності активів, що фінансуються оборотним капіталом, що породжує розбалансованість позитивного і негативного грошових потоків підприємства в часі. За своїми фінансовими наслідками цей вид ризику належить до найбільш небезпечних;

– ризик зниження фінансової стійкості. Цей ризик генерується недосконалістю структури капіталу (надмірною часткою використовуваних

позикових коштів), що породжує незбалансованість позитивного та від'ємного грошових потоків підприємства за обсягами [15];

– ризик фінансової залежності. Цей ризик свідчить про залежність підприємства від зовнішніх кредиторів та неможливість погашення поточних зобов'язань за рахунок власних активів. Генерується збільшенням позикових коштів та зменшенням власних.

На рис. 2 подано класифікацію фінансових ризиків за видами:

– інвестиційний ризик характеризує можливість виникнення фінансових утрат у процесі здійснення інвестиційної діяльності підприємства. Відповідно до видів цієї діяльності, поділяються й види інвестиційного ризику; – ризик реального інвестування і ризик фінансового інвестування. Усі розглянуті види фінансових ризиків, пов'язаних зі здійсненням інвестиційної діяльності, належать до так званих «складних ризиків», підрозділяються, своєю чергою, на окремі їх підвиди. Так, наприклад, у складі ризику реального інвестування можуть бути виділені ризики несвоєчасної підготовки інвестиційного проекту; несвоєчасного завершення проектно-конструкторських робіт; несвоєчасного закінчення будівельно-монтажних робіт; несвоєчасного відкриття фінансування інвестиційного проекту; втрати інвестиційної привабливості проекту у зв'язку з можливим зниженням його ефективності і т. п.;

– інфляційний ризик. В умовах інфляційної економіки він виділяється в самостійний вид фінансових ризиків. Цей вид ризику характеризується можливістю знецінення реальної вартості капіталу (у формі фінансових активів підприємства), а також очікуваних доходів від здійснення господарських операцій в умовах інфляції. Оскільки цей вид ризику в сучасних умовах має постійний характер і супроводжує практично всі господарські операції підприємства, у фінансовому менеджменті йому приділяється постійна увага;

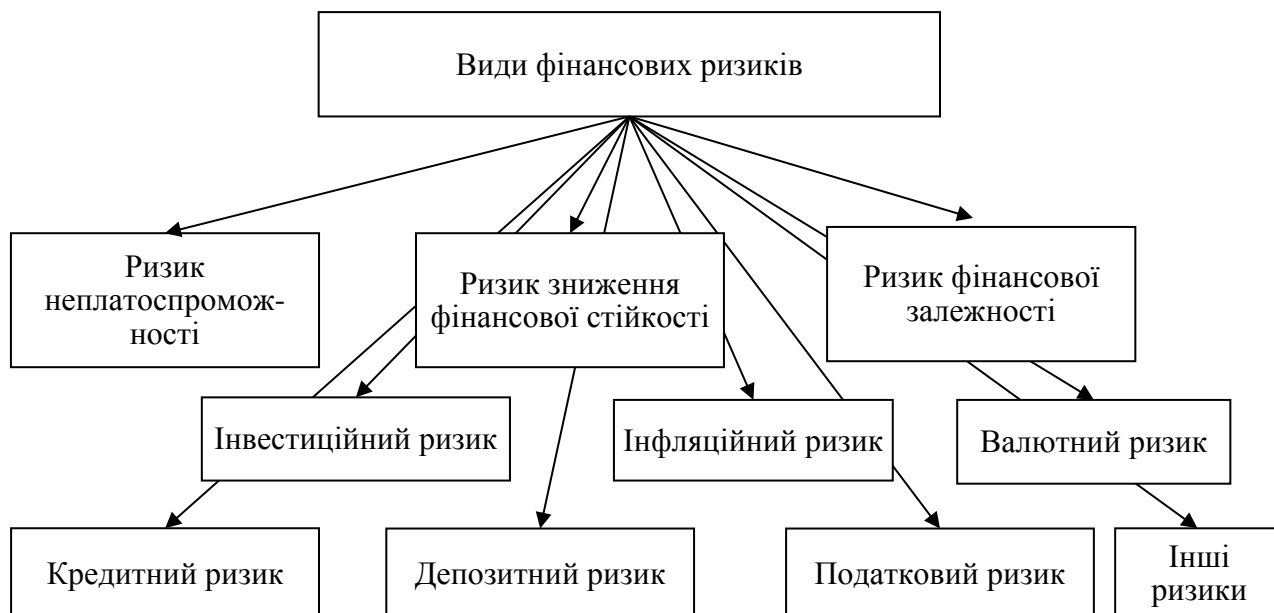


Рис. 2. Класифікація фінансових ризиків за видами [5]

– валютний ризик. Цей вид ризику властивий підприємствам, що здійснюють зовнішньоекономічну діяльність (імпортують сировину, матеріали і напівфабрикати й експортують готову продукцію). Він проявляється в недоотриманні передбачених доходів у результаті безпосереднього впливу

зміни обмінного курсу іноземної валюти, що використовується у зовнішньоекономічних операціях підприємства, на очікувані грошові потоки від цих операцій. Так, імпортуючи сировину і матеріали, підприємство програє від підвищення обмінного курсу відповідної іноземної валюти щодо національної. Зниження цього курсу визначає фінансові втрати підприємства під час експорту готової продукції;

– кредитний ризик. Він має місце в господарській діяльності підприємства під час надання їм товарного (комерційного) або споживчого кредиту покупцям. Формою його прояву є ризик неплатежу або несвоєчасного розрахунку за відпущену продукцію в кредит готову продукцію, а також перевищення розрахункового розміру бюджету з інкасування боргу [15];

– депозитний ризик. Цей ризик відображає можливість неповернення депозитних вкладів (непогашення депозитних сертифікатів). Він зустрічається доволі рідко і пов'язаний із неправильною оцінкою і невдалим вибором комерційного банку для здійснення депозитних операцій підприємства. Проте випадки реалізації депозитного ризику зустрічаються не тільки в нашій країні, але й у країнах із розвинутою ринковою економікою;

– податковий ризик. Цей вид фінансового ризику має низку проявів: ймовірність введення нових видів податків і зборів на здійснення окремих аспектів господарської діяльності; можливість збільшення рівня діючих ставок податків і зборів; зміна строків і умов здійснення окремих податкових платежів; ймовірність відміни діючих податкових пільг у сфері господарської діяльності підприємства.

Будучи для підприємства непередбачуваним (про це свідчить сучасна вітчизняна фіскальна політика), податковий ризик істотно впливає на результати його господарської діяльності;

– інші види ризиків. Група інших фінансових ризиків досить велика, але за ймовірністю виникнення або рівнем фінансових втрат вона не настільки значуща для підприємств, як розглянуті вище. До них належать ризики стихійних лих та інші аналогічні «форс-мажорні ризики», які можуть призвести не тільки до втрати передбачуваного доходу, але й частини активів підприємства (основних засобів, запасів товарно-матеріальних цінностей), ризик несвоєчасного здійснення розрахунково-касових операцій (пов'язаний із невдалим вибором обслуговуючого комерційного банку); ризик криміногенний та ін.

Оскільки фінансові ризики відіграють найвагомішу роль у загальному портфелі ризиків підприємства і становлять найбільшу частину його сукупних господарських ризиків, запропоновано організаційно-економічний механізм управління ними (рис. 3), що містить методи оцінки та управління, важелі впливу на фінансові ризики та інструменти [6].

Основна мета управління фінансовими ризиками – мінімізація пов'язаних із ними фінансових утрат і забезпечення фінансової безпеки.

Організаційно-економічний механізм управління фінансовими ризиками

Мета: мінімізація фінансових втрат
Завдання: оптимізація структури капіталу та портфеля боргових зобов'язань

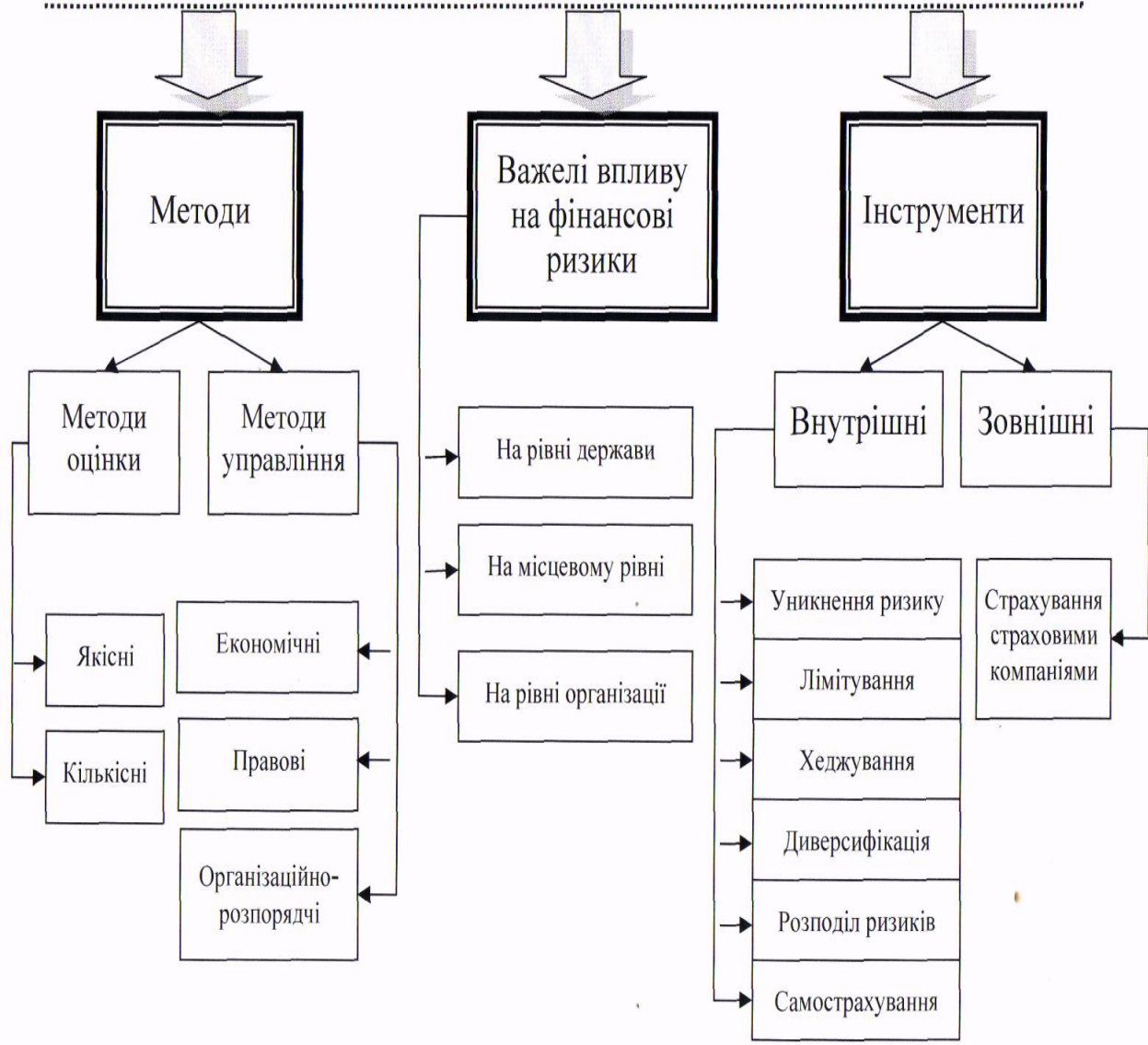


Рис. 3. Організаційно-економічний механізм управління фінансовими ризиками

Розділ 2. Напрями вдосконалення управління фінансовими ризиками суб'єктів підприємництва в забезпеченні їх фінансової безпеки

Розглядаючи питання фінансових ризиків, слід звернути увагу на фінансову безпеку підприємства, адже під цим поняттям розуміють діяльність з управління ризиками та захисту інтересів суб'єктів підприємництва від зовнішніх та внутрішніх загроз для забезпечення їх стабільного розвитку.

Схематично структуру фінансової безпеки держави та місце фінансової безпеки суб'єктів підприємництва в ній зображено на рис. 4 [6].

Фінансова безпека – це стан захищеності суб'єктів підприємництва від негативного впливу фінансових ризиків завдяки використанню захисних

фінансових інструментів, що забезпечує їх стабільне функціонування, здатність швидко та ефективно реагувати на загрози та раціонально використовувати фінансові ресурси.

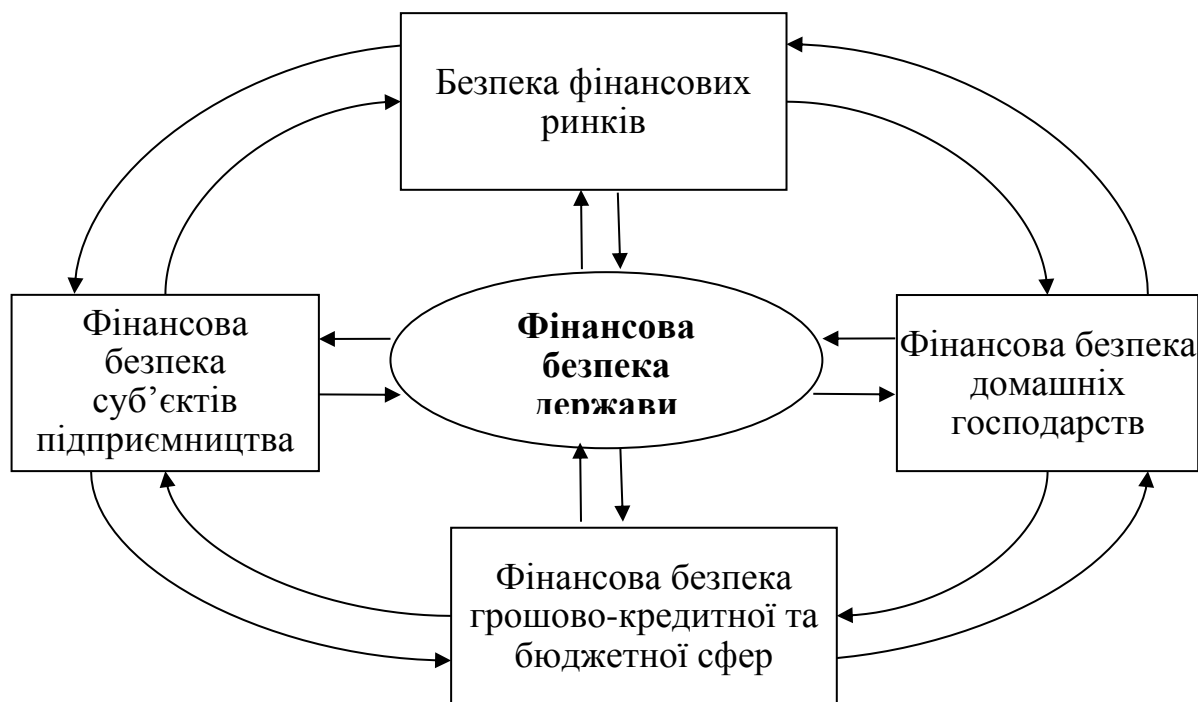


Рис. 4. Система фінансової безпеки держави [6]

Для аналізу використано дані експертно-технічних центрів (ЕТЦ) Держгірпромнагляду України, які є державними госпрозрахунковими підприємствами.

Нами проведено оцінку фінансових ризиків групи суб'єктів підприємництва для забезпечення їх фінансової безпеки. У табл. 1 сформовано портфель фінансових ризиків для кожного з аналізованих підприємств. Умовними позначеннями слугували «+» та «-», що свідчать про наявність фінансового ризику чи його відсутність відповідно.

Слід зазначити, що на всіх державних підприємствах «Експертно-технічний центр» виявлено такий фінансовий ризик, як ризик фінансової залежності, проте аналізовані підприємства уникнули ризику зниження ліквідності та зниження рентабельності.

Крім того, виявлено такі ризики: зниження фінансової стійкості, ризик неефективної структури капіталу, зниження ділової активності, ризик недоотримання прибутку, неплатоспроможності та ін. Дані ризики потребують системи заходів нейтралізації.

Для формування цілісної системи управління фінансовими ризиками пропонується системний підхід, який передбачає ідентифікацію, оцінку, контроль (нейтралізацію) та аналіз результатів контролю. Ідентифікація та оцінка фінансових ризиків потребують застосування цілісної методики, яка полягає у використанні комплексного фінансового аналізу, аналізі банкрутства та прогнозуванні прибутку. Лише за умови використання усіх методів у комплексі можна отримати реальну картину портфеля фінансових ризиків. Інформаційною базою слугує система показників, які знаходять своє відображення у бухгалтерській звітності.

**Портфель фінансових ризиків
на державних підприємствах «Експертно-технічний центр»**

Види ризиків Підприємства	Неплатоспроможності	Зниження фін. стійкості	Зниження ділової активності	Фін. залежності	Зниження рентабельності	Зниження ліквідності	Неефективної структури капіталу	Операційної діяльності	Неефективного використання коштів	Недоотримання прибутку
ДП «Західний ЕТЦ»	-	-	+	+	-	-	+	+	+	+
ДП «Волинський ЕТЦ»	+	+	-	+	-	-	+	+	-	-
ДП «Рівненський ЕТЦ»	+	+	+	+	-	-	-	+	-	+

Так, в умовах кризового стану економіки загалом більшість підприємств працює збитково, а також є велика частка тих, що знаходиться на межі банкрутства або на стадії порушення справ про банкрутство боржників їх кредиторами в суді. Саме достовірна і своєчасна ідентифікація негативних факторів впливу на фінансово-господарську діяльність та антикризове управління підприємства є запорукою виходу з фінансової кризи. У зарубіжній практиці давно вже розроблено методи управління кризовими явищами підприємства. Проте їх досвід не можна повністю переносити на вітчизняний науково-практичний ґрунт, тому що при цьому не враховуються галузева специфіка фінансово-господарської діяльності вітчизняних підприємств, умов господарського та податкового законодавства, особливості функціонування та тенденції розвитку економіки у цілому по Україні.

Напряму діагностики ймовірності банкрутства підприємства можна відвести пріоритетне значення у процесі формування цілісної системи управління фінансовими ризиками. Виявлення таких ризиків, як ризик неплатоспроможності, зниження фінансової стійкості, фінансової залежності ще раз підкреслює потребу у проведенні аналізу ймовірності банкрутства, аби попередити й нейтралізувати фінансовий ризик банкрутства.

Найвідоміші методи діагностування банкрутства наведені на рис. 5.

Отже, усі методи діагностики банкрутства поділяються на якісні та кількісні.

Використання якісних методик під час діагностування загрози виявлення банкрутства має низку переваг, оскільки якісні показники сигналізують про виникнення або потенційну загрозу виникнення складностей із ліквідністю підприємства.

За умов відсутності для українських підприємств універсальної методики прогнозування банкрутства нами проведено оцінювання рівня загрози банкрутства за допомогою моделей Альтмана і не виявлено ризику банкрутства.

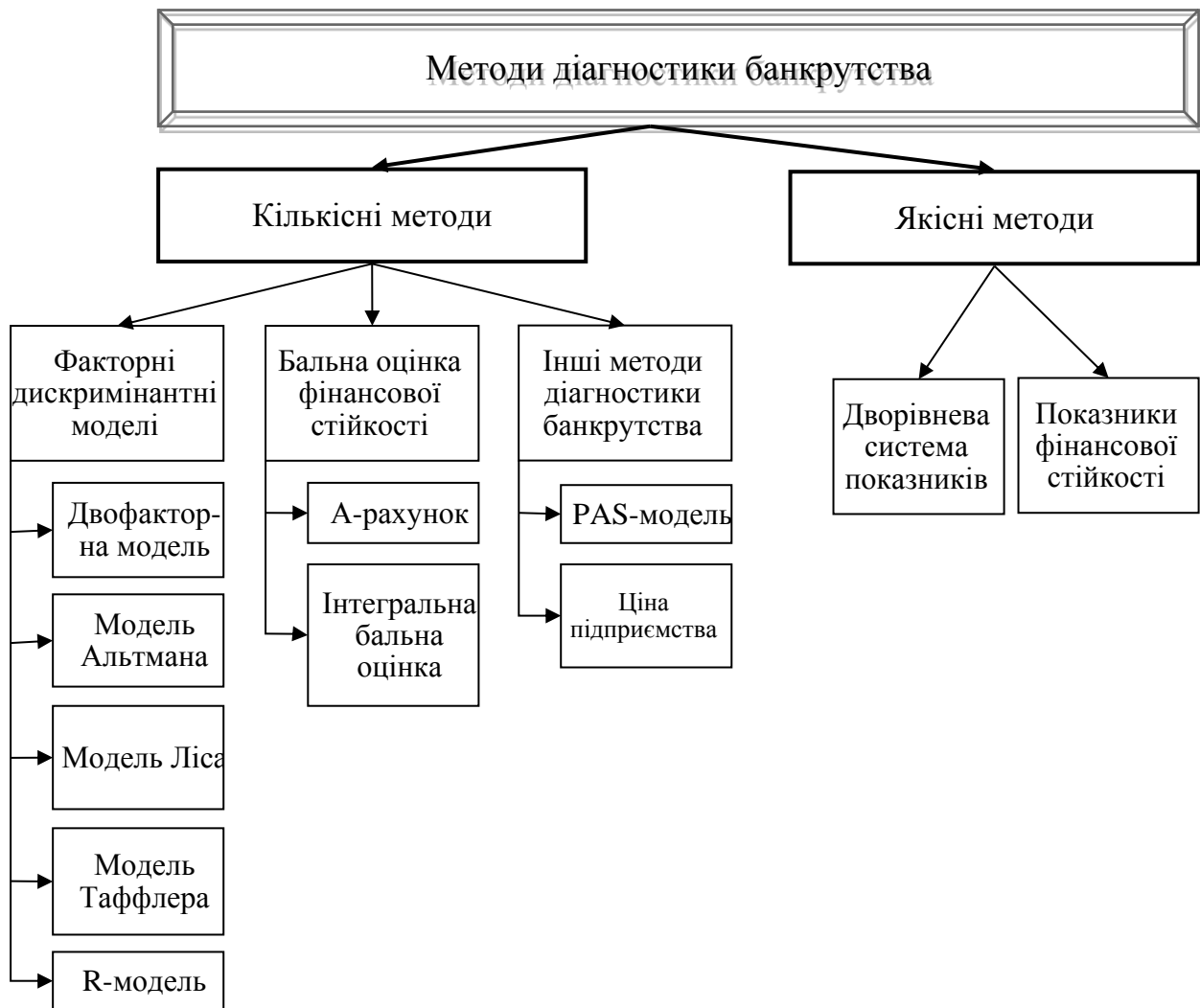


Рис. 5. Методи діагностики банкрутства

Таблиця 2

**Діагностика ймовірності банкрутства групи
аналізованих підприємств за допомогою моделі Альтмана**

Підприємства	2013 р.	2014 р.	2015 р.	2016 р.
ДП «Західний експертно-технічний центр»	4,402	5,334	5,088	5,153
ДП «Волинський експертно-технічний центр»	4,685	5,437	4,733	5,891
ДП «Рівненський експертно-технічний центр»	3,769	3,760	3,248	3,108

Діагностика та прогнозування ризику банкрутства відіграють важливу роль під час прийняття управлінських рішень щодо подальшого розвитку діяльності суб'єкта господарювання. Це дає змогу попередити низку фінансових ризиків, які тягне за собою кризовий стан, а саме: неплатоспроможності, неліквідності, недоотримання прибутку, ін.

Прогнозні дані прибутку від реалізації послуг на 2018–2020 рр., тис. грн.

Підприємства	2018 р.		2019 р.		2020 р.			
	Середня арифметична	Середня геометрична	Середня арифметична	Середня геометрична	Середня арифметична	Середня геометрична		
ДП «Західний експертно-технічний центр»	3220,00	3274,96	3509,00	3650,16	3798,00	4059,11		
	$\Delta R_P=5,21\%$	$\Delta R_B=-4,66\%$	$\Delta R=0,55\%$	$\Delta R_P=4,83\%$	$\Delta R_B=-4,36\%$	$\Delta R=0,42\%$	$\Delta R_P=4,51\%$	$\Delta R_B=-4,09\%$
ДП «Волинський експертно-технічний центр»	890,67	933,15	1046,33	1156,43	1202,00	1407,54		
	$\Delta R=2,37\%$	$\Delta R_P=5,88\%$	$\Delta R_B=-3,51\%$	$\Delta R=2,05\%$	$\Delta R_P=5,32\%$	$\Delta R_B=-3,28\%$	$\Delta R=1,79\%$	$\Delta R_P=4,86\%$
ДП «Рівненський експертно-технічний центр»	999,67	997,79	1032,33	1035,27	1065,00	1073,06		
	$\Delta R=0,04\%$	$\Delta R_P=3,15\%$	$\Delta R_B=-3,11\%$	$\Delta R=0,06\%$	$\Delta R_P=3,04\%$	$\Delta R_B=-3,10\%$	$\Delta R=0,06\%$	$\Delta R_P=2,93\%$

Разом із тим звернімося до прогнозування прибутку підприємств з урахуванням фінансових ризиків. Прогнозування прибутку спричинене також виявленням ризику недоотримання прибутку, а прибуток є основною метою діяльності підприємства та здійснюється, аби уникнути цього фінансового ризику в перспективі. Для оцінки впливу чинників на зміну чистого прибутку пропонується використовувати факторний аналіз рентабельності.

Провівши оцінку впливу чинників на зміну чистого прибутку експертно-технічних центрів у 2016–2017 рр. на основі факторної моделі, виявили, що рентабельність продажів зросла в середньому на 5–6% за рахунок зростання виручки від реалізації послуг.

У 2018–2020 рр. очікується зростання прибутку від реалізації послуг усіх аналізованих підприємств у межах середніх величин, а саме середньої арифметичної та середньої геометричної. Проте факторний аналіз показав зниження темпів зростання рентабельності продажів, що характеризує прибуток від реалізації послуг, за рахунок швидкого спаду темпів зростання виручки від темпів зростання витрат (табл. 3).

За допомогою методів прогнозування прибутку суб'єкти підприємництва можуть виявити та нейтралізувати такі ризики, як ризик недоотримання прибутку та зниження рентабельності, а також поліпшити свою фінансову та господарську діяльність через прийняття доцільних управлінських рішень щодо розподілу прибутку.

Таблиця 4

SWOT-аналіз експертно-технічних центрів України

Сильні сторони	Слабкі сторони
<ul style="list-style-type: none"> • Кваліфіковані кадри • Наявність власних лабораторій та технічного обладнання • Система управління якістю • Широкий спектр діяльності • Висока ліквідність * Легка структура активів 	<ul style="list-style-type: none"> • Зростання собівартості послуг • Зростання поточних зобов'язань ➤ ❖ Неефективна структура капіталу ➤ Надлишок, нераціональне використання грошових коштів ➤ Зниження показників оборотності ❖ Зниження темпів зростання оборотних активів ❖ Низька частка власного капіталу у балансі * Зниження показників оборотності * Неефективне використання оборотних коштів * Низька частка власного капіталу у балансі
Можливості	Загрози
<ul style="list-style-type: none"> • Монополіст на ринку • Зростання обсягу послуг завдяки економічній привабливості регіону • Інвестиційна діяльність 	<ul style="list-style-type: none"> • Ризик фінансової залежності • Ризик операційної діяльності ❖ * Ризик зниження фінансової стійкості ❖ * Ризик неплатоспроможності ➤ * Зниження ділової активності ➤ * Ризик недоотримання прибутку
<ul style="list-style-type: none"> ➤ Для ДП «Західний експертно-технічний центр» ❖ Для ДП «Волинський експертно-технічний центр» * Для ДП «Рівненський експертно-технічний центр» • Для усіх експертно-технічних центрів 	

Подальшим кроком є управління ризиками, тому для вибору оптимальної стратегії діяльності підприємства з урахуванням фінансових ризиків пропонується провести SWOT-аналіз.

Визначено такі можливості усіх експертно-технічних центрів: а) монополіст на ринку; б) зростання обсягу послуг завдяки економічній привабливості регіону; в) інвестиційна діяльність. Серед сильних сторін аналізованим суб'єктам підприємництва притаманні: якість наданих послуг; широкий спектр діяльності; кваліфіковані кадри; наявність власних лабораторій і технічного обладнання; система управління якістю; висока ліквідність та ін.

На нашу думку, одним із найбільш перспективних варіантів для вибору стратегії діяльності підприємств з урахуванням фінансових ризиків є зменшення витрат, а саме собівартості послуг та адміністративних витрат, проте не більше, ніж на 10%, аби уникнути різких зрушень. Доцільно вважати за дійсність пропорцію: зниження витрат на 10% призведе до збільшення доходу від реалізації на 50%.

Для вибору оптимальної стратегії діяльності з урахуванням отриманих результатів ДП «Західний експертно-технічний центр» пропонується використати грошові кошти (підприємство є високоліквідним), які є в надлишку, для покриття поточних зобов'язань, що знизить ризик фінансової залежності та зниження фінансової стійкості. Для покращення ділової активності та уникнення ризику недоотримання прибутку доцільним буде зменшення собівартості послуг та адміністративних витрат на 4% та 2% (адже, як відомо з факторного аналізу, витрати зростали, що гальмувало зростання прибутку) завдяки зростанню наданих послуг, їх якості та кваліфікованим кадрам.

За результатами проведеного SWOT-аналізу були визначені сильні та слабкі сторони для кожного підприємства, що дало можливість фінансовим менеджерам урахувати фінансові ризики досліджуваних підприємств у процесі формування оптимальної стратегії діяльності підприємств. Роль такого методу контролінгу, як SWOT-аналіз, значна, оскільки він дав можливість спрогнозувати обсяги прибутку на 2019 р. (табл. 5).

Тобто для усіх експертно-технічних центрів пропонується зниження витрат, а саме собівартості та адміністративних витрат, проте не більше ніж на 10% у сукупності, аби уникнути різких змін, що можуть негативно позначитися на діяльності суб'єктів підприємництва, за таких умов очікується зростання доходу на 50%. Будемо вважати вірною рівність: зниження витрат на 10% призведе до підвищення доходу на 50%.

Упровадивши запропоновану стратегію, експертно-технічні центри зможуть отримати прибуток від реалізації послуг у 1,5–4 рази більший, ніж прогнозований їм через три роки, а саме у 2019 р., що підтверджує раціональність вибраної стратегії розвитку (табл. 5).

Отже, використовуючи SWOT-аналіз для вибору стратегії діяльності підприємства, прийняття рішень, відповідно до даного методу, та вжиття заходів щодо нейтралізації фінансових ризиків, аналізовані підприємства значно покращать свою діяльність та фінансовий стан.

Стратегія розвитку експертно-технічних центрів

Суб'єкти підприємств а	Зниження витрат, %		Збільшення доходу, % (у)	Очікуваний прибуток, тис. грн. (П)	Прогнозування прибутку на 2019 рік, тис. грн. (П ₂₀₁₉)	Темп приросту
	Собівар- тість (x ₁)	Адмініст- ративні (x ₂)				
ДП «Західний ЕТЦ»	4	2	30	6598,50 $\Delta R=17,52\%$ $\Delta R_p=4,07\%$ $\Delta R_B=13,45\%$	3798,00 $\Delta R=0,42\%$ $\Delta R_p=4,51\%$ $\Delta R_B=-4,09\%$	1,74
ДП «Волинський ЕТЦ»	4	3	35	2192,41 $\Delta R=16,98\%$ $\Delta R_p=6,33\%$ $\Delta R_B=10,65\%$	1202,00 $\Delta R=1,79\%$ $\Delta R_p=4,86\%$ $\Delta R_B=-3,07\%$	1,82
ДП «Рівненський ЕТЦ»	5	3	40	3752,15 $\Delta R=27,06\%$ $\Delta R_p=17,27\%$ $\Delta R_B=9,79\%$	1065,00 $\Delta R=-0,06\%$ $\Delta R_p=2,93\%$ $\Delta R_B=-2,99\%$	3,52
по Україні	$x_1+x_2 \leq 10$		$y \leq 50$	$P \approx 1,5 - 4 P_{2015}$		1,5-4

Забезпечення фінансової безпеки суб'єктів підприємства неможливе без проведення ефективної системи управління фінансовими ризиками, яка передбачає ідентифікацію, оцінку та контроль (нейтралізацію) фінансових ризиків.

Таким чином, на основі всіх цих складників запропоновано й обґрунтовано стратегію діяльності аналізованих підприємств, яка дасть змогу не тільки нейтралізувати фінансові ризики та мінімізувати фінансові втрати, тим самим стабілізуючи фінансовий стан, а й збільшити прибуток (рис. 6).

Суб'єкти підприємства для забезпечення власної фінансової безпеки потребують дотримання обґрунтованого управління фінансовими ризиками, що здійснюється у декілька етапів, а саме ідентифікації, оцінки та контролю (нейтралізації). Найвагомішими є перший та другий етапи, адже вимагають цілісної методики, що полягає в діагностиці фінансового стану, аналізі банкрутства та прогнозуванні прибутку.

Зазначена методика дасть змогу раціонально обрати методи контролю (нейтралізації). Такий підхід забезпечить корегування індивідуальної стратегії діяльності суб'єкта підприємства з урахуванням фінансових ризиків, чого потребують вітчизняні підприємства за теперішніх нестабільних умов функціонування.

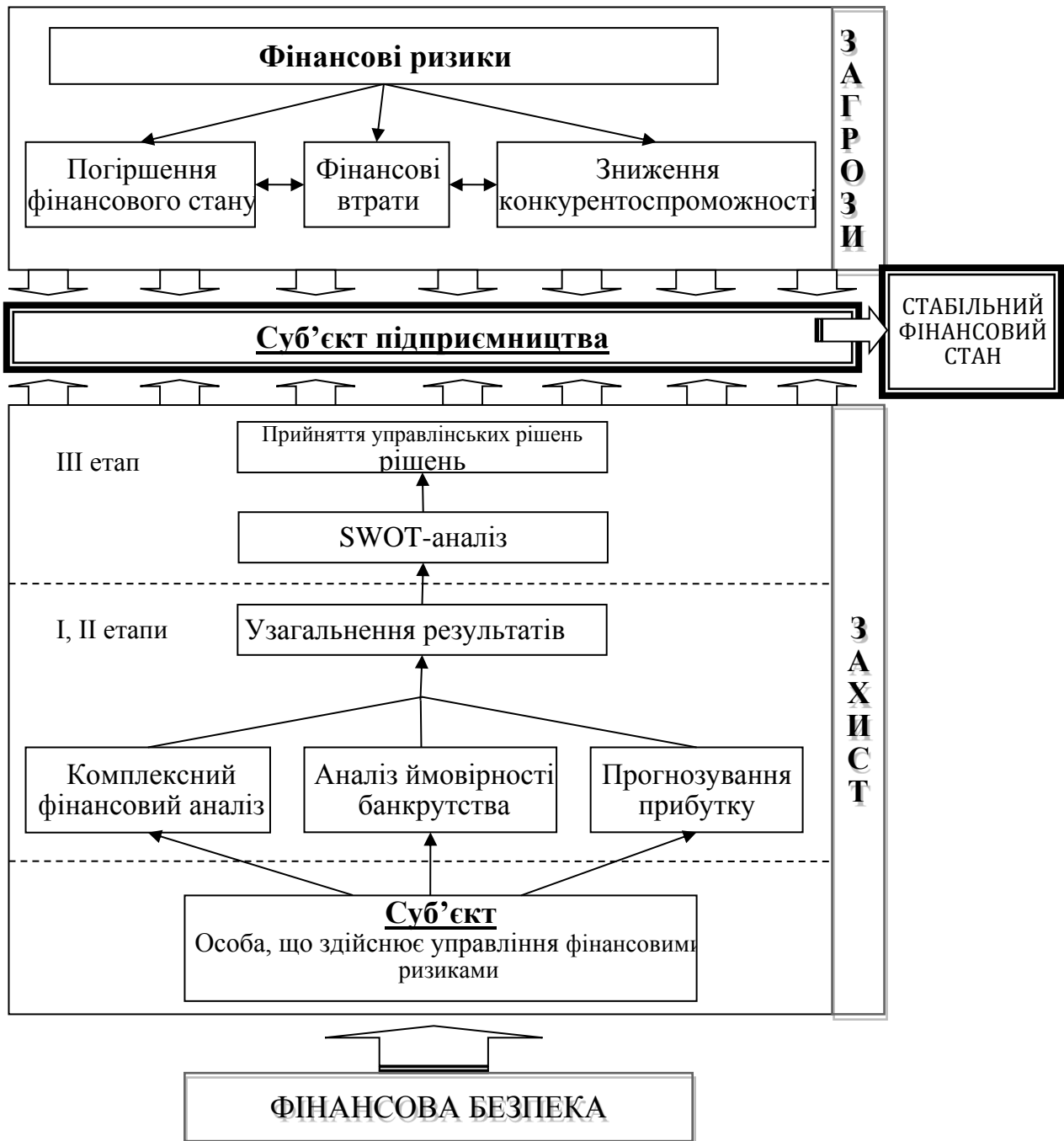


Рис. 6. Стратегія управління фінансовими ризиками в системі фінансової безпеки суб'єктів підприємництва

Висновки

Проведений нами аналіз демонструє, що в Україні існують певні напрацювання з проблем фінансових ризиків та управління ними з огляду на фінансову безпеку суб'єктів підприємництва. Однак чимало проблем, які стосуються формування комплексної системи мінімізації фінансових ризиків для фінансової безпеки суб'єктів підприємництва та посилення їх конкуренції, залишаються не вивченими. Крім того, не сформована однозначна й структурована система управління фінансовими ризиками. Особливо це питання актуалізується в умовах жорсткої та недобросовісної конкуренції, глибоких зрушень у системі економіки, нестабільної політичної ситуації та інших чинників. Адаптація вітчизняного сектора економіки до таких вимог ринку є складним процесом. Така ситуація розхитує стабільність

функціонування підприємства, ставить під загрозу його подальшу успішну діяльність і приводить до фінансових труднощів.

Водночас надзвичайно важливим є усвідомлення можливостей та ймовірності настання фінансових ризиків. З огляду на це, необхідно вдосконалити методи, важелі та інструменти управління фінансовими ризиками суб'єктів підприємництва, які формують дієвий механізм їх економічного зростання й є запорукою фінансової безпеки.

З урахуванням вищезазначеного, у роботі запропоновано й обґрунтовано цілісну систему, яка охоплює комплексний фінансовий аналіз, прогнозування прибутку та банкрутства, що дало змогу розробити пропозиції з мінімізації фінансових ризиків і сформуванню стратегію діяльності суб'єктів підприємництва за допомогою збалансованої політики управління фінансовими ризиками для забезпечення фінансової безпеки.

Упровадження ефективної комплексної системи управління фінансовими ризиками забезпечує стабільність функціонування суб'єктів підприємництва та слугує підґрунтям формування їх фінансової безпеки, яка трактується як стан захищеності від негативного впливу фінансових ризиків завдяки використанню захисних фінансових інструментів, що забезпечує їх стабільне функціонування, здатність швидко та ефективно реагувати на загрози та раціонально використовувати фінансові ресурси.

Список використаних джерел:

1. Башнянин Г.І. Управління ризиками платіжних систем у перехідній економіці / Г.І. Башнянин, О.Д. Вовчак, В.П. Страхарчук, А.Я. Страхарчук. – Львів : Новий світ-2000, 2006. – 224 с.
2. Бланк И.А. Управление финансовой безопасностью предприятия / И.А. Бланк. – К. : Эльга, Ника-Центр, 2004. – 784 с.
3. Донець Л.І. Економічні ризики та методи їх вимірювання : [навч. посіб.] / Л.І. Донець. – К. : Центр навч. літ-ри, 2006. – 312 с.
4. Івченко І.Ю. Економічні ризики : [навч. посіб.] / І.Ю. Івченко. – К. : Центр навчальної літератури, 2004. – 304 с.
5. Румянцева Г.І. Стабілізація фінансового стану підприємства у контексті стабілізації механізму управління інвестиційними ризиками / Г.І. Румянцева. – Львів : НЛТУ, 2016. – Вип. 26.2. – С. 236–240.
6. Інноваційний розвиток промислових підприємств в контексті підвищення ефективності їх діяльності / Г.І. Румянцева, П.С. Харів, Р.С. Чорний [та ін.] ; за ред. П.С. Харіва, Р.С. Чорного. – Нововолинськ : Бізнес-Інтернет-центр, 2015. – С. 256–271.
7. Терещенко О.О. Фінансова діяльність суб'єктів господарювання : [навч. посіб.] / О.О. Терещенко. – К. : КНЕУ, 2003. – 554 с.
8. Смит А. Исследование о природе и причинах богатства народов : монография / А. Смит. – Москва : Издательство социально-экономической литературы. –1962. – 654 с.
9. Шумпетер Й.А. Теория экономического развития / Й.А. Шумпетер. – М. : Прогресс, 1982. ; Директмедиа Паблишинг, 2008. – 401 с.
10. Маршалл А. Принципы экономической науки : в 6 т. / А. Маршалл. – М. : Прогресс, 1993. – Т. 2. – 351 с.
11. Пигу А. Экономическая теория благосостояния : в 2-х т. / А. Пигу. – М. : Прогресс, 1985. – Т. 1. – 512 с.
12. Найт Ф.Х. Риск, неопределенность и прибыль / Ф.Х. Найт ; пер. с англ. – М. : Дело, 2003. – 360 с.
13. Беднарська О.Р. Суть та види ризиків у плануванні діяльності машинобудівного підприємства / О.Р. Беднарська // Вісник Національного університету «Львівська політехніка». – 2007. – № 606. – С. 8–15.
14. Вагнер І.М. SWOT-аналіз як інструмент стратегічного аналізу / І.М. Вагнер // Вісник Криворізького економічного інституту КНЕУ. – 2009. – № 4(20). – С. 81–84.

15. Дубодєлова А.В. SWOT-аналіз конкурентних можливостей підприємства / А.В. Дубодєлова, М.В. Гербут // Вісник Національного університету «Львівська політехніка». Менеджмент та підприємництво в Україні: етапи становлення і проблеми розвитку. – 2009. – № 657. – С. 15.
16. Вітлінський В.В. Ризикологія в економіці та підприємстві : [монографія] / В.В. Вітлінський, Г.І. Великоіваненко – К. : КНЕУ, 2004. – 480 с.
17. Єпіфанов А.О. Фінансова безпека підприємств і банківських установ : [монографія] / А.О. Єпіфанов, О.Л. Пластун, В.С. Домбровський [та ін.] ; за заг. ред. д-ра екон. наук, проф. А.О. Єпіфанова. – Суми : УАБС НБУ, 2009. – 295 с.
18. Загорельська Т.Ю. Управління фінансовими ризиками на рівні підприємства / Т.Ю. Загорельська // Вісник Хмельницького національного університету. – 2009. – № 3. – Т. 1. – С. 168–173.

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