MANAGEMENT OF THE 21ST CENTURY:
GLOBALIZATION CHALLENGES

monograph

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PREFACE

The end of XX and the beginning of the XXI century are characterized by global management specialists as times of violent changes in the management paradigm. Globalization and regionalization are the main processes of the development of the modern world, which not only significantly affect economic life, but also cause political, social and even cultural and civilizational consequences. These consequences are increasingly felt by almost all countries of the world. Among them, Ukraine, which is fully conscious, actively and purposefully moves towards integration into the world community. Globalization as the emergence of world-wideness, manifests itself, first of all, in the formation of a single socio-economic, political, cultural and informational space. This process of social change in recent decades consists in the formation of a single global market, information openness, the emergence of new information technologies, as well as in increasing the global cultural connection. Governance in the process of globalization allows countries to share experiences, using the achievements made and the difficulties they face. This process contributes to the mutual enrichment of ideals, cultural values and aspirations, taking into account the recognition of cultural diversity. As a tendency to global development, globalization is a phenomenon that is defined by the market, and not by state forces, and means homogenization of life.

The formation of new integration economic relations in Ukraine and the intensification of competition objectively force executives and managers to radically change the system of views on enterprise management in an unstable and difficult predicted external environment. Today, the main task is to adapt not to the changes in market conditions of operation, but to the speed of these changes. In this regard, a management system that is capable of responding adequately and in a timely manner to changes in both the internal and external environment is necessary. Therefore, this problem is given more and more attention in theoretical researches of scientists and practical activity of business entities.

The philosophy of socio-economic development of Ukraine at the present stage is to know the underlying factors of national and general civilization progress. These new ideas will enable the information, intellectual, organizational, material and financial resources of Ukraine to be used for the civilization jump and solve urgent problems of time. This forces to focus attention on the main directions of management development using autarkic cycles while providing a sufficient level of comfort of life; creation of social and organizational structures that will operate on the principles of self-organization and will carry out a coordinating and organizing role of overcoming crisis phenomena in society.

Taking into account, that traditional management, as a mechanism in his different models, forms, systems exhausted itself, as does not assist the decision of problems of globalization of development of civilization, there was an objective necessity to set forth the paradigm of management of XXI of century – to the management
essence of that consists in opposition to the processes of self-destruct; conditioning for harmonization of self-regulation open system: human, organization, company; conditioning for realization of creative potential of everybody; forming and introduction of management mechanism is on all levels for any socio-economic open system.

The researches, sanctified to the theoretical and methodical aspects of forming of directions of development of modern models of management, their introduction and realization taking into account possibilities of home economy, acquire at these terms of the special actuality. Questions related to the management at macroeconomic level and at the level of enterprise are updated on theoretical, and on practical levels, that is confirmed by scientific positions of experience authors and beginners, and provides a scientific discussion for researchers, and for practical workers.

A collective monograph «Management XXI century: calls of globalization» is devoted to these and other problems. Progress of management theory trend on the basis of analysis of theoretical and methodical groundwork scientists and practical workers highlighted in the collective monograph create possibilities for the practical use of the accumulated experience, determine maintenance of management, and their realization must become basis for the choice of reference-points of the further researches sent to the improvement of management theory. In a collective monograph considerable attention is spared by the task of practical character, related to forming of organizationally-economic mechanism of management organizations in the conditions of globalization, by development of methods, principles, case frames taking into account modern scientific approaches and to the consolidated informatization of business processes of modern enterprises.

In a monograph is devoted the results of researches and scientific positions of authors of different countries are expounded in relation to such aspects of management, as: management organization as by the socio-economic system; an innovative, investment and informative management is in the system of modern enterprise; a skilled management is in modern organization; branch and regional aspects of modern management; public management; agrarian management; management of tourist business; international management and management of foreign economic activity; management of risks, by safety and competitiveness of enterprise; marketing management; the modern going is near a management higher education.

Authors are overcome the wide enough circle of problems - from forming of conceptual principles of management of development of the state potential to the applied aspects of management his separate subsystems and subjects of manage.

A monograph consists of two divisions and 70 subdivisions, each of that is independent enough on maintenance problem questions.

Structure of monograph, namely, presence of two parts: «Development of modern paradigm of management in Ukraine: national and globalization aspects» and «Management the modern socio-economic systems in the conditions of reviving
and world integration» helps to be concentrated both on the conceptual questions of forming and development of economical, social environmental constituent and problems of providing of process of practical application of the worked out case frames.

Preparation of collective monograph within the limits of two research themes: the «Macroeconomic planning and management of higher education of Ukraine the system: philosophy and methodology» (state registration number 0117U002531); «A management the socio-economic system in the conditions of national and globalization calls» (state registration number 0117U003102) underlines not only scientific but also practical orientation. The results of researches are stated in a collective monograph by authors present a scientific and practical value.

Positive party of collective monograph are the system and logic of construction, simplicity and availability of exposition of material, presence of examples and illustrative material.

We hope that the monograph will become another step to the scientific decision of problems of forming of effective control system in the difficult terms of globalization.

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PART 1. DEVELOPMENT OF MODERN PARADIGM OF MANAGEMENT IN UKRAINE: GLOBALIZATION AND NATIONAL ASPECTS

RECENT TRENDS IN THE DEVELOPMENT OF FOREIGN ECONOMIC SECURITY OF UKRAINE

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In modern conditions of geopolitical and geo-economic instability, as well as instability of the world financial system against the backdrop of global disasters, the notion of economic security becomes particularly important.

Within the framework of interstate relations, it is expedient to differentiate the economic aspects of the national and international security. Foreign economic security today is an integral part of Ukraine’s economic security. The proper state of foreign economic security is designed to provide favorable conditions for the development of the national economy through its active participation in the world division of labor. The rapid development of market relations, the intensification of export-import operations, the total strengthening of international economic cooperation and integration processes throughout the world are accompanied by an aggravation of economic competition in the domestic market. Consequently, all these tendencies actualize an issue of ensuring the economic security of the state and its core components.

Issues related to the essence of foreign economic security as an important element of the national security system are not sufficiently developed in comparison with the category “economic security”, various aspects of which are widely represented in recent scientific works and publications.

This determines the urgency and need for further research on trends in the changes in foreign economic security.

Traditionally, in the domestic and foreign scientific literature, the concept of “foreign economic security” is hardly used in the literal sense and is often interpreted as an integral part of the national economic security. In general, most experts define this concept as a specific type of activity, which is explained by the strengthening of globalization processes and the need for countries to enter international markets and compete there. Today, there is no clear understanding of foreign economic security in the Ukrainian legislation. The first move in the legislative aspect for the foreign economic security understanding is the Law of Ukraine “On Foreign Economic Activity”. The given concept is indirectly explained by the following principles
of foreign economic activity development, as enshrined in the Article 2 of this Law: sovereignty, freedom, legal equality and non-discrimination, the rule of law, protection of interests of the business entities, and the equivalence of exchange [1].

This indicates the incompleteness of methodical processing and the need for further research on the notion of foreign economic security (Table 1).

### Table 1

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<tr>
<th>Authors</th>
<th>The essence of the concept</th>
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<tr>
<td>Lipkan V., Lipkan O. [2]</td>
<td>Foreign economic security is an integral component of economic security or a targeted influence of any management entity on threats and dangers in which state, non-state and international institutions and organizations create the necessary and sufficient conditions for reducing external dependence, overcoming discrimination, dictating, and subordination to the interests of other countries.</td>
</tr>
<tr>
<td>Methodological recommendations for calculating the level of economic security in Ukraine [3]</td>
<td>Foreign economic security is a state of conformity of foreign economic activity to national economic interests, which ensures minimization of state losses from negative external factors and creation of favorable conditions for the economic development due to its active participation in the world division of labor.</td>
</tr>
<tr>
<td>Ivanchenko V. [4], Vlasyuk O., Sukhorukov A., Nedin I. [5]</td>
<td>Foreign economic security can be described through the term “foreign trade security”, which is the ability of the state not only to withstand the impact of external negative factors and minimize the damage caused by them, but also to use the participation in the world division of labor to create favorable conditions for the development of export potential and rationalization of imports, and, finally, to ensure compliance of foreign trade activities with national economic interests.</td>
</tr>
<tr>
<td>Varnaliy Z. [6], Heiets, V. [7], Sukhorukov A. [5]</td>
<td>The external economic security of the state is considered to be the country’s ability to maintain the competitiveness of the national economy, to protect effectively its own economic interests, to resist external economic threats, and to use competitive advantages in the international division of labor.</td>
</tr>
<tr>
<td>Bogomolov V. [8]</td>
<td>Foreign economic security can be achieved by increasing competitiveness, adapting the economy to the current conditions of the world market development, ensuring governance and an adaptive sensitivity to the protection and liberalization policies in order to ensure sustainable economic growth as a whole.</td>
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<tr>
<td><strong>Chesnokov A. [9]</strong></td>
<td>Foreign economic security is the ability of the state through a set of measures in the foreign economic sphere to ensure the sustainable development of the economic system and its resilience to external negative factors and manifestations of globalization changes in the world economic system. In order to realize the existing national economic interests, the author proposes to allocate horizontal (social, legal, financial, environmental and personnel) and vertical (export, import, credit and investment) components of the foreign economic security.</td>
</tr>
<tr>
<td><strong>Gerasimchuk Z., Vavdiyuk N. [10]</strong></td>
<td>The author does not directly define the essence of the notion of foreign economic security. He recognizes this term as a separate functional component of assessing the level of economic security of the state and discusses the level of external economic openness in the country as the basic characteristic of the foreign economic security.</td>
</tr>
<tr>
<td><strong>Oleksiyenko M. [11]</strong></td>
<td>The author defines foreign economic security solely on the basis of a general theory of systems and regards it as a subsystem of the international economic security aimed at ensuring the protection of the country’s economic interests as a socio-economic system, as well as a high level of implementation of its foreign economic potential.</td>
</tr>
<tr>
<td><strong>Yaremko L. [12]</strong></td>
<td>Foreign economic security is the ability of the socio-economic system to protect its common and specific interests in the context of globalization, which include as follows: – ensuring stable receipts of goods that are classified as critical imports and are not available in the territory of a particular country; – elimination of environmentally harmful consequences of the functioning of industry and urbanization; – overcoming the depressiveness of the territory, creating labor-intensive industries in order to absorb surplus labor force.</td>
</tr>
<tr>
<td><strong>Senchagov V. [13]</strong></td>
<td>Without defining the essence of foreign economic security, the author considers the system of international economic security as a state of the world economy and international economic relations, when stable economic development of states is ensured and conditions for mutually beneficial economic cooperation are created that exclude the illegal use of economic force. The system of international economic security must protect the state from the following types of threats: – spontaneous deterioration of the conditions of the world economic development; – the undesirable consequences of economic decisions that have been taken without proper agreement between countries; – conscious economic aggression, which is manifested by other states.</td>
</tr>
</tbody>
</table>
Foreign trade security is a synergetic concept that comprehensively reflects the generalized state of its main components. Therefore it is expedient to carry out its research through a system of indicators, national economic interests, factors and threats.

Foreign economic security is a set of international conditions for the existence of agreements and a set of different institutional structures in which each member state of the world community will be able to freely choose and implement its strategy of social and economic development without experiencing external pressure. This is necessary to provide each member state of the world community with the proper conditions for establishing mutually beneficial relations with other countries and to ensure the protection from external interference.

The author notes that the key factor that ensures the need to consider foreign economic security as an independent category and also as a separate direction in the national security system development is the ability of the state to withstand the influence of negative external factors and to minimize the harmful consequences caused by them, to take an active part in the world division of labor from with the aim of creating favorable conditions for the development of the economy and ensuring the compliance of foreign economic activities with national economic interests as a whole.

Foreign economic security is an integral part of both international and national security of the country, reflecting the state of effective use of corporate resources to prevent threats and to ensure the stable functioning of the enterprise both in the domestic and foreign markets.

Summarizing the essence of the notion of “foreign economic security”, it is worth noting that its etymology depends on the research conducted by scientists in the field of national and economic security development. Foreign economic security is considered by scientists to be the state of a certain object, as well as the condition for sustainable economic development, and even a result of certain managerial actions.

However, in almost all the above definitions of foreign economic security, it is possible to outline the common features: the main goal of this concept is related to the economic growth; the total aim of the foreign economic security is the protection of national interests in the foreign economic sphere; the methods used in this process are concerned with the level of competitiveness increase.

On the basis of the above definitions and the behavior of a certain country when creating conditions to ensure an effective foreign economic activity, it is expedient
to distinguish three main approaches to the definition of this concept: satellite, autonomous and situational ones.

The satellite approach, as follows from the primary meaning of the word “satellite”, defines foreign economic security, as a formally independent but actually subordinate notion. In this context, security should be viewed from the perspective of competitiveness and sustainability as the significant economic concepts of nowadays. Obviously, foreign economic security is the ability of the national economy to compete in foreign markets and to be resistant to external influences.

In general, the satellite approach is identified with the market approach, which argues that the state is not able to improve its own security. This is impossible, since external factors are exogenous, that is, they are outside the sphere of the national government influence. One of the modifications of the satellite approach is a composite approach, in which foreign economic security exists only as a component that includes energy, food, raw materials, migration, monetary, financial, food, and environmental security.

On the contrary, autonomous approach, as characterizes the interpretation of the word “autonomous”, defines foreign economic security as an independent concept with its own unique content. Therefore, the foreign economic security acts as the ability of the national economy to counter various threats and meet different challenges.

Autonomous approach acts as a state approach, which provides that regulation of foreign economic security can not be addressed to the market, it should be provided only by the state government. In this sense, an autonomous approach is a managed approach, which means ensuring foreign economic security because of state intervention.

And, finally, the situational approach makes it possible to define foreign economic security as the competitiveness of the national economy, which allows to provide protection against threats and to develop steadily on this basis. This definition contains four basic concepts: competitiveness, sustainability, threats, and challenges.

The first two concepts define a wide range of the investigated and developed problems, while the content of the above definition focuses on the concepts of threats and challenges only [18].

Thus, the multiplicity of approaches to the justification of foreign economic security, its main concepts and aspects can be explained by the multifaceted nature of this category, but also by the fact that each author offers his own understanding of the essence of this concept, which greatly depends on the context and the research objectives.

In this regard, the analysis of any problem of national or external economic security should begin with an analysis of risks, challenges and threats (Figure 1).
Fig. 1. The main threats to foreign economic security of Ukraine [developed by author on the basis of the sources: 4, 6, 7, 8, 19]

However, the factors that are caused by foreign trade operations have the greatest impact on the state and the level of foreign economic security and, accordingly, the level of the national economic security. Based on the analysis of the trends in the development of Ukraine’s foreign trade provided by the Department for International Trade and Economic Cooperation and European Integration, the main threats to ensuring the necessary level of foreign economic security of Ukraine in the trade sphere were identified by author (See Figure 2).
To ensure foreign economic security of Ukraine, the highest priority should be given to the following tasks of the state policy in this field:
- the optimal combination of state protectionism and free trade policy;
- the tax support of the domestic commodity producer;
- the maximum use of the advantageous geographical position of Ukraine regarding the transit through its territory of cargo from abroad and energy carriers;
- the substantial improvement of the work of the customs authorities with a view to preventing smuggling by the subjects of foreign economic activity;
- the suppression of illegal export of capital from Ukraine;
- the active attraction of foreign investments;
- the diplomatic and political support of foreign economic activity;
- the creation of an economic system compatible with the West European ones, which will facilitate the establishment of the effective relations with the developed countries;
- the development of various forms of international economic cooperation;
- the ensuring of a positive balance of foreign trade balance of the country;
- the diversification of exports and imports.

Thus, the conducted system research of the recent trends in the development of foreign economic security of Ukraine has shown that the external economic security of the state can not be objectively investigated without taking into account its close connection with various levels of economic and national security of the country.

Having determined the main external economic threats of Ukraine, it is necessary to develop a system of indicators for determining the level of external economic security of the country, which is expected to become one of the promising areas of scientific research in this field.

References:


THE FUTURE CHALLENGES OF THE EUROPEAN DANUBE REGION STRATEGY

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In the Presidency Conclusions of 18 June 2009, the European Council requested the Commission to prepare an EU Strategy for the Danube Region (EUSDR). The Commission adopted a Communication on 8 December 2010 (with an Action Plan identifying specific actions and examples of projects in 11 priority areas), which was then endorsed in April 2011 by the Council.

The European Danube Region Strategy (EDRS) was adopted by the Hungarian Presidency on 30 June 2011 in Budapest. It was the second EU macro-regional
strategy, which followed the EU Strategy for the Baltic Sea Region. A first Report to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions concerning the EUSDR was issued on 8 April 2013.

Fig. 1. EDRS countries
From http://www.danube-regio.eu/

Countries in the EDRS area:
- 9 EU Member States: Austria, Bulgaria, Croatia, Czech Republic, Germany (Baden-Württemberg, Bayern), Hungary, Romania, Slovakia, Slovenia
- 3 additional connecting countries: Bosnia and Herzegovina, Montenegro and Serbia
- 2 neighbours: Moldova and the Ukraine (4 districts)

A complex approach to the Danube area required new methods for the development of the strategy. As a versatile corridor, the Danube River emphasizes the trans-national character of strategy creation. Obviously, the Danube also areas appear in Hungary’s National Development Plan documents and policies.

National interests may differ from country to country, in specific issues (Lentner, 2007). In addition, different priorities may be included in the separate development programmes and strategies for the Danube NUTS2 and NUTS3 regions. The Danube-Cities (ESPON categories) are developing at a rapid pace, especially in the metropolitan areas.

Therefore, the elaboration of the Danube Strategy could not be part of a traditional planning process with a designer workshop finding the optimum vision, collects policy expectations and sets professional requirements. A continuously (or at least regularly) operating international design system was needed. Some of the projects in the INTERREG programmes III and IV indicate positive experiences
in this area (Veres, 2010a; 2010b). Demand has increased for forums not created for unilateral information and opinion formation but for the purpose of discourse. This was the purpose, for example, of the Danube-Region Cohesion, Interregional International Scientific Conference organised at the University of Dunaújváros already on four occasions.

The Danube is an important link between the European Union and the countries acceding the EU. Consequently, the European Union also plays a major role in the development of the Danube as one of Europe’s most important and busiest waterways. A series of international scientific conferences provided opportunities in Hungary and in the neighbouring countries for the participants to familiarize themselves with the social and economic as well as natural developments taking place along the Danube, and to identify possible goals and directions in improvement. This allows the Danube countries, regions and communities can play a significant role in Europe’s development (Veres, 2010c).

The discourse-triggering conferences resulted in the exploration and enhancement of opportunities for cooperation between the countries along the Danube, in the generation of new joint projects, and in the expansion and promotion of international and interregional relations (Veres, 2016).

Summary of the EDRS Action Plan. In early June, 2010, DG REGIO, the body in charge of the preparation of the Danube Region Strategy on behalf of the European Commission, delivered a consultative version of the Action Plan for the Member States on the basis of previously submitted national contributions and stakeholder conferences. This was the basis for the subsequent bilateral and multilateral negotiations with Member States and for the legitimacy of actions selected for the cooperation (European Commission, 2010).

The EU Strategy for the Danube Region was published in two documents: a Communication from the European Commission to the other EU Institutions, and an accompanying Action Plan, which complements the Communication. The projects are considered to be illustrative, providing examples of project types or approaches encouraged in general. The essence of the procedure is that the actions included in the Action Plan are implemented by the Member States and the stakeholders on the basis of the subsidiarity principle.

The Action Plan sets clear priorities, and provides the information required for implementation and follow-up. The priorities are broken down into well-defined actions, with sample project proposals for the presentation of the supporting actions. As a common feature of the actions specified in the Action Plan, they all support the existing EU policies, including the EU’s strategic guidelines outlined in the EU 2020 document, the integrated approach based on the principles of sustainability, social cooperation and a number of other effective EU regulations.

Despite the fact that the Action Plan serves stability for a certain period, the thematic priorities may change over time, and so the actions and projects may also be reviewed, transformed or replaced (this is called a “rolling” plan).
The EDRS adopted in 2011 on the technical basis of the Action Plan eventually identified 11 priority areas (Table 1). Table 1 shows that Hungary played an important role in coordination and was assigned priority areas PA2, PA4, PA5, representing a professional challenge and responsibility, and requiring increasing cooperation.

Table 1

<table>
<thead>
<tr>
<th>Connecting the Danube region to other regions</th>
<th>Creating prosperity in the Danube region</th>
</tr>
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<tbody>
<tr>
<td>PA1/a Mobility - inland waterways</td>
<td>PA7 Knowledge society</td>
</tr>
<tr>
<td>Austria and Romania</td>
<td>Serbia and Slovakia</td>
</tr>
<tr>
<td>PA1/b Mobility - rail, road and air transport</td>
<td>PA8 Competitiveness</td>
</tr>
<tr>
<td>Serbia and Slovenia</td>
<td>Baden-Württemberg and Croatia</td>
</tr>
<tr>
<td>PA2 Sustainable energy</td>
<td>PA9 People and skills</td>
</tr>
<tr>
<td>Czech Republic and Hungary</td>
<td>Austria and Moldova</td>
</tr>
<tr>
<td>PA3 Culture and tourism</td>
<td></td>
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<tr>
<td>Bulgaria and Romania</td>
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<tr>
<th>Environmental protection in the Danube region</th>
<th>Strengthening the Danube Region</th>
</tr>
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<tbody>
<tr>
<td>PA4 Water quality</td>
<td>PA10 Institutional capacity and cooperation</td>
</tr>
<tr>
<td>Hungary and Slovakia</td>
<td>Austria and Slovenia</td>
</tr>
<tr>
<td>PA5 Environmental risks</td>
<td>PA11 Security</td>
</tr>
<tr>
<td>Hungary and Romania</td>
<td>Bulgaria and Germany</td>
</tr>
<tr>
<td>PA6 Biodiversity, land, air and soil quality</td>
<td></td>
</tr>
<tr>
<td>Bavaria and Hungary</td>
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</table>

Source: Gábor Jenei (2017)

- In the period between 2014 and 2020, the criteria set out in the objectives of the Strategy are enforced in an organised framework. There are best practices and cross-border cooperation programmes inherited from the 2007-2013 period.

As for other opportunities, centrally managed funds are available from Brussels, such as the Life+, the Horizon 2020, and the European territorial cooperation programmes, including transnational programmes, such as the Central Europe Programme and the Danube Operational Programme (see Figure 2).

Many say that a significant portion of these funds were already available in the 2007-2013 period, and, although in a limited amount, they were also available in the last two years. However, it is important to note that partnerships and the frameworks of cooperation which have developed their concepts in accordance with criteria set by the Danube Region Strategy and are actually be able to have access to these resources have only evolved recently.

In order to improve the flow of information, in 2015 a project financing conference was organised by the Hungarian Ministry of Foreign Affairs and Trade for Hungarian stakeholders who wish to implement projects in relation to water management and energy in the next period.
We have established strategic partnerships with Germany, in particular the Baden-Württemberg region, and with the Czech Republic and non-EU countries. The Strategy has been highlighted in various operational programs, in different funding sources and as a new element in bilateral cooperation.

As an added value to the macro-regional approach, countries have jointly defined the gas market infrastructure developments to be implemented in the 2014-2020 period using financial resources and have succeeded in bringing these outcomes and modelling outcomes into the various Brussels decision-making processes.

This model has been able to show how to achieve a particular infrastructure element affecting the price of gas in some countries in the Danube region. The construction of gas storage capacity can be highlighted in such forward-looking job. Almost all countries around Hungary, and in the Danube Region - talking to EU countries - indicated that they would like to given priority to gas storage capacity on the expense of resources of the 2014-2020 development period.

The analyses showed that as of now there are 4 billion cubic meters of excess capacity, and if anticapited developments will be realized, it will increase this capacity to 9 billion cubic meters.

The new role of macro-regions. In 2015 the European Parliament made a critical and analytical overview of the new role of macro-regions in the European territorial cooperation (European Parliament, 2015) and concluded that macro-regional strategies have become a crucial concern in shaping the European territorial
cooperation in the post-2013 cohesion policy. The European Union is currently implementing two macro-regional strategies: the EU Baltic Sea Strategy and the EU Strategy for the Danube Region. In October 2014, the EU Adriatic and Ionian Strategy was also adopted. In addition, recommendations have been made for and debates are ongoing about the development of similar strategies for other macro-regions, especially coastal ones, the Alpine, the Carpathian, the North Sea, the Black Sea, the Western and Eastern Mediterranean Sea and the Atlantic Arc regions.

Developments in concepts and legislation related to macro-regional cooperation. The European Parliament first discussed the conceptual definition of macro-regions and macro-regional strategy, the latter called an increasingly important area of governance for European territorial cooperation. Macro-regional strategies are important tools not only for regional policies but also for foreign policy. The future of macro-regional strategies are discussed against conflicting views on post-2013 cohesion policy and a changing regulatory framework. The European Parliament’s comments clearly point towards support to a territorial and contractual approach in macro-regional cooperation, in line with the Europe 2020 agenda. It was noted that the added value of macro-regional strategies lies in promoting the involvement of neighbouring countries, the creation of territorial synergies and the reduction of regional disparities.

The macro-regional strategies under consideration are analyses of the Carpathian Region, the North Sea, the Black Sea, the Atlantic Arc and the Strategy for the Western and Eastern Mediterranean. At the current stage, the concepts of certain strategies have not yet been clearly linked to specific needs or specific actors / partial areas, while in the case of other strategies, due to the high level of social and economic cohesion, there is still considerable doubt concerning the need for macro-regional cooperation. Contrary to other strategies, the feasibility of macro-regional cooperation can be questioned because of the social and economic inequalities and political instability.

The classification of macro-regional strategies is based on an in-depth assessment of the need for cohesion as a means of achieving a macro-regional level of social, economic and territorial cohesion as a tool for cohesion in post-2013 cohesion policy. According to the analysis, macro-regional strategies should be divided into three groups: 1) macro-regional strategies that function as possible means of the EU’s foreign policy (Mediterranean and Black Sea Strategies); 2) macro-regional strategies used for combatting development inequalities (Danube Region, Baltic Sea, Adriatic, Ionian and Carpathian regions) and 3) macro-regional strategies that serve as potential tools for exploiting territorial synergies (Alpine, Atlantic and North Sea strategies).

Conclusions and policy recommendations. Added value: The added value of macro-regional strategies for European territorial cooperation and cohesion policy needs to be assessed on the basis of the nature of the reviewed macro-region. According to the three elaborated approaches, the different categories of macro-
regional cooperation classified in different categories are expected to have different added values.

Monitoring and evaluation: The preliminary assessment of political and financial needs and capabilities should be given priority in assessing the feasibility of future strategies;

Technical assistance: The European Parliament should continue to provide financial support to transnational activities, while also carefully assessing in this respect what and how they can fulfil in the next few years;

Regulatory framework: The European Parliament should examine the idea of conditionality of macro-regional cooperation and the usefulness of European Grouping of Territorial Cooperation in macro-regional strategies in greater depth in the coming years.

Evaluation of progress in the Danube Strategy. Numerous projects were launched or improved as a result of the EUSDR. These include: the master plans on Fairway rehabilitation and maintenance and on LNG navigation; the creation of nature protection networks and the development of common methodologies for the assessment and management of natural risks due to the climate change; and the setting up of a network for improving security on the Danube River (European Commission, 2016).

The EU Strategy for the Danube Region has clearly improved cooperation culture, linking stakeholders and dovetailing existing institutions to share knowledge and experience. The ministers of transport at the Ministers’ Meeting of the Danube Region received high-level political support to ensure better management in Danube shipping. The achievements of the cooperation culture and activity shown as an important goal in the Danube Region Strategy also fed through as spectacular results in automotive industrial cooperation. The experience gained in the European Union and more specifically, in the Danube Transnational Programme has contributed to the development of a Cooperation in Automotive Higher Education and Research in Hungary, the evolution of a coordinated innovation activity, and network cooperation (Tóthné Borbély, 2013).

The Danube Financing Dialogue is an example of a match-making platform offered by the strategy for project promoters and financing institutions to discuss issues and identify suitable solutions related to financing projects in the region (Lentner, 2015a).

The EUSDR has also made the governance system more effective by strengthening coordination between policies and institutions at a national level. It has facilitated reaching out to relevant stakeholders at both national and local levels, and continued dialogue with civil society organisations (Lentner, 2015b).

Another important area where the EUSDR has made a genuine contribution included the EU enlargement and neighbourhood policy agendas. It has helped to intensify thematic cooperation with the five participating non-EU states and to bring stability to the area through solid networks and partnerships. Relevant initiatives
include the setup of the first European Grouping of Territorial Cooperation with a non-EU country (Hungary and Ukraine), and the establishment of a new coordination scheme in 2015 to allow Moldova to participate in the strategy. Serbia has also taken an active part in coordinating two of the strategy’s priority areas.

The implementation of the EUSDR has been supported by the Danube Transnational programme. The latter covers the same geographical area, provides financial support to specific transnational projects and supports the strategy’s governance. In 2014, the 14 participating countries jointly set up the Danube Strategy Point (DSP), which became operational in June 2015. The DSP has mainly been active in monitoring, communicating and providing support to priority area coordinators and to cooperation between priority areas.

Irrespective of promising initial achievements, the EUSDR would benefit from a number of specific policy and operational measures, such as the continued integration of the transport and energy infrastructure, actions to counter water pollution, natural risks, common labour market and education policies, competitiveness measures, in particular for SMEs, and measures addressing demographic challenges and brain drain. The security dimension remains important as is the need to develop public administration capacities.

In addition, new challenges have been faced in the past two years, for example relating to migration flows, global security and terrorism (Veres, 2017).

The administrative capacity available for the arrangement of implementation and for improving cooperation remains an issue, particularly in non-EU countries. This still requires appropriate responses at both national and regional levels.

References:


One of the most important tasks, put before the Ukrainian society, is increasing of Ukrainian economical competitiveness and wellbeing of Ukrainian population. Hence, a lot of reforms in the different spheres of economic, social and legal policies are provided in the modern stage of Ukrainian development. By 2018, one of the most urgent reforms in Ukraine is the health care system’s reformation.

Nowadays the complicated socio-economic, political and demographic changes are taking place in Ukraine. To date, according to the non-official statistical data, the preliminary appraisement of the total number of population is about 29 millions, i.e. in comparison with 2010 it has decreased 1,58 times or 16,96 mln. people. According to the official statistics, the dynamics is not such bad, but nevertheless, there are significant problems with demographics: by 01.02.2018 there are 42, 39 mln. people in Ukraine.

Such reduction of population is caused by military actions on the East of Ukraine (Donetsk and Luhansk regions), massive migration processes (about 7 millions emigrants per year), high mortality rate, low fertility and population ageing. According to statistical data (2017), in the last decade in Ukraine, more than 1.5 thousand diseases account for 1 thousand people.

Thus, these difficulties have a significant impact on the entire health system’s activities, regional health authorities, and each medical institution. Hereby, one of the most important priorities of Ukrainian state policy is the preservation and strengthening of the population’s health on the basis of a healthy lifestyle formation and increasing the medical care’s availability and quality for the population.

The actuality of the research topic arises from aforesaid, which is defined by finding out the most perspective ways of Ukrainian health care system reformation and implementation of the best international experience into this process.

Therefore, the analysis of the best practices of managing health care and the main procedures of their implementation into Ukrainian realities is one of the main tasks of this research.

Nowadays a lot of researches are dedicated to this problem. Among the most prominent ones are the scientific works of the following Ukrainian and international

As it was said in the target setting part, we have to analyze not only the national implementation mechanism of health care system’s reformation, but the main gears of health care system’s realization worldwide; implementation of their most efficient parts into our reformation process remains the underdeveloped scientific issue.

The main goal of this research is to analyze the procedures of Ukrainian health care system’s reformation and to determine the most useful mechanism of their realization, considering the best international practices. The study has challenged the assumption that the modern Ukrainian financial model of the health care system needs to be revised and reformed with the purpose of its improving.

Despite the diversity of forms of medical care, today there is no country that would be fully satisfied with its own health care system [4]. Ukraine is no exception. For the entire formative period of Ukrainian independence its governance has been finding the best ways of the health care system improvement.

The following classification of the models of the health care system exists in the Health Economics: (1) national health model (Beveridge model), directed on the high-grade preventive and medical process, characterized by universal health care coverage of all citizens by a central government; (2) social insurance model (Bismarck model), grounded on the comprehensive compulsory health insurance; (3) private insurance model, based on the out-pocket financing, characterized by employment-based or individual purchase of health insurance financed by individual and employer contributions [5, p. 26-30].

Ukrainian health care system was related to the Semashko health care system (administrative state model), as the most post-soviet health systems, characterized by the planned economy and centralized mechanism of administration and control. But nevertheless, in recent years corruption and bureaucracy was peculiar to this model; the profession of “physician” has long been not considered prestigious, due to the law level of salaries of specialists in this sphere. Thus, the old Ukrainian health care system has been shown its inability in the conditions of the market economy. So, one of the main issues of the modern reformation process is to decide this problems.

In accordance with the new concept of the health care reformation, starting from January, 1st, 2018, it will involve the following spheres of Ukrainian health care system: (1) an autonomization of medical institutions; (2) the rural health care; (3) the primary health care; (4) the secondary health care; (5) the tertiary health care; (6) e-Health. The transitional period of the reforming will last for up to January, 1st, 2020. The main stages of reform are presented in the table 1.
Table 1

<table>
<thead>
<tr>
<th>Stage</th>
<th>Period</th>
<th>Scope of action</th>
<th>Main actions</th>
</tr>
</thead>
</table>
| 1     | From January, 1st, 2018 | Creation the National Health Service | 1. Formation of the Service  
2. Election of the head on the competitive basis  
3. Start to the work  
4. Formation of main hospital districts  
5. Gathering of the all necessary statistic data  
6. e-Health |
| 2     | From January, 1st, 2018 till 2020 | Primary health care sector | 1. Acquiring the status of noncommercial utility  
2. Contracting with National Health Service  
3. Contracting with patients  
4. Adoption of e-Health technologies  
5. Financing by the tariff system for the patient and additional budget financing |
| 3     | From 2020 | Secondary health care and Tertiary health care | 1. Contracting with National Health Service  
2. Contracting with patients  
3. Adoption of e-Health technologies  
4. Direct financing per each provided medical service at one unitary rate (it’ll be fixed-cost and include costs for drugs, equipment and its amortization, salaries)  
5. Adopting the program of medical guarantees |

Source: Created by the authors on the basis of the data from [3].

For the realization of this concept, the National Health Service as the key element of medical reform must be founded. Its main functions are funding executing and contracting with medical institutions. Its head must be elected on a competitive basis, as the main responsible party of this medical reform [3].

In our view, another important part of reforming is the necessity of creation of hospital districts. The main reason for their creation is the provision of the qualitative intensive medical care for all Ukrainian population; this requires the number of served population about 200 thousand people, which allow the medical institutions to be provided by necessary equipment and staffed with qualified personnel.

The autonomization mechanism of all medical institutions is considered as the main financial and managerial tool of this reformation process and the essential condition of the adherence of institutions of the primary health care into it.

From 2018, all the medical institutions concluded the contract with National Health Service, will be financed under a new mode, i.e. they will get annual fixed payment for the medical care for each patient, with whom the physicians of this institutions signed a contract. In accordance with the draft law № 6327 medical care is paid from the State budget [1]. At the primary level and in case of the emergency situation the state pays for 100 % of all the necessary treatment; it covers about
80% of all appeals for medical care. At the secondary and tertiary levels the state guarantees 100% of payment for medical care and other medical services, included into the list of treatment and defined by medical guaranties program.

In accordance with the reform, it is formed the system of the national solidarity insurance. Budget contributions are formed through the general tax system and accumulated in the treasury accounts; from them the National Health Service pays for medical service (fig. 1).

![Mechanism of payments for medical services](image)

**Fig. 1. Mechanism of payments for medical services in accordance with the concept of the medical reform**

*Source: Created by the authors on the basis of the conducted researches.*

But nevertheless, it is planned, that some medical services will be paid by patients (so-called “red service package”). All the medical services, gone beyond the bounders of the program of medical guarantees, are included to them (i.e. stomatological services or services of plastic surgery). Noncommercial utilities will be able to provide additional services at the uniform rates, which have been defined for the state program of medical guarantees. Private medical establishments will define independently tariffs for the additional services beyond the bounders of the contract with the National Health Service of Ukraine.

In accordance with the draft law № 6327 [1] there is a norm, in accordance with which the volume of the state budget funds for the state program of medical guarantees realization is annually determined as an amount not less than 5% GDP in the Law of Ukraine “On the State Budget” (fig. 2 and 3).

It was mentioned above about the noncommercial utility; that means that all the medical establishments will tend to become like other enterprises. They were budget institutions, working through system of the vertical control, so far. Their managers didn’t have freedom to act and were guided by orders from on high. The Law of Ukraine № 2002 [2] allows the medical institutions to fully operate and expand their rights to the level of the all economic entities of Ukraine, including the right to strike deals, to have its own bank account, to set salaries without reference to the wage grid.

Thus, in accordance with [2], (1) manager of medical institution, will get the freedom to manage the assets and finances, to create personnel policy, and to determine internal organizational structure of medical establishment; (2) manager of medical institution, will get the right to set salaries for the employees in the ways, not prohibited by law; (3) medical institutions are able to have its own bank
account; (4) financing of the medical institutions is supported not by the breakdown of the costs, but on the basis of its own financial plan, which allows to manage the funds effectively; (5) medical institution has the right to consolidate with other establishments with the purpose of the functions redistribution among them and optimization of use of the material, human and financial resources; (6) medical institution has ability to hire the doctors, working as individual entrepreneurs, which are registered and have got the necessary license for the carrying out of economic activity in the medical sphere, under a refit contract. But nevertheless, noncommercial utility remains in ownership of the local communities.

Thus, we can conclude, that reformation of health care system is a complex process, covering all the spheres of system’s functioning. It must be provided by constant regroupment of resources between all elements, stages and levels of medical care with the purpose of clinically productive and more cost-effective decision-making process of medical care provision. It must take into account fast-changing market of medical techniques and technologies, pharmaceutical market, and system of development of clinical practice.

Therefore, among the most priority areas of changes are: (1) structural reorganization of health care system with the development of primary medical care on the basis of family medicine; (2) transition from administrative planned model to the medical care providing on the contractual basis; (3) strengthening of financial basis of health care system; (4) formation of the system of providing and support of qualitative medical care; (5) realization of active personnel policy; (6) realization of rational pharmaceutical policy; (7) managing change in the health care sphere.

But nevertheless, we can trace next obstacles for reformation of Ukrainian health care sector; among them are: (1) redundancy of state obligations of free medical care; (2) deficit of budget; (3) lack of knowledge, training and motivation of the
managerial personnel in the health care sector; (4) lack of interest in reforms of a number of political and corporative groups; (5) weak methodological and political managing process.

Thus, it is necessary to refer to the weaknesses and disadvantages of the reformation process of health care sector in Ukraine. They are: (1) absence of clearly defined goals; (2) a continuous review of strategies of reforms; (3) absence of clearly defined policy, providing the realization of adopted decisions; (4) ignoring of scientifically proved practical approaches, experiences and methods; (5) ignoring of the successful world experience and failures; (6) influence of lobby groups; (7) law paces of realization; (8) incoherence and contradiction of actions.

Given all of the above, we can conclude that for the effective development of the medical system, it is necessary that its part, related to organization and managing of medical institutions, has to be adequate and reasonable to the modern, fundamentally new economic and legal relations. Only in then it is possible high-grade interaction of the government, business and society on issues relating to health care system. In the modern Ukrainian health care system, however, there is a number of structural and management problems, which need fundamental changes of the current approach to the management and organization of medical care.

Among the most significant priorities of the modern stage of medical system’s reform we can highlight: (1) formation of organizational structure of the primary health care on the basis of the general practitioner (a family doctor); (2) reorganization of the emergency care; (3) creation new links between the primary and secondary health care; (4) formation new financial gears of health care system; (5) implementation of the system of provision, appraisal, and control of medical care quality; (6) formation of effective system of stimulation and motivation of the medical personnel. Thus, the main directions of health care reform are: (1) transition from inpatient care to out-patient one; (2) transition from specialized and highly specialized care to general one; (3) transition from quantity of medical services to their quality; (4) transition from increasing the number of physicians to the quality of their work; (5) transition from a treatment to the diseases prevention.

In our opinion, if all these priorities are adhered to, the medical reform will be effective and productive and the main its objective – to increase economies’ competitiveness and wellbeing of population in Ukraine – will be achieved.

References:


**METHODOLOGY OF REINGENIEERING BUSINESS PROCESSES IN CONDITIONS OF IMPLEMENTATION OF CONTEMPORARY MANAGEMNT METHODS OF THE ENTERPRISE**

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Formulation of the problem. The necessary tasks that need to be addressed in the course of reengineering are characterized by a high degree of complexity and great responsibility. Successful reengineering cannot be implemented out without a solid methodological basis. The key role in the business process organization projects is performed by well-established procedures and the application of appropriate methods and tools. It is therefore essential to increase the importance of the business process and to link with it numerous functions. Reengineering of business processes has a strategic purpose to achieve breakthrough improvements in indicators, which will achieve high performance of enterprises that focus on consumers’ demands.

The article outlines various possible measures for the use of business process reengineering, which will improve the consistency of procedures, methods and instrumental support for management, its adaptation, minimize the cost, and minimize the time spent.

Unsolved Problems. A great degree of risk is associated with managing the
business processes of the enterprise. Very often the process reengineering approach involves organizational restructuring and can be extremely destructive for the organization. The vital question to address is: what dictates the need to develop a mechanism for using management tools in concert with the goal of achieving the desired breakthrough.

Aim of the Research. The aim of this research is to develop a purposeful and systematic understanding of the necessity to introduce the business processes in modern enterprises. In addition, depending on the requirements of the external environment as they are the business processes that are ultimately the subjects of any innovations.

The research was conducted on the basis of the object-oriented approach, which allows to describe both data about the essence of the process and its behavior, provides creation of transparent, easily modifiable business models and information systems that allow the reuse of individual components. The choice of the management method is dictated by the time requirements. Each era was characterized by its own methods and implemented by the head of the firm, based on the ideas and beliefs.

Main research results. The relevance of the research lies in the fact that the reengineering of the process provides the maximum improvements, however, remains the most expensive of all approaches to improving business processes and requires a lot of time. Most organizations can implement only one change of this scale at a time. Nevertheless, in this approach the elements are used consistently and as a result, the desired breakthrough is achieved.

This approach can be applied both at the single process level and at the entire organization level. Process management provides planning, and the management of the controls. The subject consists both the basic process and the auxiliary process.

Business-reengineering, similar to other management methods, came to us from the West. During the last 80 years the method of revolutionary transformation of the enterprise appeared and spread; a radical restructuring of its business, which was called «reengineering.» In fact, the ideologists, M. Hammer and J. Champi, expressed the essence of reengineering as: «This is a fundamental rethinking and radical redesign of the company’s business processes to achieve fundamental improvements in the main actual indicators of their activities - value, services, quality, pace» [12,13]. One of the key concepts that underlies the reengineering are the business processes. It is their improvement that is a huge reserve of increasing the efficiency of the enterprise. Therefore, it is necessary to understand the nature of business processes, to understand what importance they have for the enterprise and most important of all, how to properly change them. To emphasize the business processes, their improvement required an unconventional approach from the managers. Gradually, reengineering, which proposes to break the existing system in the enterprise and build it a new one on the basis of such a revolutionary change in business processes, began to transition into a management system and «grow» with technology and become the basis for scientific justification. In fact,
it appeared in the corresponding software products. In the business reengineering, the process approach is at the forefront, where the enterprise process is the object of management [4].

In this article, we will consider the methodology of applying business process reengineering. This will be an opportunity to improve the consistency of procedures, methods and instrumental support for management and its adaptation. This is essential to move from task management to process management. In such an organization, the result of labor will be visible to each participant of the process, since the «client» of the result of labor is determined initially and consequently, the result is predetermined based on the client’s expectations [12].

From the process approach point of view, the organization is resembled as a set of processes (the functional approach as a set of functions). Hence the enterprise management transforms into the process management. Each process has its own goal, which is the criterion of its effectiveness; how optimally this process leads to its achievement? The goals of all processes are goals of the lower level, through the implementation of which the goals of the top level-the goals of the organization are achieved. By managing processes and perpetually improving them, the company achieves a high efficiency of its activities [4]. Therefore, the main focus is on processes as they penetrate all the elements of the control system and are focused on the final result. We will establish the necessary processes and manage them.

Reengineering of the business processes is devoted to theoretical work, textbooks and practical guides that have been published, which nevertheless do not provide an answer to the question of how the reengineering project is actually implemented. For instance, even if the project was developed by the consultants, it should be noted that according to various estimates, the percentage of failures of reengineering projects in the Western companies reaches up to 70%. There are many examples of the fact that the developed projects have not been implemented [2]. The reasons are from our point of view are the rejection of other approaches to the management of the organization and the formal implementation of the principles of reengineering.

The precursor of the process approach was a functional approach. Now it is considered obsolete and its modern alternative is the process approach as a primary tool for reengineering. However, the rejection of the functional approach requires removing the concept of «function» and accordingly, «the functional principle of creating an organizational structure.» Only then the process structure is built. It turns out that the distribution of specialists will be distributed on the basis of their belonging to the processes. Thus as a rule, at the enterprise level each of the employees is multifunctional [6]. Therefore as a rule, it is the combination of a functional and process approach to the management of an enterprise is the «golden mean». The functional structure of the enterprise defines «what to do», and the process structure «how to do.» These are two inseparable aspects of management. If the manager, head of the company can look at the organization from this point
of view, then reengineering will become a really useful and effective management tool [4].

Business process reengineering is a complex method that provided the company opportunities to be configured for the implementation of strategic goals and tasks by optimizing the performance of all its functions and operations by various divisions. Therefore, its application will allow to optimize business processes with respect to the company’s strategy, ensure transparency of business for owners and top managers. Furthermore to effectively manage operations, provide predictable processes, and formalize the processes for further automation.

Practical activity for the management and improvement of business processes is implemented with the help of technology of business-reengineering, which the following possibilities into reality [3; 4; 7, 8.10]:

1. Development (design) of future business processes.
2. Diagnostics of business management processes.
3. Change (adaptation) of business processes.
5. Documentation of business processes.

Now we will analyze them in more detail.

1. Development (design) of business processes. For this purpose, a special language for describing business processes is used. In fact, it permits you to describe the current state of business processes, as well as create models of the future. The model includes a description of all the components of the process such as the functions, resources, participants, goals, information, results, events, direction and sequence of actions. Therefore reflecting the existing reality or the image of it in the future. All the participants in the process fulfill their functional responsibilities in accordance with this model. In addition, all the employees clearly know all their actions in all the processes in which they are involved [4].

The development (design) of the business processes involves the following actions: the development of the image of the future organization and the development of the business model of the new organization [11].

A) The development of the image of the future organization. The development of the image of a prospective organization should be implemented using an integrated approach based on a combination of strategy development processes and the business requirements. The activities of the first stage include the specification of the main objectives of the organization based on its strategy, customer needs, the general level of business in the industry and the current state of the organization. The purpose of this stage is to develop a view of the new organization and formulate it in terms of specification of the organization’s goals [11].

B) The development of a business model for a new organization. Modeling and simulating of the processes is implemented with the obligatory use of any modeling language. In fact, the modeling language should express how the internal or external process is turned into reality with the help of human or technical resources and from
what functions these resources will be taken. It is especially vital to show how the process can be supported by the information system [11].

2. Diagnostics of the business management processes. The analysis of the business processes is implemented with the purpose of development of elimination offers of the problem zones in the organization’s processes. To perform this, a «snapshot» of the technology of the process execution is made—a model of business processes «as is» is built, which allows the customer to get a comprehensive view of what is happening in the company. During the analysis of the model, the current problems of business processes are revealed such as: double subordination, duplication of functions, absence of information link between processes, and the inconsistency of processes. Based on the results of the analysis, suggestions are made for the new direction of changes (adaptation) of business processes.

3. Change (adaptation) of the business processes. Any changes in the conditions of business such as the emergence of a new line of business, the expansion of the range, changes in the supply chain, and technology, require an immediate transformation of the affected business processes. The existing model is adjusted, the changes are communicated to the executors, and they begin to perform functions in accordance with the new conditions. Perpetual adaptation of business processes to changing conditions serves as an effective mechanism for the business management [4].

4. The Optimization of business processes. In order to determine the activities’ bottlenecks and effectively manage the company, it is essential to link the implementation of certain processes and works with its target strategic indicators. To perform this, it is vital to compare the company’s strategic goals and objectives with the inputs and outputs of the processes. First of all, the dependence of the results of the company’s activities on the results of the process is revealed. Second of all, the need to fix the existing business processes in order to assess their effectiveness. If this is not performed now, future significant costs are possible due to inefficient work of employees, breach of contractual obligations, the need for restructuring, etc. This entails both serious financial costs and loss of the company’s image [5].

5. The documentation of business processes. It is vital to document all the management’s actions and changes of the business processes. Business process models are designed in the form of descriptions, representing diagrams on paper and by the electronic media. These details are resembled in a complex and repository business processes of the enterprise. In addition, changes are necessarily reflected in the models so that the company can perpetually maintain the current version of the entire set of business processes. Similarly, you can plan the future processes and save them as versions that are analyzed, checked and debugged and only then become workers [4].

The necessities to adjust the management system may be due to [9]:

1) The feedback and the impact of the results of the operation of the control object (in particular, the discrepancy between the normative and actual parameters
of the object).

2) The necessity to review the goals, methods and the processes implemented by the management system.

3) The software development and technological tools and progressive management methods.

Conclusions and prospects for future research. To conclude this article, we can summarize the peculiarity of the reengineering of the business management processes as follows:

1. Reengineering approach allows to release additional resources (financial, personnel, technical, etc.), investing them in the main production.

2. Applying the reengineering business processes will improve the consistency of procedures, methods and instrumental support for management, its adaptation, minimizing the cost and minimizing the time spent.

In other words, using managing processes, we organize effective interaction both inside the company and outside with the outside world. Accordingly, this reduces transaction costs (the costs of poor-quality interaction), internal (employees and units among themselves) and external (firms with buyers, suppliers, investors, etc.) [4]. In addition, this will increase the competitiveness of the socio-economic system. Therefore, further research will be devoted to the development of the idea of increasing the competitiveness of the business entity by creating a comprehensive mechanism for the organizational design.

References:


CHARACTERISTICS AND EVALUATION OF ECONOMIC RISKS OF THE ENTERPRISE

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The statement of the problem. Any business is associated with uncertainty, a lot of dangers, competition. Risk is an integral part of a business activity in any market. The entrepreneurial activity in Ukraine is particularly risky, where an external environment of any enterprise is permanently transformed, where the shadow economy sometimes dominates, where negative factors are widespread and very aggressive. Despite this, under these difficult conditions a lot of companies not only survived, but also thrive mainly due to the effective use of the huge potential of modern risk management.

The analysis of the main research and publications. Different aspects of economic risk were studied by foreign researchers, such as D. Terry [6], E. Nikbakht [4], P. Bernstein [1], and others. The essence of economic risks was investigated by Ukrainian scientists, in particular V. Vitlinskyi [2], T. Koroliuk [3], H. Tarasiuk [5]. The problem of determining risk became particularly acute in the late XX at the
beginning of the XXI century due to political factors, fluctuations in exchange rates, prices. Consequently, the relevance of the research consists in the lack of a common approach to determining the nature of the economic risk category, the needs of practice and risk management.

The results of the research. Activities of economic entities are carried out in a market, which is characterized primarily by economic freedom of actions of the manufacturer. Economic freedom has to be paid, because freedom of one enterprise is accompanied by freedom of other enterprises that can buy or not buy its products, offer their prices, sell counter products at certain prices, dictate their terms of transactions, operations. Obviously, that herewith partners seek, first of all, their own benefit.

The relativity of such a concept as benefit is that benefits for some partners may turn out to be a loss for others. This conception is also strengthened by the fact that companies which produce homogeneous products tend to push their competitors out of the market. Consequently, regardless of desire, starting its activities, and, hence, entering the market, any enterprise will have to deal with uncertainty and, as a result, to feel influenced by those types of risks that are inherent in this economy and this direction of activity.

The conditions of uncertainty that occur in an entrepreneurial activity are the subject of research and the object of constant observation by economists of the most diverse areas as well as other specialists (lawyers, sociologists, political scientists, etc.). A complex approach to the study of uncertainty in business is related to the fact that economic entities, in the process of their operation, are subject to a number of conditions that can be classified by the place of their origin as follows:

- social and political;
- administrative and legislative;
- manufacturing;
- commercial;
- financial.

In the economy of a command-administrative type, business risk was considered incompatible with a planned economy and was not recognized. Today, Ukraine is developing a market economy, which is associated with various types of uncertainty for all economic entities.

Activities of enterprises at various stages in a wide variety of fields are always associated with uncertainty. The existence of uncertainty in activities of economic entities causes the emergence of risks, without which it is impossible to develop the enterprise effectively [2].

Enterprises that are affected by different types of risks can manage them. The effectiveness of management is largely determined by identification in the general classification system. Risks are classified according to different characteristics using different approaches. There is no single generally accepted classification of risks.

Risks can be classified according to the following characteristics:
- connection with entrepreneurial activity: entrepreneurial, non-entrepreneurial;
- belonging to the country of operation of the economic entity: internal, external;
- levels of emergence: micro-level, branch, inter-branch, regional, state, global (world);
- the sphere of their origin: socio-political, administrative-legislative, manufacturing, commercial, financial, natural-ecological, demographic, geopolitical;
- the degree of substantiation of risk-taking: substantiated, partly substantiated, hazardous;
- correspondence with permissible limits: admissible, critical, catastrophe;
- the level of systemacity: systemic, non-systemic (unique);
- reasons of emergence: uncertainty of the future, lack of information, subjective influence;
- risk realization: realized, unrealized;
- adequateness of time for decision-making on responding to risk realization: warning, current, delayed;
- the degree of influence: influenced by one person, influenced by some people;
- the possibility to predict: predicted, partially predicted;
- the degree of influence on the activity: negative, zero, positive.

This classification can be continued or divided into subclasses or subgroups until each of the elements of risk can be given properties that are characteristic only to it. In addition, each risk can be considered in the context of another qualification group depending on specific conditions.

Understanding the nature of risk is directly related to identification of the functions that it performs in economic activity. One of these functions is regulating and protecting.

Since economic risk is an integral feature of an entrepreneurial activity, it is necessary to highlight its peculiarities along with changing the forms and the mechanisms of economy management of enterprises under the conditions of transition of the country to market relations. They consist in the fact that the risk is always present at all stages of the business entity activity regardless of the sphere of operation. The entire elimination of risk is impossible due to a number of reasons, both objective and subjective ones, and the absence of risk, as a rule, harms the economy, because it undermines its dynamism and efficiency.

Economic risks of the enterprise are numerous and varied. It is difficult to distinguish the main ones. But it should be noted that there are risks specific to the particular enterprise and those that emerge in all without exception organizations. Under certain conditions all of them can play a decisive role.

Since the term «risk» is understood as a probability (threat) of the loss of a part of business resources, lack of income or emergence of additional costs as a result of certain production and financial activities, then financial risks are commercial risks [2]. Risks can be pure and speculative. Pure risks mean the possibility of a loss or
a zero result. Speculative risks are expressed in the possibility of obtaining both a positive and a negative result.

Pure (static) risks always have losses. Natural risks are associated with a possible impact of natural conditions on a company. They may be weather conditions unpredictable for a particular season (temperature fluctuations, light frost, thaw, abundant snowfalls or, conversely, their absence, etc.) or natural disasters (earthquakes, floods, landslides, tornadoes, etc.) [3].

Speculative (dynamic) risks may have either losses or income. Sometimes they are called financial risks.

Speculative financial risks are when an investor making greenfield investment knows in advance that only two types of results are possible for him – income or loss. The peculiarity of financial risks is the probability of a loss as a result of any transactions in financial and credit and exchange spheres, transactions with fund securities, that is, the risk arising from the nature of these transactions. Financial risks include a credit risk, an interest rate risk – an exchange risk, a profit risk.

Financial risks in a strict sense are interdependent with political ones and include:
- risks associated with the purchasing power of money (inflation and deflation, exchange risks, a liquidity risk);
- risks associated with capital investment (investment risks, which include: a profit risk, a risk of profitability decrease, a risk of direct financial losses.

A credit risk is a danger of non-payment of the principal debt by the borrower and interests belonging to the lender.

According to financial implications it is accepted to divide risks into three categories:
1) an admissible risk is the risk that results in a threat of loss of profits by the subject of management if the risk isn’t solved;
2) a critical risk is the risk in which there is a threat of loss of revenue by the subject of management;
3) a catastrophe risk is the risk of inability of an enterprise to pay.

Sources of financial risks can be inside (conflicts, or disloyalty, negligence of individual employees) and outside of the financial risk object (actions of partners or competitors, etc.). Therefore, systems of management of both internal and external financial risks can be distinguished. A special system is used, which is a subsystem of the financial management system, to manage both external and internal financial risks.

Therefore, it can be noted that, broadly speaking, financial risks are any risks that generate financial consequences. Under this approach, financial risks include commercial risks that arise not only as a result of financial risks (in a strict sense), but also property, production, trade risks as well.

A financial risk is the risk arising in financial business activity or when making financial transactions on the basis that the product is either currency, securities, or
funds. It includes:

- an exchange risk is the probability of financial losses as a result of a change in the exchange rate in the period between exchange rate changes and changes in the contract with individuals and a production plant and calculations on it;
- a credit risk is the probability that partners – contract participants are not able to fulfill the contractual obligations as a whole and on individual items;
- an investment risk – the risk of loss of the invested capital and the expected income. In its turn, it can be divided into: a risk of real investment – the wrong choice of location of the object being built, failures in the supply of materials and equipment, the rise in prices of investment goods, etc.; a risk of financial investment – ill-considered selection of financial instruments for investing, financial difficulties or even bankruptcy of individual elements, unplanned investment conditions, etc.

An inflation risk deals with the fact that when inflation rises, the obtained money incomes depreciate more rapidly from the point of view of real purchasing power than they grow.

A deflation risk is accompanied by the deterioration of the economic conditions of entrepreneurship and the reduction of incomes.

Liquidity risks are associated with the possibility of losses when securities and goods are sold through the change of assessment of their quality and value in use.

A profit risk is the risk of an indirect (incidental) financial damage or loss of incomes as a result of failure of some action (investing, hedging, etc.). A risk of profitability reduction is realized as the reduction of interests and dividends on portfolio investments, deposits and credits [1].

All of the above types of economic risks are only conditionally overview, typical for any enterprise. Each of them is divided into subtypes that have particular conditions for the particular enterprise.

The main reasons of risks can be divided into three groups:

1. Most of the processes associated with economy are fundamentally indeterminate.
2. Economically-optimal incompleteness of information.
3. «Organizational» ambiguity or asymmetry of information.

The reasons of risks can be grouped according to the sphere of their occurrence (figure 1).

In an entrepreneurial activity the risk is directly related to the possibility of making a profit, but at the same time the risk limit is required. This limit depends on the size of an enterprise. In fact, large enterprises are less sensitive to risk, and small ones are more flexible and mobile when the market situation is changing.
Along with it, the following functions of risk are important:
- the innovative function of risk deals with the search of non-traditional ways of solving economic problems;
- the regulating function of risk has constructive and destructive forms. Constructiveness consists in the ability of the subject to risk, and destructiveness generates adventurism, subjectivism when unreasonable decisions are made and there is lack of information.
- the protecting function of risk is the following: risk should be considered not only as a natural state of an entrepreneur, but also it is necessary to tolerate possible failures;
- the analytical function of risk involves an analysis of all possible alternatives, solutions and selection of the most cost-effective ones.

Conclusions. The evidence from practice shows that there is a real transformation of risk into a tool for regulating economic relations, which helps entrepreneurs to develop skills of orientation in the probable world and to form necessary qualities of thinking, such as alternativeness, variability and dialectiveness.

Under modern conditions, such predictability is evident as creating risk funds and application of various methods of risk minimization that allow one, on the one hand, to use the constructiveness of risk, and on the other – to protect an entrepreneur from negative consequences.

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INTERNATIONAL DEVELOPMENT POLICY STRUCTURES FOR SCIENCE, TECHNOLOGY AND EDUCATION COOPERATION IN HUNGARY

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International development cooperation and international humanitarian activities form an important part of Hungary’s international relations and as policies developed in line with Hungary’s commitment in the international donor community are key elements of Hungary’s role in addressing global challenges. According to the Hungarian law in force, under the leadership of the Minister of State for Security Policy and International Cooperation of the Ministry of Foreign Affairs and Trade and the Deputy State Secretary for International Cooperation, the Department for International Development and Humanitarian Assistance is responsible for developing the policy for International Development Cooperation and International Humanitarian Assistance, for its coordination by the Government, as well as for its implementation.

Hungary’s annual summary statistics about spending on official development assistance in 2016 pointed out that last year – similarly to previous years – multilateral development cooperation prevailed primarily due to ratio of mandatory contributions to the EU, voluntary contributions to EU Funds and to support for international organisations. In terms of bilateral International Development programmes and projects, the problem of resources with a low level of funding reappeared. Within the OECD, the Development Assistance Committee (DAC) was founded in 1960. Hungary joined to the OECD in 1996 and since its accession to the EU, it has had an observer status in the OECD DAC as an EU Member State. As a result of the accession process launched in 2016 that took months, Hungary became the 30th full member of the DAC on 6 December 2016. As a
member of the Committee, Hungary became a part of a global process that aims at coordinating Development Policy all over the world, and deals with the coordinated implementation of the UN Development Sustainable Goals in the long run, as handling crises effectively is possible only with a global approach and with the cooperation of Member States. The Sustainable Development Framework establishing the directions for development after 2015, Agenda 2030, was adopted by a consensus on 25-27 September 2015 at the UN Development Summit by the Heads of State and Government of the UN Member States with Hungary as a participant. The Framework sets 17 goals and 169 subgoals for the period between 2016 and 2030 that replace the Millennium Development Goals (MDGs) adopted in 2000. Hungary had a leading role in establishing the Sustainable Development Goals (SDGs) since Hungary co-chaired the UN Open Working Group (OWG) commissioned to make a proposal for the goals with Kenya for one and a half years. In terms of adopting the framework, it was emphasised that international peace and security and sustainable development cannot be separated, and thus the causes triggering conflicts can only be eliminated through sustainable development. Moreover, the Agenda includes the target system and subsystem to achieve the dual aim of poverty reduction and sustainable development in a balanced manner.

At the same time with intergovernmental negotiations aiming at establishing the Sustainable Development Framework, preparations were going on for the Third Funding for Development Conference of the UN held between 13 and 16 July 2015 in Addis Ababa. The final document of the Conference, the Addis Ababa Action Agenda (AAAA) forms an integral part of the Sustainable Development Framework 2030, thus providing its implementation. The Sustainable Development Framework and the Paris Agreement adopted at the 21st Conference (COP21) of the parties of the United Nations Framework Convention on Climate Change (UNFCCC) are interconnected in many ways. The transforming elements of the Agenda 2030 have an effect on the implementation of the decisions made at the Climate Summit, while the decision about the legally binding climate agreement affects all the goals of the Framework too.

Migratory pressure is still one of the greatest challenges affecting Europe. International Development Cooperation has a key role in handling factors that trigger migration locally, that is, in providing assistance with international cooperation to ensure such living conditions that hundreds of millions of people shall not be forced to leave their home countries. The main goal of the UN Sustainable Development Framework adopted in 2015 (Agenda 2030), including the Sustainable Development Goals (SDGs) is that people shall live in peace and security, under balanced and sustainable conditions in every state of the world within 15 years. Besides the “human sectors”, International Development has a great potential in terms of the Economy too. Development activities also contribute to improving international opinion about a particular country, enabling economic actors to pursue their interests in the medium to long term. While migration and asylum were not among
the priorities of development and foreign policy instruments under the EU budget, due to the mass wave of migrants and asylum seekers coming to Europe, they were integrated horizontally into most of the sub-programmes, which in turn resulted in the reallocation of resources. The Commission started to use the funds in an ever increasing ratio on supporting the resettlement and assimilation of migrants and refugees primarily in the neighbouring countries of states affected by conflicts, and wherever the conditions allowed, on providing assistance for them to return to their homeland. The Commission set the overall objective of providing better living conditions for forced migrants and refugees also during the transitional period spent in refugee camps and host communities. Thus, the EU paid greater attention to provide a remedy for the consequences of mass displacements in addition to handling the causes triggering migration (e.g. deep poverty, unstable political and economic systems, harsh security conditions etc.). However, this did not mean a complete change of focus: it was rather a more focused approach in handling consequences, which – in terms of handling causes – had been established by the beginning of 2016, mainly thanks to establishing Trust Funds. Making payments to the extra-budgetary European Development Fund, which serves the development of the African, Caribbean and Pacific Group of States (ACP) as part of the Cotonou Agreement, is Hungary’s obligation flowing from its EU membership. Now the programming and the allocation of funds is going on for the 11st EDF (2014-2020). The overall budget of the 10th EDF is EUR 22.682 billion, out of which Hungary has to pay EUR 125 million based on its quota (0.55%). The funds can only be used in specific sectors as set out in particular country strategies (in general: environmental protection, water management, energy, agriculture, food industry, health care industry, construction, education and culture, building capacities, human rights, migration and supporting democracies).

Hungary has been the member state of Organisation for Economic Co-operation and Development (OECD) since 1996. Within the organisation, the Development Assistance Committee (DAC) was set up in 1960. Hungary joined the OECD in 1996, since its accession to the EU, it has had an observer status in the OECD DAC as an EU Member State. As a result of the accession process launched in 2016 that took months, the Minister of State for Security Policy and International Cooperation, Dr. István Mikola formally signed the accession document in Paris. Thus, Hungary became the 30th full member of the DAC. As a member of the Committee, Hungary became a part of a community that aspires to a leading role in coordinating Development Policy all over the world and in the implementation of the UN Sustainable Development Framework including the Sustainable Development Goals. Handling crises effectively is possible only with a global approach and with the cooperation of the Member States. In this process and reducing poverty, the DAC plays a leading role. The DAC urges and assists its member states in establishing a comprehensive Development Policy, in coordinating their particular policies with Development Policy, and in every four year it makes a comprehensive evaluation of
the International Humanitarian Assistance and Development Policy of each member state. Hungary takes part in the high level and executive meetings of the DAC, as well as in its monthly formal sessions and in the work of particular committees. As regards the reform of the ODA, the integration of new, innovative forms of funding into development funding continued in the various working groups of the OECD in 2016 with the main focus on soft loans eligible as ODAs, the administration of development activities in the private sector, and the just recognition of the amount of energy invested by the donors besides the profit of recipient countries. In terms of bilateral scholarships and contributions for developing countries in 2016, 103 students from developing countries participated in the Stipendium Hungaricum programme funded by the Ministry of Human Capacities and coordinated by the Tempus Public Foundation. The scholarship programme that has been come well-known again after decades is especially important. It aims at improving Hungary’s “international visibility”, presenting our national values in the global context. The aim of the programme in educational policy is to foster the internationalisation and quality improvements of Hungarian tertiary education, to strengthen the international relations of the Hungarian scientific elite, to increase the cultural diversity of tertiary education institutions and to promote the competitive Hungarian higher education all over the world. The economic and foreign policy objective of the programme is laying the foundations of the personal and professional attachment of students graduated in Hungary, thus potentially enhancing the understanding of Hungarian peculiarities and interests among the elite of their home country, and establishing the social capital necessary for developing Hungarian economic relations and fostering its aspirations for market entry. It is not negligible that the presence of international students has a positive impact on the economic development of that particular city or region. In addition, the programme contributes to the promotion of the Hungarian language, as some students start their university studies in Hungarian following a preparatory training. In the multilateral context, the university level agricultural programme in Hungary for fellows from developing countries based on the agreement between the Government of Hungary and UN FAO, which continues the practice of previous years, falls into this category. The contribution to the UN FAO scholarship made by the Ministry of Agriculture enabled 34 countries to participate. The Regional Educational Centre of the Hungarian Competition Authority organised five seminars on competition law in 2016 as part of its annual programme for the competition authorities of its primary target countries out of which three events were held in Budapest, one in the Russian Federation and another in Serbia. Within the framework of its bilateral agreements, the Hungarian Academy of Sciences provides financial assistance for the mobility costs of joint research projects and gives mobility support for individuals who wish to travel with research purposes. The subsidised projects mainly last for 2-3 years. The Academy of Sciences provided financial support for 10 developing countries in 2016. Moldova held the presidency of the Police Cooperation Convention for Southeast Europe (PCC
SEE) in the first half of 2016. The Moldavian party – due to trainings organised earlier at the International Training Centre of the Hungarian Ministry of Interior and building on the positive experiences during last year’s Hungarian presidency – asked the Hungarian Ministry of Interior and the PCC SEE Secretariat to organise the Moldavian Presidency’s training programme in Hungary. The Hungarian party did not only provide logistical support and assistance for the organisation, but an instructor of the Faculty of Military Sciences and Officer Training of the National University of Public Service developed the curriculum of the training programme and moderated the training together with the PCC SEE lecturers as well. 16 military education specialists from ten PCC SEE countries participated in the training which they deemed excellent both in terms of professionalism and organisation. Similarly, professional cooperation based on special knowledge transfer was initiated by the Secretariat of the Police Cooperation Convention for Southeast Europe (PCC SEE). The target group of the training was the pool of military experts with multiple years of experience in the field of document security of PCC SEE member states. The professional forum aimed at giving an opportunity for regional professionals to share their experiences about false and forged Iraqi documents, to review trends and best practices in the field of document security and to strengthen the professional network in the area of documents within the PCC SEE. In addition to the British, German, Belgian and Swiss experts, the Pest County Policy Headquarters, the Ministry of Foreign Affairs and Trade, the Hungarian Special Service for National Security and the National University of Public Service sent lecturers to the workshop. The curriculum of the training was developed by the professionals of the Hungarian National Police Headquarters, the International Training Centre of the Hungarian Ministry of Interior and the National University of Public Service with the representatives of the Secretariat. Since 2012, Hungary has been a member of the Delhi-based Global Development Network. It is an international network of researchers in Development Studies that focuses on the development of the Third World. The organisation excels other international research institutions and networks by organising its annual conferences presenting new research results.

Recently Hungarian diplomacy has also sought to enhance cooperation between the disciplines of the Hungarian Academy of Sciences – especially in the areas of Sustainable Development, Climate Impact, Healthcare and Agricultural Sciences – and the scientific and educational professionals of countries entitled to ODAs. Bridging the gap in scientific knowledge and education in underdeveloped countries is of key importance in development. In 2016 October, the Committee for International and Development Studies of the Hungarian Academy of Sciences received the delegation that came to Hungary for the preliminary investigation before our accession to the DAC, and informed them about the cooperation between the Ministry and the academia. However, the results of these efforts also depend on the commitment of the parties. This partnership assumes governmental awareness and an appropriate national legal environment.
Countries should commit to invest in R&D. Experience leaves no doubt that innovation (developing and commercially and/or societally exploiting new products, processes, services, infrastructures, etc) is vital for the success of companies (at the micro-economic level) and economies as well as to increase individual freedoms, the quality of life and societal well-being, at the social level (Senera-Saridogan, 2011). OECD countries show that higher per employee and more intense technology diffusion correlate strongly with total factor productivity. The impact of innovations in communication, mobility and e.g. health care on the quality of life is unmistakable. Innovation is the result of technological development in combination with organizational changes, new management methods, marketing concepts, financial techniques or policy approaches. All of these increasingly rest on scientific research, in the natural, engineering and medical sciences, and today to a greater degree in social sciences and humanities than in the past. Previous developing countries in East and South-East Asia, in Latin-America and also South-Africa demonstrate that this is the way ahead. Companies do invest in research and development which they wouldn’t do if good economic reasons were absent, and that is why in almost all OECD countries business funding R&D has increased considerably. But firms are withdrawing from longer-term research, while patents reveal that they rest increasingly on academic research results (citations in patents of academic publications). So here is an important reason why government investments are necessary to maintain the overall R&D enterprise. More generally, there are three compelling arguments. The first focuses on improving the quality, productivity, cost-effectiveness and accessibility of a variety of services, infrastructures and policies for which the government itself is totally or largely, directly or indirectly responsible. Secondly, while basic research is not a pure public good (that is others can use it without diminishing the value for its producers and other firms cannot be stopped to use it), it is obvious that firms will not invest in all the research they will eventually use. Here the governments have to and have always stepped in through the funding of research in universities and institutes of basic science. Thirdly, however, much knowledge is ‘tacit’ knowledge and embodied in persons, procedures, organizations. Also using published knowledge requires extensive and expensive learning processes; capabilities (people, equipment etc.) are necessary to appreciate and assimilate (‘absorb’) results from elsewhere. This leads to the modern rationale for investment in public basic research, which creates technological opportunities; it increases technological diversity by providing a source of new interactions, networks and technological options, whereas firms tend to exploit the variety in an existing technological path; and it is also a source of skills, required to translate knowledge into practice; an enhanced ability to solve complex technological problems; and the ‘entry ticket’ to the world’s stock of knowledge. Countries that have been able to benefit most from science and technology have built up systematically ways and means to carry out research and development and to support firms, government agencies and other organizations in society at large.
in applying the results of research, whether carried out domestically or abroad. Several common characteristics are to be found and developed countries, emerging economies and some developing countries are not very different in this regard.

Organization and funding systems for science. In many developing countries establishing a national body with responsibility for science and technology was part of the initial institutional framework. They had and sometimes still have a series of responsibilities: defining policies for science and technology, coordinating science and technology and funding R&D are often included, but also supervising or managing research institutes. Registration of ongoing research, responsibility for compliance with international provisions (biodiversity, ethics for example), and proposing legislation for intellectual property, and occasionally even running a national patent office are to be found as well. A key lesson that successful countries have learnt is the need to differentiate several of these functions and to articulate them in separate organizations, some of them within the government structure, some at arms length or completely independent. In several countries a new type of body has emerged over the past decade or so as an expression of the importance science and technology, and education, for the socio-economic development of a country. The increasing focus on innovation as the mechanism through which the impact of science and technology is often realized, and the awareness that an international, global perspective must be developed only add to the reasons to create such a Research and Innovation Council (which is the name of a successful example in Finland). The essence is that government, industry, research organisations, universities and vocational training institutions agree on and commit to a medium- and long-term vision and strategy for economic and social development, and the role of increased competitiveness and innovation. For that the government creates a high-level body combining key stakeholders from the government, the private sector and other institutions. Developing and agreeing on key components of a strategy for economic development; committing to work together, to coordinate activities, and to mobilise and commit the members’ respective constituencies; defining systematic action plans (for example as regards incentives to improve the business environment and entrepreneurship; human resources development; technology, knowledge and innovation; the information infrastructure; communicating with society at large; and monitoring and measuring progress would be key roles of such a Council. It does not take over formal responsibilities but if stakeholders indeed commit to a direction and to work together it may be a powerful informal instance of coordinating across the public and private sector.

Role of a vital enterprise sector. The most obvious standpoint (Golob et al.) is that the enterprise sector usually does not carry out much research. Indeed, historical experience shows that as overall R&D efforts in a country increase, the financial share of enterprises in the total amount of R&D carried out increases as well. The Gross Expenditure on R&D measured as a percentage of Gross Domestic Product (GERD/GDP) which for quite a few countries is now close to or upwards of 3%,
is financed for mostly more than two thirds by private enterprises. Over the period of 2000 to 2015, the GERD share in Hungary rose by a total of 0.59 percentage points. The peak was in 2013, when gross expenditure on research and development made 1.39 percent of Hungary’s GDP. In 2015, this ratio was 1.38 percent, much lower than in Austria but nevertheless, higher than in Italy. To the extent that proper economic, social and legal conditions will result in expanding and strengthening the sector of private enterprises one may expect private R&D efforts to grow as well. One very effective way is to support companies in employing scientists, engineers and advanced technicians. In many countries schemes exist that subsidise salary costs at a decreasing rate, say from 75% in the first year to 25% in the third year, and 0% thereafter. Often companies retain such persons. Financially supporting specific R&D or innovation projects in companies, after an independent check on likely viability, or collaborative projects between a company and a researcher at a university or public research centre is proven to be effective as well. Technology adaptation and dissemination programmes with a group of companies or an industry branch, supported by a (public) national industrial research institute are another example. Dissemination is indeed one of the fastest ways to increase the skill level and productivity of companies on a wider scale. It is drawing attention in many emerging economies, and increasingly is being discussed in developing nations. The key notion is that there is often a certain specialization of economic activity in a region, whatever the precise size. There is a virtuous circle of ‘proximity’: companies, even outright competitors benefit from the same suppliers, from agreements and interaction with universities, polytechnics and technical colleges for focused training, from regional governments and banks creating optimal conditions, from joint public, public-private or even private R&D programmes, and so on. Science or technology parks, or public industrial research institutes, with incubator and business development services to assist entrepreneurs in the initial stages of setting up and growing their company, are part of the game everywhere. And very directly, providing tax support, by allowing companies to deduct part of the salary costs of R&D personnel, is found in general by economists to be an effective stimulus. All in all, developing a rich mix of measures and instruments to help increase skills levels, productivity and R&D efforts of companies is a key policy area and challenge for governments in developing countries. Many good examples exist, and countries which are moving fast such as China and South Africa have gone already quite some way (Haour- Zedtwitz, 2014). 

Higher education sector: public and private responsibilities. The university sector or the higher education more generally, deserves much attention. Many developing countries and emerging economies as well, have seen the sector evolve in a particular way. Often one finds one, by now very large, national university which in the past drew most of the talent in the country, both as professors and as students. As student numbers began to grow new national and increasingly private universities were established (Tindemans, 2009). The (former) national
university has often grown so large that concerns for decreasing quality are more than justified as funding has not matched the student numbers. Research was rather concentrated at the national university, also because in many cases this university had close links to one or two universities abroad. Private universities concentrate with few exceptions on areas such as business administration, finances, ICT or for example international relations. The mushrooming number of small universities has, however, brought a serious quality issue to the fore, making a much tighter accreditation system an absolute necessity. Sometimes, however, governments are still very restrictive with providing licenses to private universities or are in other ways, sometimes unknowingly, raising obstacles. The result is that in those countries gross enrolment into higher education is at a very low level. Public financing is often intransparent and rather more follows historical patterns than funding mechanisms that allocate the scarce public resources in the best possible way (McLendon, 2003). Moreover the national university or the few public ones rather deal with the ministry of finance than the ministry of (higher) education, creating a further hurdle towards a transparent and equitable system. In countries with a very strong Academy of Sciences the additional problem was and often still is that the development of a strong research capacity at universities was effectively choked. Establishing a more balanced system of tertiary education, which is much less focused on one or a few central universities is essential. There are very good reasons to differentiate between universities and institutions of professional that offer shorter (one to two years) degree programs or diplomas or longer (three to four year) professional degree programs. Within universities only a relatively limited number should be encouraged or even allowed to developing into or continuing as research universities. Dilution of research funding is a threat all over the world and for example a serious issue in Europe, but much less so in the US. China here follows clearly the US example. Providing good-quality undergraduate education is an important and valuable mission for a tertiary educational institution. A set of interlinked issues relate to the functioning of institutions of higher education. But the government has to create many of the conditions that provide incentives for individual institutions to improve their management and operating methods. Universities need strong management and the traditional academic procedures for appointing persons on key positions are not always well suited to modern requirements. The same applies to human resource management already mentioned in the context of staff development. Universities and other tertiary institutions need on the whole increased autonomy, including internal financial autonomy and flexibility in employment conditions. Those conditions, at least in public institutions, often resemble those of the civil service, and the recognition that these are not suitable has taken roots worldwide. What governments are increasingly doing is granting autonomy in exchange for accountability. That is often combined with forms of performance-based funding which will be considered in greater detail in the next section. A link to national priorities is another element whether this is implemented
through a financial mechanism or not. Governments may require universities to respond to such priorities in ways they may freely choose but should report upon in their annual accounts or strategic plans.

Supporting innovation: funding instruments. A contrast between developed countries and most developing countries and emerging economies is not only the availability of funding as such but also the lack of a differentiated and transparent funding system for research and innovation. It may seem a technical matter but it is not. Funding mechanisms play a crucial role in improving quality, in directing researchers and institutes, in ensuring both a sustainable infrastructure for research and dynamics on the basis of competition, as well as in providing incentives for cooperation between universities and companies. As an example, in quite a few developing countries experience is now being built up with a mechanism for providing funding on a competitive basis to excellent researchers and their teams, using (international) peer review as a selection procedure, funding coming from international partners in development.

In the first place governments provide from their higher education budgets direct funding, mostly as institutional or core funding to create the infrastructure for carrying out research. There are several ways in which this can be done. Often, also in developed countries this is still strongly based on discretionary ways, which others would describe as arbitrary. But attempts are being made to base these core funding allocations on more or less detailed budgeting and on the funding of specific cost categories, increasingly governments or higher education funding agencies, which are tasked by governments in some countries to replace governments in doing this, are searching for formula-based lump sum contributions, implying that the governments bases its contribution on some rational calculation whereas universities retain the full freedom to spend the money in ways they deem fit. Both past performance and agreed future targets may lie at the basis of such performance - or formula-based funding mechanisms. The second major contribution to university research also comes from the government, but through and independent ‘Research Council’ (there may be more for different fields of science) and to a lesser degree from an ‘Innovation Funding Agency’. This funding is typically provided on a competitive basis, using (international) peer review as the selection mechanism. The proportion between what is often called the ‘first flow of funds’ to university research and the ‘second flow of funds’ varies widely. Some countries (the US and the UK are key examples) rely heavily on the competitive mechanism, others put the emphasis on the core funding. It is really a policy issue: continuity versus dynamics, as some would like to phrase the dilemma. How to promote concentration of research and thus differentiation of missions of tertiary educational institutions is a vexing problem that governments in most parts of the world face. With regard to tapping private resources, whether it is for stimulating companies to carry out more research or for attracting private donations for research in public institutions, governments need to consider which tax measures will effectively trigger individuals, private
foundations or charities and enterprises. Competitive funding for research projects is key as a complement to institutional funding. Almost all countries nowadays avail of a mechanism to provide such funding. The National Science Foundation in the USA is a well-known example, but as part of modernizing the research and research funding systems many countries have created a ‘Research Council’ or a National Funding Agency whose main task is to make available research money for the best researchers by transparently assessing proposals or past performance through peer review (often international) in competition. There is a good case for letting them operate very largely in a ‘self-organising’ mode by scientists, though the government should set a certain framework to which such a National Funding Agency is bound. The Russian Foundation for Basic Research, the National Natural Science Foundation of China have been successfully functioning during the last twenty years, but also in for example Uganda the Uganda National Council for Science and Technology is now providing competitive grants with government money assisted by the World Bank. Even in France, which in the past relied extensively on CNRS with its own research institutes and research units at French universities, the French Research Agency (AFR) now provides competitive funding. As the STI system evolves and extends governments may wish to consider whether more research councils or funding agencies would better serve different fields of science (Tindemans, 2009). As mentioned before governments can do several things to stimulate companies to increase skill levels, productivity and research efforts. How should one go about it? And what type of support measures is one to consider? Initially for reasons of efficiency and the lack of (human) resources one may well consider to making the same funding agency that on a competitive basis funds academically-oriented or strategic research also responsible for the support measures that target companies in the first place. But eventually as the STI system matures, one usually finds a separate agency tasked with the promotion of research and innovation in companies. The reason is that proposals to get support from companies or involving companies often require some form of business plan, market assessment and a strong managerial approach. Assessing such proposals requires different skills from those required to assess on a competitive basis research proposals. Governments are also considering which instruments they can use to introduce more differentiation, concentration and specialization, which as mentioned before are important policy challenges for the higher education system. This has lead in several countries to competition not between individual scientists but between institutions as a whole or departments. Sometimes one finds requirements for public-private partnerships in such competitions. Not always is the competition complete. For example in China’s case the limited number of universities allowed to participate in the so-called ‘Project 985’ have been identified by the government, but using academic performance as an important criteria. Another strategy some governments adopt especially to increase concentration and also specialization focuses on mergers between tertiary educational institutions. It is not an easy option
to implement, certainly not when one part of the problem is the sometimes very large number of rather small private tertiary institutions. Yet governments would do well to consider how accreditation could be used to increase efficiency and quality by increasing the average size of universities and providers of professional training.

Consistent STI system as tool for development. Intimately linked to the funding system for science, technology and innovation (STI) and the functioning of higher educational institutions and research institutes is the system of quality assessment. Theoretically one makes sometimes a distinction between Quality Control (QC), which is the licensing or accrediting institutions or programs ex ante; Quality Assurance (QA), which relates to assessing ex post whether programs (not institutions) have delivered according to goals and promises; and quality promotion or fostering, which means instilling a spirit of making quality a key parameter in the management of an institution, of faculties, the provision of education and the carrying out of research. In practice often a mix and quality assurance is here taken to represent all activities undertaken in this context. Autonomy is increasingly provided in exchange for accountability and the latter hinges to a large degree on reliable quality assurance mechanisms to be in place. One important component of such a system of quality assurance is a formal accreditation system for higher education. Many countries nowadays require that individual programmes (an undergraduate or graduate program in chemistry for example) and/or institutions as a whole are accredited on a regular basis. Public funding (in the case of public institutions) or the license to operate (in the case of private institutions) can be made dependent on a positive outcome, though in both cases some feel that market information (in the form of the outcomes of accreditation reports, put otherwise: naming and shaming) available to students will do the work without formal sanctions. Not all countries have a national system; some depend on professional bodies (for example in engineering) to do the accreditation. But the mechanism is basically the same: the institution (or department or program management) is required to carry out a self-evaluation - retrospective and prospective - according to a strict protocol; an accreditation committee appointed by the accreditation body carries out a site visit, and writes an accreditation report with possible suggestions or even requirements for improvements to be made before the accreditation body gives its verdict. Setting up a proper, transparent and independent accreditation system is one of the urgent challenges for governments in developing countries, and it is a very positive development that this is now happening on a significant scale. It is also an area where there is quite some scope for regional and international cooperation to exchange views, to establish common protocols, to get international experts on board for national accreditation exercises, and eventually maybe to set up joint accreditation systems. On a global level one finds the International Network for Quality Assurance Agencies in Higher Education, the INQAAHE with membership from all over world from developed countries, developing countries and emerging economies. For research much less homogeneity exists
in quality assurance mechanisms. They are straightforward in the case of funding agencies providing competitive funding as the evaluation is the key element in the selection and granting process. But for the core or institutional funding component of research at universities or research institutes practices still widely differ, or are even absent. Yet, increasingly governments take the view that public funding has to along with regular evaluations of performance. So more and more one see governments appointing committees to do an evaluation of research institutes in a similar vein to the accreditation process in education: a self-evaluation, a site visit and a verdict with or without direct financial or other implications (including dismissing management). In other cases governments just require that institutions themselves or umbrella organizations organize take responsibility themselves for such an evaluation but then provide governments with the outcomes. The yardstick along which to measure and evaluate the performance of a research organization is of course dependent on the nature of the institute. An institute for clinical research, an institute for industrial research or an institute for agricultural research that may involve a considerable extension component, have different audiences and clients, require different criteria for evaluating and their clients must be strongly involved in assessing performance.

A marked difference between many universities and research institutes in developing countries and those in developed nations is found in the area of information and communication technology support. The dependence of education, especially higher education, and research on being heavily supported by a variety of tools in the area of ICT, is nowadays so great that no catching up will be possible without adequate provisions. One needs computers in large numbers, software tools, management information systems, one need to train people to use all of these. Here attention will be focused on one provision that has become of paramount importance in the last two decades, namely a network that provides high-quality data communication services. In all developed countries and in many others one finds dedicated national networks for research and education, NRENs. These are ‘knotted’ together by continental and global links (very high-capacity cables, increasingly optical fibres). In many developing countries the local capacities are not high, national connectivity is poor as is international connectivity. The other side of the coin is that costs are very high and reliability low. There is no reason why that situation should be allowed to persist. With the new undersea cable along the African coast, global coverage of the system of backbones is virtually complete. What remains is to build the national systems and connect them to the continental and global backbones.

References:


Beyond Budgeting continues one of the latest management innovations that captured the imagination of both researchers and practitioners [1]. However, unlike its predecessors, namely the Balanced Scorecard and Activity Based Costing, this concept hasn’t yet achieved the same degree of success in terms of adoptions. It is a paradox since unlike many inefficient innovations that got diffused widely, Beyond Budgeting proved it works well and contributes to organizational performance in all documented case studies. In order to explore this empirical and theoretical anomaly, we decided to study the emergences and dissemination of Beyond Budgeting as an abstract idea in Ukraine. We hoped to understand how local actors interpret and judge this ambiguous enough concept and whether it can be expected that BB will be adopted in domestic firms. Especially interesting is what form it will take given that previous empirical studies demonstrated that the form and configuration of Beyond Budgeting approaches differently in different countries, organizations even subsidiaries of the same firm. We use discourse analysis which allows capturing both material and symbolic aspects of management ideas and trace their dissemination, interpretation and change as it evolves [2].

Data collection and analysis. In order to answer this question a comprehensive literature review was conducted as well as interviews with practitioners were obtained. In total, 22 articles from professional journals, 20 scholar articles and 12 business conferences were found and four interviews conducted. The first impressions gained from the information received were about a level of knowledge and understanding of the topic Ukrainian scholars and practitioners demonstrated. In their publications they provided huge volumes of information, including budgeting criticism, advantages of Beyond Budgeting and disadvantages of traditional management tools and systems, 12 Beyond Budgeting principles, foreign practice and a lot of other issues addressed in western Beyond Budgeting literature. The first discourse found dealt with the articles titles: authors in the vast majority of cases didn’t put “Beyond Budgeting” in the article titles, replacing it with more familiar for local readers associations, like for example, “non-budgeting management”,


“performance without budgets” or “new management model without budgets”. They put catchy titles forward but explicitly explained and discussed a meaning and attributes of the concept inside their articles.

However, professional journals provided a grounded analysis and practitioners’ thoughts about the applicability of this innovation in Ukrainian business and cultural circumstances while scholars have limited themselves with concept description. They didn’t make any assumptions and conclusions about Beyond Budgeting prospects in Ukraine and focused solely on information deliverance. At the same time their presentation of Beyond Budgeting philosophy and principles was shifted from leadership subset to process principles which received much more attention. Also academic writers made a significant emphasis on a range of administrative tools like Balanced Scorecards, Rolling Forecasts dedicating most of their attention to these issues. On the other hand, practitioners captured a human-side of the concept and discussed mostly leadership principles and importance of mind-set changes among the employees and management teams, thus, introducing readers with the essence of the Nordic Beyond Budgeting model (Bogsnes, 2009). Many authors suggested and some of them claimed that Beyond Budgeting is inevitable and its emergence and further dissemination in Ukraine is only a matter of time. Business schools and conferences also delivered all available Beyond Budgeting information to the audience: many conferences among other topics announced “Beyond Budgeting in Ukraine” discussions while many business schools put it into a study program.

Summing up, Beyond Budgeting is well-known among Ukrainians practitioners as well as this management model is a subject of publications and presentations during the last ten years. A number of scholarly articles increase every year and the concept’s emergence in business media is still sustainable and it doesn’t decline.

Translation through academic literature. Since being one of the channels of management knowledge dissemination, scholarly publications were a part of this process in Beyond Budgeting cross-national translation from Scandinavia to Ukraine (Sahlin and Wedlin, 2017) [3]. As ideas usually take form of written presentations Beyond Budgeting during its circulation was translated into text that appeared in form of academic and professional publications.

In this stage editing process was executed by actors involved in translation, namely academic writers. Having all necessary rhetoric and formulation techniques they didn’t use it. Articles didn’t provide much analysis, assumptions or conclusions and those comments that were made didn’t shape or reframe the concept according to their perceptions and understandings of the topic. They in fact didn’t bring the notion of Beyond Budgeting into local Ukrainian context; they didn’t reembedded it into specific context in which it might be used by potential adopters.

They, however, edited Beyond Budgeting in the sense that they distorted its founding philosophy as a leadership and people-based management model, where a notion of trust and autonomy is a central. Instead, writers made a shift towards a
technical perspective, describing and discussing management accounting tools like rolling forecasts and balanced scorecards, in fact, often separately from the whole Beyond Budgeting framework. In this sense one may say that these authors have ignored and passed by those principles that seems to be inapplicable and don’t fit a specific local context while similarities where repeatedly emphasized. Since certain management accounting tools are widely employed and are in fact institutionalized in Ukraine, respectively, the greatest attention was paid to them.

The issues of decentralizations were also skipped in most of the cases. Authors who put this Beyond Budgeting element into their concept interpretation just mentioned it briefly without any further explanations. At the same time most of the articles had an example of Handelsbanken which in fact illustrates decentralization as a cornerstone of this management system rather than being an example of budgeting abolishment.

While most of Ukrainian Beyond Budgeting writers didn’t consider a leadership and process principles as a one unit, they made a one more discourse, at this time towards budgeting abandonment and rolling forecasts installation instead of it. Describing it this way, they didn’t link budgets issues with human side of the enterprise, since “a mind-set required before we look at tools and process required. No tool or process can do this job alone” (Bogsnes, 2009: 140) [4]. The typical article suggested, that in order to implement Beyond Budgeting model it is enough to replace it with different set of tools. Bogsnes also emphasized that “the purpose is not to get rid of budgets but to create more agile and human organizations” (Bogsnes, 2013:20) [5]. Human side is what was almost dismissed in Ukrainian academic perspective on Beyond Budgeting.

The positive moment of such a discourse is that scholar writers made the concept more understandable in terms of Ukrainian definition. The point is that they didn’t use a label Beyond Budgeting in title (there is only one exception) but replaced it with more understandable and familiar for non-English speaking readers explanation. Instead of Beyond Budgeting they offered various Ukrainian denotations like “non-budgeting management”, “management without budgets” or “beyond budgets (but translated it into Ukrainian) that makes more sense for those who read a title and seek to form a basic idea perception.

Another vital requirement for Beyond Budgeting model was almost lost in translation, namely, rewards and evaluations. Only few authors described a relative performance-based rewards and it’s the need for fixed performance contracts abolishment. These can be understood as some extra details drop that could have been perceived as too difficult to understand. This in turn distorted the logic of translation (Sahlin-Andersson, 1996) since an attention was shifted dramatically from the aspects that are seen too complicated and not relevant for the new context and receivers.

A lot of authors don’t cite primary Beyond Budgeting sources, like Hope and Fraser, Wallander or Bogsnes, referring previous articles by their Ukrainian
colleges. This in turn may cause additional circulations of idea since the primary source is getting lost and more broad and loose interpretations can emerge, creating new meanings and features will be ascribed to the concept.

The one more pattern of Beyond Budgeting reflection in domestic scholarly magazines is a significant time lag between scholar publications and articles in professional media. This conclusion is made since Beyond Budgeting topics became emerge in academic magazines only during the last five years (the date of the first publication is 2010) while professional media started to shed a light on Beyond Budgeting and related topics since 2005. This observation is consisting with the previous findings in management fashion studies (Nijholt et al, 2014) [6], supporting the suggestion that fashion emerge in professional media earlier then in academic publications. However, this fact doesn’t give enough reasons to consider Beyond Budgeting as a management fashion, since rate of adoption doesn’t support this assumption.

One of the respondents asked about latest research findings in Beyond Budgeting studies, namely, about the overall level of adoption in western countries. This fact can serve as one more evidence that supports an assumption about a lag between academic literature and idea deliverance to potential users. Also, nobody from four respondents mentioned scholarly publication as a source of information in topic considered.

Translation through professional magazines. Professional media plays a main role in Beyond Budgeting dissemination and shaping. This was confirmed by the data gathered on the basis of the interviews with the demand-side representatives and numerous findings during the literature review. Both scholars and practitioners acknowledge that professional magazines and conferences continue to play a key role not only in a transportation of Beyond Budgeting in Ukraine but also have a greatest power to influence an attitude towards Scandinavian concept. And like with a lag between scholar and business journals case, this finding is also in line with the main theoretical findings in professional-media and social-media perspective on management ideas gatekeeping (eNijholt et al, 2014). In later studies researchers began to see an editor’s perceptions of certain ideas newsworthiness as a vital factor in its translation and editing process.

In total, description of Beyond Budgeting principles and advantages are reflected in professional print media in greater details then in academic literature. Business publications writers used different rhetorical elements, like storytelling and other techniques that attract readers’ attention when interpreting the concept. Also, authors in professional magazines provided readers with analysis, conclusions and recommendation regarding Ukrainian business and cultural environment – this was avoided mostly in scholar publications. They discussed management accounting and control practices and innovations in Ukraine, delivered to the audience various opinions shared by professionals both in western countries and in Ukraine and compare foreign experience and achievements with domestic traditions. Doing so,
they tried to change and reshape highly institutionalized business environment by bringing new ideas and practices to internal knowledge market.

Also, when comparing discourses that took place in both Ukrainian and international business press in BSC publications and those with Beyond Budgeting it need to be outlined that different types of products were highlighted. BSC as a tool attracted wide attention of consultants, which helped it to become an institutional element, while Beyond Budgeting has been positioned as a philosophy and thus considered as a concept that is extremely difficult to commercialize (Becker et al., 2010). Management consultants respond to the current environmental demands and seek to satisfy a niche emerged. But this requires the presence of early adopters and successful examples what was not a case of Beyond Budgeting. Therefore, professional magazines didn’t try to cell Beyond Budgeting but rather to perform its natural functions – to serve as a specialized information provider. The main aim was to discuss and analyze the concept as impartially as possible.

Beyond Budgeting “edition” in the professional magazines. Despite the accepted logic of translation discourse and editing rules that distort an idea in some degree, Ukrainian professional magazines were able to keep the balance between narrating and the holistic model deliverance without dropping vital principles and statements. Authors in almost all cases carefully delivered all necessary information that should be told about Beyond Budgeting and added their opinions about the concept prospects and applicability in Ukraine without general information omission or distortion. What is the most important – the logic of Beyond Budgeting principles description and analysis hasn’t been violated and kept the balance between uniform present of both leadership and process principles with only few little exceptions related to reward system. While emphasis in academic literature was put on tools that aim to substitute calendar-driven budget, practitioners reached a balanced narrative where the human side of the model is given enough attention (Sahlin and Wedlin, 2017).

Thus, neither a form of idea nor its content and meaning hadn’t been reformulated or changed. It should be emphasized that the distinction between idea presentation and opinions and suggestions expression was clearly made in Ukrainian business press. Each time authors stressed that the conclusions are based solely on their opinion and experience gained in the industry they were belonged to. Every time idea remained relatively stable and unbundled while circulating in Ukrainian business media though time and space.

Barriers outlined by the concept translators and potential adopters. Answers given from respondents interviewed and literature review were in many cases in line with the arguments and points of view with previous findings. All publicists and all interviewees agree that traditional budgeting is obsolete and no longer fits to modern business environment (incl. Bunce et al., 1995, Hansen et al., 2003; Hope and Frazer, 2003; Bogsnes, 2009). However, the findings from Ukrainian print-media and internet resources showed that the attitude toward Beyond
Budgeting concept in Ukraine is sometimes skeptical. The results reflect Ukrainian practitioners and scholar’s attitude toward possibility of Beyond Budgeting shift and budgeting abandonment among Ukrainian organizations in the recent future as well as no firm with already established Beyond Budgeting-based MCS was found. While data gathered from academic publications deals only with brief descriptions and repeating of Beyond Budgeting theory (often citing only Hope and Fraser’s publications) with no deep studying of the phenomenon and with no discussions, business journals, internet sources and respondents provided an information related to the attitude toward Beyond Budgeting among Ukrainian top-managers and companies owners. Among others, empirical findings also showed a degree of resistance and barriers Beyond Budgeting concept meets in developing countries where needed cultural peculiarities absent while unpredictable environment and wick economic situation present.

Barriers that face Ukrainian companies while implementing Beyond Budgeting are partly in line with those that have been found earlier by various explorers. During the last 10 years Ukrainian practitioners and theorists have outlined the next three main barriers that Beyond Budgeting concept meets in their business and cultural environment:

Trust problem. It is extremely difficult to change a mind-set of both management stuff and employees even for those companies that do not operate in unpredictable environment. Hope and Fraser (2003) acknowledge that trust-building requires a lot of time and that is a big cost for a company that has a weak financial position and operate in turbulence environment with bad economic situation. And if Bjarte Bogsnes (2009) was talking about the minority of those who didn’t share trust atmosphere of StatoilHydro, Ukrainian CFO and CEO assume that in Ukraine this people would have belonged to the vast majority.

Budget abandonment. The actual budget abandonment is seeming to be problematic according to various Ukrainian business publications. Many authors suggest that companies can use Beyond Budgeting tools and technique, even separate forecasting, planning and resource allocation but at the same time maintain annual budgets. Moreover, according to some authors, a significant amount of companies does mix these two approaches intuitively since a lot of management teams in Ukrainian organizations implemented Balanced Scorecards (mostly using only financial KPIs) and rolling forecasts. Both tools are widely known among Ukrainian practitioners but without any connection to Beyond Budgeting framework.

Decentralization. The main skepticism repeated by some of Ukrainian specialists and practitioners in Beyond Budgeting topics can be summarized in a few statements. First of all, they emphasized that every organization need to establish and to learn traditional budgeting thus it might be a necessary level toward advanced management control systems. Also, many practitioners acknowledge that Ukrainian companies need simple, clear, transparent and measurable objectives with tight budgetary control system implementation. Some Ukrainian managers
believe that focusing on budget-oriented goals as figures that have to be reached will provide better results than the decentralized adaptive models. And as they explain, not because the latter is worse, and due to the fact, that at the level of perception of values, attitudes towards entrepreneurial activity, openness, self-motivation and self-control, Ukrainian society is still not ready to meet these models.

Issues on plasticity and identity rose in academic circles and comparison with data gathered in Ukrainian sources. Becker et al. (2011) raises a problem of too much plasticity of the concept [7]. This characteristic can trigger a broad diffusion since potential adopters can not only see the benefits for themselves but also be able to recognize their own way to translate and interpret an idea. This is what management fashion researchers call interpretative viability and this is what helped with BSC (Ax and Bjørnenak, 2005) [8] and ABC (Jones and Dugdale, 2002) [9] diffusion and further adoption. Consequently, this is what is considered as a factor which can make Beyond Budgeting no longer recognizable as one and the same idea after being translated and edited (Becker et al., 2011). Too much plasticity of the innovation thus can lead to unique identity losing and further losing of control over the brand. Again, the explanation on why some innovations do overcome a trade-off between identity and plasticity and successfully balance between these two extremes, while others do not come from its formulation and promotion. Since it is not a “toolbox” from which to choose some number of items or a simple change of techniques, but a set of twelve principles and, moreover, the most radical change ever existed in management ideas market and change that implies a whole substitution of management model such an approach can lead to can lead to a gap between the original idea and its interpretations (Aksom, 2017; Firsova, 2017) [10][11]. Further, Becker et al. (2010) refer to Beyond Budgeting definition as a “combination of innovations” or “innovation that houses others innovations” (Ax and Bjørnenak, 2005; 2007) and remind a Horngren’s (2003) remark about Beyond Budgeting as a right context for already existing tools and techniques. It follows that if this context is removed it is no longer Beyond Budgeting case.

But the empirical data gathered, in particular, literature (both academic and professional) observation and interviews outcomes suggest that respondents of this study and numerous references and reflections in media by various stakeholders showed that it is not difficult to recognize Beyond Budgeting features. Practitioners and scholars in Ukraine strongly associate Beyond Budgeting with de-bureaucratization and improvement of existing budget practice toward more flexibility and efficiency. In other words, this concept can even be promoted and established by brand new label and it still is recognized and acknowledged as Beyond Budgeting.

However, Beyond Budgeting didn’t presented under any other label: it had been clearly delivered by Ukrainian mediators of the concept using “Beyond Budgeting” signboard. Even though it was often substituted in the titles by more recognizable and understandable definitions, inside the publications it was described as a Beyond
Budgeting. Formulating Beyond Budgeting status in Ukraine. From the perspective of neo-institutional theory, Ukrainian companies can partly or fully implement Beyond Budgeting in order to improve its long run efficiency and thereby to get a competitive advantage (Kennedy and Fiss, 2009) [12]. Since there are no concept first adopters in Ukraine (at least officially), the main reason behind the implementation of this innovation is not search for legitimacy but a desire of performance improvement. Thus, Beyond Budgeting implementation can be now considered as a rational choice and organizations that adopt the concept in Ukraine will be considered as role models and will be imitated by their peers. In this case, mimetic isomorphism will take place (DiMaggio, Powell, 1983). Mimetic process, in turn, will lead to successful dissemination and adoption of Beyond Budgeting among Ukrainian organizations.

Although this study is based on only a small number of interviews, they provide a useful basis for analysis and conclusions about Beyond Budgeting status in Ukraine. All mediators of Beyond Budgeting in Ukraine repeatedly emphasize the fashionable nature of the concept. They have described it as a modern, progressive wave in management practice managers need to be familiar with.

Conditions for Beyond Budgeting emergence in Ukraine. We have described a translation process of Beyond Budgeting, showing how academic and professional literature, business schools and conferences interpret the concept, objectifying it in texts and oral presentation which is vital for further unpacking and reembedding by receiving organizations. However, it is only a half way of the concept travel route (Erlingsdottir and Lindberg, 2005) [13]. Although all the preconditions for the concept adoption by Ukrainian organizations have been carried out – Beyond Budgeting cases haven’t been emerged and still don’t.

When it is said about impossibility of Beyond Budgeting transfer and emergence in completely different national environment it is only means that this setting doesn’t have yet a successful Beyond Budgeting case which could be promoted through various communication channels. Ukrainian “translation agents” (including academic and business magazines, conferences, and business schools) highlighted Beyond Budgeting in the way similar to foreign experience: during the last ten years they provided information about Beyond Budgeting nature, functions, numerous advantages, delivered a detailed analysis of twelve principles, discussed all Beyond Budgeting tools and techniques, including rolling forecasts, BSC, KPIs, benchmarking, decentralization, trust issues, mind-set challenges and explained why it is important for the modern organization in turbulent environment. They frequently mentioned successful cases like Handelsbanken, Borealis, Statoil, listed all their benefits gained after new model implementation [14]. They only failed to show a successful Ukrainian Beyond Budgeting case and that made all their efforts in vain. All rhetoric elements that were used by Ukrainian and Scandinavian media were almost the same in terms of the knowledge and information quality and
volume but Scandinavians based their arguments on the fundament of success story, while Ukrainian had to retell the story from distant land.

Ukrainian managers need this first adopter, an evidence of Beyond Budgeting applicability in their context. An example of such a desired first adopter emerge provides Bogsnes (2009) referring to Brazilian Semco and there are various other Beyond Budgeting cases in quite unexpected places described in different articles. An interview results and various articles being scrutinized during a literature review also supports an assumption that cultural and business features can’t stop a first adopter’s emergence since a lot of practitioners are ready for Beyond Budgeting.

It appears that there are no first adopters because there are no Beyond Budgeting cases and the last are absent due to, again, the miss of role models. In order to break this vicious circle, Ukrainian managers need to transpose a Beyond Budgeting from outside Ukraine. Those individuals that regularly contact with different and unfamiliar institutional contexts can transpose foreign practices from one field to another. That was a case for diversity management emergence in Denmark in 2000’s when it was an absolutely unfamiliar practice in that country when several initiators brought it inside the country in 2002. These initiators worked outside Denmark in close contact with international companies that had a very high-status and were perceived as very legitimate. That was a reason for those managers to internalize a practice, bringing it in the institutional field that was in contradiction with an institutional logic of diversity management.

Beyond Budgeting model in Ukrainian organizations. Beside the tendency of Beyond Budgeting model to take different forms in various locations and contexts and even inside one particular organization it is furthermore implemented significantly different in various countries. Therefore, there is no point to expect that Beyond Budgeting will be implemented in the more or less similar way across the globe. Management control systems based on Beyond Budgeting principles and philosophy vary fundamentally in the different parts of the world, sometimes challenging the most indisputable components of this concept. Some companies claim that they gone Beyond Budgeting but at the same time maintain fixed budget targets or don’t separate forecasts and targets.

Talking about Beyond Budgeting rate of adoption in Ukraine as well as in the rest of the world, respondents don’t doubt about the inevitability of the concept emergence in Ukraine. As one of them states:

«Beyond Budgeting offers a degree of trust relationships somewhere between Japanese model, when people spend all their life in one company, and highly centralized and control-based model taken-for-granted in Eastern Europe. Of course, it’s only a matter of time when the shift from current practice toward European model will be finally made, especially given the fact that the evolution of business principles in the CIS countries occurs much more rapidly than in the West. This is hard to notice, but nevertheless, we have been for 25 years the way that Europe and the United States were moving the last 100 years. So, the main point is that the
time for Beyond Budgeting in Ukraine simply has not come yet, but it’s inevitable anyway». (Respondent 2).

Since a strong belief in Beyond Budgeting future in Ukraine was expressed both by respondents and scholar and business publicists their reflections can be summarized and presented as a holistic model where a trends and prospects of particular Beyond Budgeting principles and techniques are shown.

Thus, Beyond Budgeting model drawn and conceptualized from the data gathered in this study including primary data (interviews with practitioners) and secondary data (opinions expressed by practitioners and scholars in numerous publications). Obtained results are presented in Table 1.

**Table 1**

**Beyond Budgeting elements and their likelihood of adoption in Ukrainian organizations.**

<table>
<thead>
<tr>
<th>Beyond Budgeting principles</th>
<th>The likelihood of successful implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Values - Bind people to a common cause; not a central plan.</td>
<td>High</td>
</tr>
<tr>
<td>Governance - Govern through shared values and sound judgement; not detailed rules and regulations.</td>
<td>High</td>
</tr>
<tr>
<td>Transparency - Make information open and transparent; don’t restrict and control it.</td>
<td>Low</td>
</tr>
<tr>
<td>Teams - Organize around a seamless network of accountable teams; not centralized functions.</td>
<td>Medium</td>
</tr>
<tr>
<td>Trust - Trust teams to regulate their performance; don’t micro-manage them.</td>
<td>Medium</td>
</tr>
<tr>
<td>Accountability - Base accountability on holistic criteria and peer reviews; not on hierarchical relationships.</td>
<td>Low</td>
</tr>
<tr>
<td>Goals - Set ambitious medium-term goals, not short-term fixed targets.</td>
<td>High</td>
</tr>
<tr>
<td>Rewards - Base rewards on relative performance; not on meeting fixed targets.</td>
<td>Medium</td>
</tr>
<tr>
<td>Planning - Make planning a continuous and inclusive process; not a top-down annual event.</td>
<td>High</td>
</tr>
<tr>
<td>Coordination - Coordinate interactions dynamically; not through annual budgets.</td>
<td>High</td>
</tr>
<tr>
<td>Resources - Make resources available just-in-time; not just-in-case.</td>
<td>Medium</td>
</tr>
<tr>
<td>Controls - Base controls on fast, frequent feedback; not budget variances.</td>
<td>Medium</td>
</tr>
</tbody>
</table>
**Conclusions.** Beyond Budgeting is well-known among Ukrainians practitioners as well as this management model is a subject of publications and presentations during the last ten years. A number of scholarly articles increase every year and the concept’s emergence in business media is still sustainable and it doesn’t decline.

It was found that academics and practitioners respond to the same management knowledge differently which is in line with some previous findings. If scholars aimed to conceptualize Beyond Budgeting theory and contribute to the internal management control research, practitioners interpreted all available information from the perspective of Ukrainian business practice and cultural peculiarities, generating conclusions about the innovation applicability in Ukraine. Professional media and conferences made a decisive contribution to perception, understanding and attitude towards Beyond Budgeting in Ukraine. These actors transported and edited a western knowledge and experience about the concept and shaped its attitude by various comments, suggestions and conclusions about its nature and prospects outside Scandinavian countries. A general opinion among practitioners varies between positive perception and optimism towards Beyond Budgeting applicability in Ukraine and more skeptic and careful suggestions about its ability to work in such a different business, political and cultural context. Most of them however believe that even leadership principles can be fully met by domestic managers as well as mind-set issues can be solved successfully.

**References:**


MANAGEMENT OF ENTERPRISE DEVELOPMENT:
GENERAL GROUNDS

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High dynamics of the external environment changes predetermines the identification of new objects in enterprise management and at the same time it emphasizes the attention that needs to be paid to those of new objects which are - seemingly - confirmed as management objects, however, their management has a range of still unsolved issues. To the same category also belong objects
the management of which does not fit today’s economic environment anymore. And one of these complicated objects in today’s management is surely enterprise development.

Enterprise development is a very multifaceted notion, and this has already been demonstrated in many contemporary publications on the matter [1; 2].

Enterprise development is the enterprise’s capacity to carry out own well-managed changes in the course of this enterprise’s activities along with gradual adaptation to those changes which this enterprise cannot manage. The key result from this process of changes and adaptation is transition of this enterprise to a qualitatively new level/state. From this definition it is rather obvious that various aspects in the course of development are interconnected with each other. The very process of development is possible due to enterprise’s capacity to develop and at the same time this process predetermines the final results of development.

Enterprise development is taking place through qualitative and quantitative changes in its activities, that is, through changes in all functional units inside an enterprise (production unit, servicing unit, reproduction unit, management unit and so on). Similar changes are taking place in subtypes of enterprise management (production management, marketing management, innovations’ management, financial management, HR management etc.). All these changes can be managed or unmanaged.

Managed changes in enterprise’s activities are the result of the implemented managerial decisions supported by appropriate resource use. Unmanaged changes may arise in the course of enterprise’s activity due to various external reasons.

It does not really matter whether the enterprise would treat own development as a management object or not, the very course of development would still take place. Thus, changes are inevitable since they happen under the influence of various processes, phenomena and events in both internal and external environment of the enterprise.

Development is essentially evolutionary since its core result is enterprise’s transition to a qualitatively new state. However, an open question often is how prompt is this transition? Moreover – how compliant is this new state in relation to top managers’ (owners’) vision and expectations? Does this new state fit the changed requirements of today’s business environment?

The vision on enterprise’s future state and further development is usually described in various business strategies, programs, plans and large projects of an enterprise. And in order to make sure the result (the new qualitative state of this enterprise) matches this, described in advance, vision, the very process of development must be well managed.

Accordingly, changes in enterprise’s activities must be well coordinated in time and space, they also must have enough resource supply and fit into the current conditions of both external and internal environments. All of the above means, in a nutshell, that changes must be managed.
Therefore, seeing development as an object of management leads us to the necessity to formulate the aims of development, to measure its results, to outline the functions of development management and then - to select the instruments for development management.

Development management is a functional type of enterprise management, taking place along with marketing management, personnel management, innovations’ management and so on.

The emergence of this type of management has been predetermined by the deepening division of activities inside enterprises due to complication of all business processes and the necessity to comply with the constantly changing requirements to management. All of the above has logically led to the emergence of new objects for managerial influence.

The need for separation of development management as a new functional type of enterprise management has been also predetermined by the following. Enterprise development is an extremely complex phenomenon, fully oriented on the future. For this very reason, managers/owners of enterprises lose sight of it or treat development management as something secondary in importance. Current activities of any enterprises are always in the center of managers’ attention, not the future ones. Of course, solving current issues is important, however, these issues – no matter how vital they are – should not overshadow future prospects of an enterprise, and development is the key and the major guarantee of these prospects.

Many Ukrainian enterprises today already have the whole structural units or at least a manager responsible for development management. However, as the already carried out research demonstrated, competences of such departments/job posts have been determined stemming from a very narrow definition of “enterprise development”. For this very reason, these departments are often engaged in spatial expansion of an enterprise, in creation of new points of sale, in buying out other enterprises and/or establishing foreign branches, in reorganization, mergers, acquisitions etc. We have no intention to question the importance of all these processes initiated by enterprises, however, we also need to note here that enterprise development should not be limited to expansion only.

Development management essentially means constant managerial influence and actions directed at the motivated employees of an enterprise, guaranteeing full compliance with the approved and documented in advance plan of changes in enterprise’s activities.

Managerial influences and impacts on the performance of employees responsible for the whole set of interrelated changes in enterprise activity may be quite versatile, and their variety leads to the necessity to divide them into specific types. This division can be based on the functional approach (that is, changes in certain managerial functions). The very function of management is a specialized type of managerial activity, assuming a specific list of works to be carried out to solve the set in advance managerial tasks and in such a way achieve the managerial objectives.
All managerial works, performed under the function of development management, can also belong to several other functions. The essence of such functions can be revealed from the standpoint of various managers, all being directly related to enterprise development, all influencing – through professional behavior and attitudes – the enterprise performance overall. These functions may include, for example, the following:

- assessment of enterprise development results in the previous periods;
- planning of future development;
- organization of enterprise development;
- control over the process of enterprise development;
- motivating employees to participate (more) in enterprise development.

Implementation of all these functions in the course of enterprise development management must be based on the assessment of the enterprise development results in the previous periods. Such assessments together form a strong analytical basis for target setting, development timeline, selection of a development vector etc. These assessments also allow revealing the mistakes and bottlenecks in the previous periods of development so that the management could be able to determine both catalysts and inhibitors of development.

Planning of enterprise development must start with determination of the development vector. Next, according to J. Gharajedaghi [2, p. 232-237], goes the concentration of attention on enterprise product, application of technologies and overview of the markets on which this product is already present or can be present in the near future. In other words, according to J. Gharajedaghi, the second step, after the development vector determination, concerns the determination of the enterprise’s future architecture [2, p. 226].

It is important to note here that selection of a particular development vector does not automatically mean complete disregard of all other vectors. It is just one vector becomes the dominating one, while all other become additional vectors.

Development planning, in this context, becomes the combination of interrelated in time and space actions, the key aim of which is performing changes in enterprise activities, necessary for the enterprise’s transition to a qualitatively new state.

Enterprise development planning is to be carried out according to the functional subsystems of an enterprise. All activities related to enterprise development are to be included into the plans of enterprise’s structural units. Planning of enterprise development assumes the following stages:

- determining the potential future state of an enterprise, described using a combination of quantitative and quazi-quantitative parameters;
- determining the combination of localized changes affiliated to particular functional subsystems of an enterprise which together are supposed to upgrade the enterprise to the qualitatively next state;
- determining the combination of actions and activities which together are
supposed to result in changes in the functional subsystems and their management;
- joining together all changes in all functional subsystems of an enterprise with
the aim to have one common canvas of changes;
- determining the types, the volumes and the costs of resources necessary
for performing changes in functional subsystems of the enterprise and their
management. Also, setting how exactly these resources would be distributed with
the course of time.

Organization of development processes can be also understood as a cross-cutting,
comprehensive function which is simultaneously implemented through all of the
above functions of management. For this very reason, it would be appropriate to
distinguish between organization of development results’ assessment, organization
of planning, organization of control over the development etc.

Organization as such, as a function of development management means
formation of the relations between enterprise employees so that to perform
changes in enterprise activities basing on the distribution of tasks in the course of
implementing the planned changes in a timely manner and within the competence
field of certain employees (according to their rights, duties and responsibilities).
These relations between employees also assume there is an information exchange
taking place between them (which can be arranged hierarchically or heterarchically)
for better coordination of their actions. Implementation of enterprise employees’
relations aimed at performing changes in the course of enterprise activities is
supposed to guarantee this enterprise shift to its next qualitative state as planned.

Organization in this case is a systemic function of development management,
serving also a basis for all other functions and even becoming their core. It is the
systemic nature of development management organization that preconditions there
might be complications in the course of implementation as well as large-scale
negative consequences. The latter usually take place once there are irregularities
and failures in the course of development. There might be several reasons for that:
- differences in how employees see the tasks to be performed, differences in
their experience and professional level; differences in personal perception of
changes, especially when the latter go against their personal interests; or simply
miscommunication;
- peculiarities of personal relations between employees in the course of their
joint work. Troubles may emerge due to a wide range of psychological reasons
(preferential treatment, antipathy, differences in psychological types and reactions,
conflicts at their latent stage etc.);
- gaps in vertical communication, especially when the aims of development are
not transformed into specific tasks for exact performers, or when such tasks are
formulated in a blurred, very general manner. In this case the employees are forced
to interpret the tasks as they see it, and it may not always be correct;
- dynamic changes in development aims due to the corrections performed by top
management (sometimes these corrections can be quite significant). Occasionally,
corrections performed in a certain task may totally change the very contents of this task. 

The process of development must be constantly in the center of attention on the side of control authorities. Implementation of the control function allows maintaining the same vector of development along with reaching the set aims, under timely corrections, if needed, so that to avoid significant deviations, if the latter can be prevented, of course.

Today, making control the managerial function at the operational level is not enough anymore since nowadays there is hardly any truly efficient instrument to control enterprise development as such. Lack of control instruments does not allow implementing it into real business practice.

Development management is implemented at two levels of enterprise management – strategic and operational (see Figure 1).

Strategic management of an enterprise assumes setting the long-term goals in enterprise activity which, essentially, are the descriptions of a future new state, to which this enterprise is supposed to shift after a certain period of time.

For this transition of the enterprise to its qualitatively new state strategic management is supposed to provide certain strategies using which this enterprise would reach the strategic goals taking into account all relevant external and internal conditions. These strategies, in their turn, must not only fit into the forecasted state of external and internal environments, but they also must be supported institutionally and by a certain amount of resources.

Strategic management at the level of enterprises has been quite thoroughly studied by now, and the world research circles are very much unanimous about the largest part of its fundamentals.

Moreover, these fundamentals already became integral part of the university textbook knowledge (see, for example, [4, 5]). However, the actual conditions of entrepreneurship (and not only in Ukraine) are changing too quickly, thus, today there are already quite a lot of reasonable grounds for criticizing and revising much of strategic management fundamentals. This criticizing though must not be viewed as complete rejection of strategic management fundamentals by enterprises or rejection from having strategic management as such. Concentration of attention on the discrepancies between strategic management rules and the current conditions of enterprises’ functioning should become a platform for further research in this direction.

One of the most challenging issues in contemporary strategic management at the enterprise level is that its fundamentals have been and still are often formed, not taking into account the issues of enterprise development. Development as such must be the key object of strategic management, however, this is not happening in real practice.
At the operational level of enterprise management more attention must be paid to the implementation of planned changes, corrections in their implementation when this is needed due to unexpected/sudden changes in the external and/or internal environment. Corrections are also needed when there is an obvious lack of resources or resources of a totally new type are required for further development. Certain attention should be also paid to control over changes’ implementation, behavior of employees in the course of changes’ implementation and their reactions to these changes.

The functions of development management are implemented differently on the strategic and operational levels of management, and their contribution is also different, depending on a level.

To sum up, enterprise development management is supposed to be one of the
functional types of enterprise management. Since enterprise development is a highly important issue, it should not be disregarded by enterprise management. The use of functional approach makes development management very much similar with general management of an enterprise. However, the former is, at the same time, a new type of functional management which emerged due to strengthening role of development in management overall. For this very reason, formation of a theoretical basis for the enterprise development management and operationalization of its concepts becomes one of the topical direction in contemporary managerial research.

References:


STATE PARTICIPATION IN REGULATING INVESTMENT PROCESSES

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The key factors of economic growth in the national economy of each country are production, investments, innovations. In industrially developed countries, attention is paid to issues of activation and optimization of investment activity with a view to the long-term development of the real sector of the economy of the state level, because the fact of lowering investment activity below the threshold
values is treated as a threat to national and economic security. In modern economic conditions, investing is one of the key elements of the effective operation of most enterprises in the country [2].

At present, the most important problem is the intensification of investment activity. The system of certain measures in the sphere of a budget, monetary, depreciation and fiscal policy of the state is obliged to support the normal functioning of the market mechanism in the investment sphere, to overcome the consequences of the investment slowdown, to provide conditions for increasing investment activity. For these purposes, it stimulates aggregate demand, regulates bank interest, tax rates, etc.

Through regulation of investments, the state influences the pace and proportion of social production, while using financial and monetary mechanisms. For example, in order to stimulate private investment, carried out through loans, the state covers part of the loan interest at its own expense [3].

Such a policy requires much less resources from the state than if it were engaged in direct investment projects. All activities of the state in the investment sphere, ultimately, should be aimed at ensuring economic growth in the interests of all members of society.

An algorithm for managing investment flows at the macroeconomic level reflects such an important factor in the development of the state’s economy as the consumption of financing at the investment level (Fig. 1).

An effective problem of activating the investment process, ensuring stable rates of economic growth is the effective interaction of market and state mechanisms of regulation of investment activity. Their optimal ratio is determined by the specificity of economic relations, which are formed at a particular stage of development of society. Specific changes in the system of economic relations inevitably cause the transformation of the mechanisms of regulation of the investment process. Achieving the optimal combination of individual areas of the state and market mechanisms for investment regulation largely determines the effectiveness of the reforms.
The real economic practice has shown that unnecessary state interference in the investment process, as well as the unjustified self-annulment of the state from the regulation of the investment market, lead to the stagnation of investment activity. Therefore, a combination of different methods of the state and market regulation, which would correspond to national traditions of economic activity, would ensure a continuous inflow of investments in real production in order to achieve economic growth.

In modern deterministic economic systems in the mechanism of regulation of the investment process, the main role belongs to the market forms of activation of investment activity. This is due to the fact that the market mechanism is characterized by high organizational and institutional development of the investment sphere. The consistency of interests of all participants in the investment process provides the purposefulness and efficiency of the process of investment resources. In the current realities of the Ukrainian economy, the boundaries of state participation in the investment sphere should be significantly expanded. The state performs its regulatory functions by applying a system of methods and influence on the volume and structure of investment, which are depended on economic tasks, financial capacity of the state, accumulated experience of regulation.

Regulation of the state of the investment sphere can not but lead to some restriction of freedom of economic entities. But one should not forget that the restriction of freedom is always due to necessity. The state is forced to influence the market investment process because it has its own economic functions, which it has to realize in the same economic space, where investors also operate. So the central issue is the development of a scientifically sound investment policy with a clear definition of goals, priorities, and stages. The state initiates the development of such a strategy and is responsible for its direction and concrete implementation. With its participation in the investment process, it aims to create such a system of conditions and forms that orientates the choice of the most effective options for using available investment resources, to establish rules and norms for the functioning of the capital market.

It is important to take into account, however, that state participation in investment activity entails certain expenses of the state and bodies of different levels of management. Therefore, it should be carefully coordinated with the expected results and periodically be reviewed to confirm its appropriateness and magnitude.

The state investment policy is a system of measures aimed at creating conditions for the implementation of the investment process, ensuring access of enterprises to investment resources and their effective use. It involves promoting capital formation, increasing revenues from invested investments and reducing risks from investment activity, has the subordination of the investment process for the implementation of the general economic goal - raising the living standard of the population [4].

At the same time, state investment policy is not limited to a set of measures aimed at the implementation of state investment in the economy. One of the components
of this policy is the state regulation of the financial investment process. In other words, state investment policy covers fiscal investment and state regulation of the investment process. In addition to defining the objectives of the investment activity, the content of the state investment policy is also a mechanism that stimulates investment activity, optimal structure, and scale of investment, specific sources of investment and directions for their effective use.

Ukraine’s investment policy needs a tight reorientation to encourage the flow of direct investment into production with the corresponding new technologies and progressive methods of a labor organization.

The state’s investment policy should provide for the creation and enhancement of the competitive advantages of the Ukrainian economy at the expense of every possible stimulation of scientific and technological progress by the methods of state structural, industrial, tax, monetary and foreign trade policy. In order to restore the economy, to intensify investment activity, it is necessary to foresee the organization of scientific-production and financial-industrial groups that can become the engines of economic growth based on the development of modern technologies. It is safe to say that the transition to economic growth will largely depend on how successful the investment activity will be and what kind of investment policy will be implemented by the state.

The state’s investment policy should include the targeting of financial resources for reproduction purposes in accordance with the interests of the state in the given socio-economic conditions. The interests of the state are the concentrated interests of the entire society. The state acts on its behalf being endowed with political power and has the ability to exercise its will in legal acts, priority financing and other means of regulating the investment process. The state should be the subject of the first level of government, while investment funds, banks, corporations, concerns, joint stock companies and other participants in the investment process should play the role of entities of the second level, which, however, does not diminish this role. «Secondary» here refers only to the general direction of action, not their scale, the nature of effectiveness. In addition, this division of roles must be ensured not so much by direct state power, but by the effectiveness of the rules of economic behavior established by it [5].

In the current situation, the strategic goal of the state’s investment policy is to create a favorable investment climate in order to intensify the investment process and ensure, on this basis, stable GDP growth and stable social development. This requires the strengthening of the functions of the state as a strategic investor who cares about the prompt finding of the Ukrainian capital objectively its inherent properties - the accumulation, carrying out of organizational-economic, legislative and legal measures aimed at attracting investment resources, concentration of efforts at the nodal points of socio-economic development, so-called «growth points».

The efforts of the state’s investment policy in the medium term should be aimed at consistently reducing the systemic and specific risks of investing in Ukraine,
ensuring a stable and favorable legislative regime of investment activity, and creating effective legislative and practical mechanisms for the effective protection of investors’ rights in the implementation of investment projects. The priority task here is also to change the negative image of Ukraine in the world capital markets and to create a positive image of the Ukrainian economy, as a place with standard and safe business conditions, understandable entrepreneurs in any country in the world [2].

In the long run, investment policy should provide a simple and expanded reproduction in a socially oriented market economy. The most promising directions of this policy are the implementation of a systematic and innovative strategy for highly efficient machines, equipment, and advanced technologies, which allow to continuously improving socio-economic efficiency and increase profit margins.

In accordance with the investment policy, the state aims at the investment process in close connection with the innovation process as a necessary condition and an important prerequisite for the formation of a knowledge-based economy, high-tech industries, and high-tech products. We need not just investments, but investments related to the improvement and increase of scientific and technical potential, which ensure the transition from technological to nature-transforming processes, which are gradually approaching the innovative processes of change of matter and energy [1].

Today, the absence of a system for ensuring the innovation process in the country has led to a situation where the decline of the high technology industries in the industry has occurred in Ukraine due to the global development of non-material manufacturing and informatics sectors. The current situation in the Ukrainian economy was the result of uncontrolled market elements, which does not contribute to the creation of organizational and economic conditions for innovation development. At the same time, the experience of developed countries has shown that for success in innovation development, special mechanisms of management and self-organization are needed that promote the innovative type of development. One of its main elements should be the financial mechanism, which initiates the revival of the demand for innovations from business entities, which today largely do not have sufficient funds for it since the cycle of productive investments and innovations goes beyond the short-term interests [7].

In these conditions, it is necessary to create an investment-innovation mechanism that corresponds to economic realities, which provides a large-scale capital inflow for the fundamental modernization of production on the basis of high and technology-intensive technologies. It should be borne in mind that investments are closely linked to the process of economic growth, the restoration of production, as well as innovative activities. For successful economic growth, the volume, structure, and quality of investments are important. It is the mass of investments with its modern qualitative structure that determines the possibility of switching to a new type of technology. Economic growth is possible only at the price of investments - based on
the growth of the organic structure of capital. This position of the classical political economy remains unforgettable even with the growth of investment in «human capital» in developed countries. Therefore, financing, first of all, should be directed at the expansion and restoration of fixed capital, the development of the material and technological intellectual component, where the intellectual component of the resource potential is the main implementation of any investment activity, both at the micro - and at the macro level [6].

The current investment policy of the state is adequate to the general economic course of the country. Limited financial resources dictate the volume of investment. Therefore, the state is not in a position to subsidize the development of new productions and fully implement social and investment programs. The solution to this problem is possible only if a fundamentally different economic policy is implemented, including in the investment sphere. The moderate centralization of state investment policy laid down by the former system of economic relations is now not only appropriate but also necessary since it enables the most efficient and rational use of scarce investment resources [8].

So today, a transition from a liberal type of investment policy to a moderately liberal one is required, in which the state restores its lost functions of the owner, equal partner, participant, organizer, guarantor, and creditor. The task is to reasonably and optimally combine market-based methods for regulating the investment process with the state. This refers to the prices of means of production, depreciation rates, attributes of securities, organizational structures, incentive schemes, etc. This is natural and natural in a normal market. But the transformations and distortions of the domestic economy have led to the fact that the action of natural market regulators more often turns into counteraction, restraining and destroying normal production and economic processes. Particularly painful this circumstance has affected the investment sphere. The tactical content of investment policy in the prevailing economic conditions is not in self-removal, but rather in the active actions of the state in the management and regulation of investment activity. The real rise of investment activity is hardly possible without the state’s efforts to reduce risks in the major segments of the investment market.

Today, the distinctive feature of state investment policy should be the focus on the available domestic resources of accumulation in the country and the emphasis, first of all on national capital. World experience shows that only close coordination of the state’s policy with the programs of large financial and industrial structures that have proved to be viable gives a real chance of getting out of the crisis, recovery and the subsequent dynamic development of the economy.

References:

Many prominent scientists (both in Ukraine and abroad) work in the area of solving the problems of counteracting the disorganization of the SIS safe functioning and specialized computer networks of the National Security Service, the modification of the information that is processed in the SIS, databases, and software in the context of unprecedented cyberattacks activity.

Moreover, a sheer number of up-to-date publications is dedicated to the question
of the creation and operation of IS systems. Among the available scientific and scientific-technical sources, we should note the works of leading military scientists in this field V. Buryachok, V.Khoroshok, V. Tolubok, S. Tolyup, and specialists of the State Service for Special Communication and Information Protection of Ukraine - K. Pestov, V. Kravchuk and others.

A significant contribution to the development of the theory of information protection and information security have been made by V. Dudykevych, V. Maxymovych, M. Karpinsky, O. Petrov. Z. Zhyvko. Special features of the organization of combating cybercrime are the subject of pre-research of V. Khachanovsky, V. Tsymbalyuk, and S. Demedyuk.

Researchers still overlook questions of developing and implementing effective methods of preliminary evaluation of the ISMS effectiveness; ignoring the legislative aspects and requirements of international standards in the IS field while designing a reliable ISMS.

The authors believe that the ISMS in the NPU departments should be based on the principles of complexity and adaptability.

The purpose of the study is to substantiate the priority of creating the ISMS in the context of ensuring the protection of information assets of the specialized information systems of the departments of the National Police of Ukraine, as well as to identify the organizational principles of the ISMS functioning on the basis of the requirements of current Ukrainian legislation, international and national standards.

Statement of the main provisions. The effectiveness of the system of protection of information assets of the SIS of the National Police of Ukraine depends on the adoption of weighted decisions that support, accompany and adapt the IS system to the constantly changing conditions of functioning.

Under the notion of SIS (within the scope of this publication) we understand the information system in which: interaction between a significant number of sufficiently independent components is ensured, which, in its turn, can be considered as separate special-purpose computer networks; the level of required protection against unauthorized access (UAA) to information assets for different users in different SIS components can vary in a significantly. SIS is characterized by the following features: territorial dispersion; high degree of heterogeneity; use of global connections [3].

Since according to the range of tasks to be solved, its structure, and architecture of the system SIS is heterogeneous, the IS system should be heterogeneous as well. The heterogeneity of the IS system constitutes in the presence of various objects of protection and, as a consequence, different requirements for the IS in each independent SIS component. This is due to the fact that an independent SIS component has only its own critical information assets, software and hardware means of information accumulation, storage, and processing, models of threats and IPP.

Based on this understanding of SIS, the IS provision is a specific problem.
Therefore, an important stage in implementing the protection of the entire SIS is the choice of an effective method of protecting a particular independent component of the system. In order to design a protected SIS, you need tools that both detect and block cyber-attacks, and prevent the latter.

The authors suggest using an adaptive approach to the protection of the SIS information assets, which allows us to control practically all threats and to respond in a highly effective and timely manner. This also enables not only to eliminate vulnerabilities that may lead to the implementation of cyber threats but also to analyse the conditions that lead to their very emergence. Such an approach is possible only if the level of cyber threats is evaluated, taking into account their purpose and the analysis of the risks of information assets security, which is provided with the means of adaptive safety management of the SIS, based on the advanced reaction of the security system to the implementation of plausible cyber-attacks.

Whilst considering the IS in the SIS, it is always said that there are some desirable states. These desirable states describe the SIS security. The peculiarity of the notion of protection lies in its close connection with the notion of cyber threats (which may be the reason for the SIS withdrawal from a protected status).

Consequently, we must isolate three components directly related to violations of the SIS security: the threat – external (in relation to the SIS) source of violation of the protective properties; the object of cyber-attacks is an independent component of the SIS, to which the threat is directed; action channel is an environment of the malicious activity transfer. The algorithm for implementing a cyber-attack on an independent component of the SIS is illustrated via Fig. 1 [4].

Information protection policy is an integral characteristic that unites all components of the IS system. It is a qualitative (or qualitative-quantitative) manifestation of the SIS protective properties [5]. The description of the IPP must include/take into account the nature of the threats, the cyber-attack object and the cyberspace implementation channel.

For the SIS there is a typical architecture with structural components carrying out their specific tasks. In general, the SIS architecture includes four levels: the level of application software (AS) – the level of interaction with the user; level of database management system (DBMS) and Web-servers - the level of data storage and processing in the SIS; level of the operating system (OS) – the level of DBMS and AS service; network level – the level of interaction of the SIS independent components.
Cyber-attacks can be implemented at all levels of the SIS architecture. The most spectacular manifestation of the violation of the SIS security and the IS of a state institution is the blocking or modification of this institution’s Web portal contents. Let us consider the stages of implementing a cyber-attack on the SIS.

In order to understand the nature of this threat (the established term cyberattack is given in [6, 7]) the cyber-attack on the SIS is considered an arbitrary action performed by the attacker to implement the threat while playing to the weaknesses. The SIS weakness is the inability of the defence system to withstand the implementation of certain cyber threats or a combination of such.

Practically all SIS components are vulnerable. Among them we note the following: network protocols and devices that form the network environment; Operating Systems; DBMS and Web-servers. Thus, ensuring the absence of weaknesses should be used as the basis for formalizing requirements for the means of protection [3].

Only strict and actual control of the SIS security (which can be implemented through ISMS on the basis of adaptive approach) can significantly reduce the IS risks. Such an approach to the IS system in the SIS is called an adaptive protection model. The interaction between the security analysis systems and the detection of the cyber-attacks of the adaptive protection model is presented in Fig. 2 [8]. Adaptive protection systems are orientated towards the active counteraction to the IS threats. In order to make the security system meet the modern requirements, it is necessary to complement existing solutions with the three new components: security analysis; detecting cyber-attacks; management of the IS incidents.
In its essence, the ISMS is choosing and managing appropriate measures to protect the SIS information assets from certain cyber threats in accordance with their functioning criticality of [4]. It is part of a comprehensive IT management system based on the assessment and analysis of the IS risks to the designing, implementation, administration, monitoring, maintenance, accompaniment and development of IS based on the procedures used, the size and structure of the SIS.

The ISMS should be process-oriented and as well as based on the PDCA model of processes organization (the Deming Shewhart cycle: Plan-Do-Check-Act): creation – identification of assets, risk management; implementation – the stage of implementation of the appropriate IS management; verification – monitoring and analysis; action – maintenance in working condition and improvement.

Consequently, the quality IS management is based on the following principles:

- a complex approach - the IS management should cover all components of the SIS and take into account relevant risk factors; consistency with the IS strategy;
- high level of manageability, and continuity of management; processing approach – linking management processes into a closed cycle of planning, implementation, verification, audition and adjustment; efficiency – a rational balance between ISMS capabilities, productivity and costs [8].

The ISMS should ensure the safety and reliability of the SIS functioning and, according to the authors, design, implement, and operate on the fundamental principles of Ukrainian legislation and international agreements, national and international standards [9].

In Ukraine, a number of laws of Ukraine are in force and a number of conceptual and normative documents of various levels have been adopted that cover issues of ensuring the state’s informational and cyber security, in particular, the Decree of the President of Ukraine No. 47/2017 on the decision of the National Security and Defence Council of Ukraine dated 29 December 2016 «On the Doctrine of Information Security of Ukraine»; On October 5, 2017, the Verkhovna Rada of Ukraine adopts the Law of Ukraine «On the Basic Principles of Ensuring the Cybersecurity of Ukraine».

Note that the standard is a certain methodology and a system of requirements
formation, in our case, created for assessing the security of information assets. Systematic approach can be traced starting with the terms and levels of withdrawal, and ending with their use during the development, implementation, certification of the ISMS.

Specialists in the field of IS cannot do without knowledge of state and international standards. Moreover, compliance with the requirements of standards in Ukraine is regulated at the legislative level. The provisions and requirements of standards are one of the forms of knowledge accumulation (in particular, on the procedural and software-technical levels of the IS). They fixate proven technical solutions, methodologies, developed by leading experts. The standard provides best practices in the field of information security management for those responsible for the development and maintenance of such systems.

In accordance with the Law of Ukraine «On Standardization» [10] and the implementation of the «National Standardization Work Program dated 2016» [11], Ukrainian state standards in the field of ISMSs development and certification have been adopted, harmonized with international normative documents by the method of verification.


The main standard which can be used to base create and maintain the ISMS is the updated standard ISO / IE 27001. Note that this is not a technical standard, but
Another important feature of the ISO / IEC 27001 standard is that an institution of certification has been introduced to control the quality of the IS management process. The certificate has an international status.

In the process of developing and implementing the ISMS it is necessary to fulfil the following stages: to make a decision on the ISMS establishment and to determine the limits of officials’ responsibility; to inventory the SIS assets; Categorization of the SIS assets; Audition of the SIS security with the detection of cyber threats; assess information risks; to develop an information risk management system; to develop bases for normative documents on the IS and achieve their full implementation.

For the ISMS processes, the model of the cyclic process based on the principle of the IS control, with the centralized administration in its core (taking into account the specific functioning of the SIS – compliance with the regime of secrecy) is used.

According to the authors, the analysis, assessment and risk management are conducted on the basis of the classical CIA model (confidentiality, integrity, availability).

The determining problem in the ISMS functioning is the lack of a systematic approach to monitoring IS incidents. That is, the absence of incidents does not indicate that ISMS works correctly – it means that incidents are not fixed or not determined [8].

We understand the routine work of services as one beyond the scope of the service level agreement. According to [2], the task that are being solved by the ISMS are the following: restoring the regular functioning of services in the shortest possible time; minimizing the impact of incidents on the SIS functioning; providing processing of all incidents and service requests; concentration of the IS support resources in the most important directions; providing information that optimizes support processes, reducing incidents and management planning.

The IS incidents threaten the SIS, as the result of the potential of the NDS to state information assets, the failure of key network services, interceptions of IDs, website modifications, theft of personal data and other incidents. The ISO / IEC 27005 standard describes the principles of incident management. A key element of the standard ideology is the analysis of incidents in order to determine which information assets of the SIS are to be protected from the incidents and to what extent quantitative and qualitative indicators assess the potential losses. It also provides a model for assessing the incident handling capabilities, goals and means of incident management The standard is complementary to the ISO / IEC 27001 standard in the management of the IS incidents.

Knowledge of principles, models, and procedures plays an important role in a full understanding of this standard. The IS incidents management procedure includes: incident detection and identification; notification of the incident occurred; registration of the incident; elimination of the consequences and causes of the incident; analysis of the incident;
• preventive measures to avoid the incident recurrence.

In order to handle events and incident situations, an incident response process must be organized. The main tasks of the IS incident response process are: 1) ensuring coordination of the response to the incident; 2) confirmation/refutation of the fact of the IS incident occurrence;

• ensuring the preservation and integrity of the incident evidence, creating conditions for the accumulation and storage of accurate information about the implemented IS incidents;

• minimizing the consequences of violating the confidentiality, integrity, and availability of the SIS information assets;

• protection of the SIS information assets;

• training personnel on the means of identification, elimination of the consequences and prevention of the IS incidents occurrence;

• actual and objective information about the IS state.

According to [4], the information security incident management process is presented in Fig. 3.

The process of incident management is one of the most important in providing data for analysing the functioning of the ISMS, assessing the effectiveness of the use of measures, reducing risks and improving the SIS protection.

As an example of the main processes of the system for managing incidents of information security, can be considered the following:

1. Planning (provision of material and staff resources; development of a control scheme for incidents; development and approval of organizational and regulatory documents; personnel training and testing of the chosen incident response scheme).

![Fig. 3. The process of managing information security incidents](image-url)
2. Operations (incident detection and identification; preliminary analysis of the incident; an initial response to the incident; responding to an incident; investigation of the incident; analysis of the incident; development of recommendations).

3. Analysis (metrics analysis of the internal processes efficiency; metrics analysis of the effectiveness of the processes goals achievement; analysis of the relevant feedback; development of recommendations.

4. Improvement (coordination and testing of the improvements; transition to the planning stage of the improvements implementation process; In its essence, the ISMS is the choice and management of appropriate measures to protect the SIS information assets from identified cyber threats according to their criticality [16].

Finally, we would like to note that the conducted analysis substantiates the fact that making adequate decisions in the field of legal regulation of the ISMS establishment, operation and maintenance will not succeed unless there is a clear definition and interpretation of the basic concepts and terms; the main problem of the ISMS functioning is the lack of a systematic approach to monitoring the IS incidents; only the strict and constant control of the SIS (which can be implemented through ISMSs based on the adaptive security model) will significantly reduce IS risks.

References:


THE PARADIGM OF THE PERSONNEL MANAGEMENT OF THE ENTERPRISE ON THE BASIS OF THE STAFF MOTIVATION SYSTEM DEVELOPMENT

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The potential of any enterprise is closely correlated with the quality of its management system and, above all, with the ability of the management team representatives to motivate personnel to achieve the enterprise strategic goals and objectives. The personnel’s interest in the development of the enterprise is formed when at least two conditions are fulfilled: first of all, it is the motivation for the personnel to satisfy the need in achieving the main objective of the enterprise economic activity (that is, making profit), along with satisfaction of their own needs; secondly, it is ensuring the proper level of working conditions, their comfort, safety for health, and guarantee of the high level of the technical armament of labor.

It is these two prerequisites that are decisive, since in the conditions of a market economy, the main of all types of resources involved in the production of goods and services is human capital (at the enterprise level, personnel) that is not only able to create an added value for a certain product or service, but to implement the strategic
intentions of the top-managers on the development of the enterprise and receiving profit from the sale of these goods/services to the consumers.

Consequently, it can be recognized that the management of an enterprise at the present stage should be focused on the creation of such a system in which the personnel is motivated to further development of skills and competencies, necessary for further development of the enterprise as a whole. The role of personnel management in these conditions is to harmonize the needs of the enterprise in highly qualified specialists and create conditions for proper professional activity and self-development of personnel. Therefore, the qualitative system of motivation of the personnel of the enterprise is the basis for an effective personnel management.

At the same time, the conducted studies allow us to highlight the following scientific problems:

- scientists do not always take into account the importance of solving the problems of personnel management in general and, in particular, the creation of a mechanism for its motivation as one of the elements of enterprise development;

- the concepts of “staff motivation”, “staff incentives” and “manipulation” do not have clearly defined boundaries, and are often used in the modern scientific environment as synonyms;

- considering the process of enterprise development and aiming at solving practical problems in the field of personnel management, scientists ignore the rather important issue of creating a complete system of staff motivation, and the tools of manipulation (resulting from the theoretical and methodological postulates of the behavioral economy) in the process of staff motivation are not considered in Ukraine, but are widespread in the practice of a number of Western European and American companies and corporations.

These scientific problems were formulated by us on the basis of the content analysis of scientific works of modern scientists who are engaged in the search for ways to improve management processes at the modern enterprises.

Analysis of the comparison of the essence of the “enterprise management concept” with emphasis on the importance of personnel management according to the interpretations of various scientists and socio-cultural establishments showed that the process of creating effective tools for the formation of sustainable motives for each employee to achieve not only his own, but also corporate goals, becomes extremely relevant. This is explained by the fact that such management tools allow active influence on employees in order to solve their tasks in the direction of achieving common corporate goals, as well as to coordinate actions between these employees.

So, according to Ivakhnenkov S.V, the need for management follows from the fact that the enterprise “... is a system with a division of labor, in which the setting of the goal and its realization are carried out by different people (groups of people)” [1]. According to Ivanilov A.S., enterprise management is an activity aimed at coordinating the work of other people, work collectives, which is considered to
be a complex system [2, p.189]. On the contrary, Yarkina V. [3] is of the opinion that the enterprise management traditionally consists in the purposeful impact on the collective of people with the purpose of organizing and coordinating their activities in the production process. Sardak A.V. and Dmitrenko G.A. divide the process of personnel management into two types of activities: management of the entire enterprise, taking into account interaction with the external environment, and management of people (personnel) working in the enterprise [4, p.20; 5, p.35]. Unfortunately, among the considered definitions of the personnel management process, as well as among the analyzed definitions of the term “enterprise management”, any aspects of staff motivation are not taken into account.

The results of the analysis of scientific approaches regarding the consideration of personnel motivation in the enterprise management system are shown below (See Table 1).

The basic models of personnel management, unfortunately, do not always clearly define the role of the labor motivation system, namely: it is a social model in which the functions of personnel management are reduced to taking care of the state of physical and mental health; it is a legal model in which the main tasks of personnel management are to control and to regulate the state of the performance of labor relations; it is a strategic model that brings HR-management to the level of the source of the formation of the personnel potential of the enterprise, as the most important condition for its competitiveness [6].

If we look at the development of the HR-management paradigm, we will see constant expansion and complication of functions and tasks by adding new areas of responsibility. Thus, everything began with the paradigm of the scientific organization of labor known for its simplistic approach to regulating social processes with an emphasis on the effective use of the employee as a component of the material resource of the enterprise. The paradigm of human relations has shifted the focus of attention to the development of employees’ abilities with simultaneous leveling of the individuality of each employee. When forming the paradigm of contracting individual responsibility, a complete reflection of the essence of the previous one took place with a shift in attention to the individual abilities and self-development of each employee. It is interesting that the modern paradigm of command management system again returns to the ability of the individual to work in a team with simultaneous attention to the issues of self-development and the formation of the creative potential of employees.

However, it should be emphasized that in order to manage the enterprise as a system where the management body acts as the governing body, first of all, it is necessary to coordinate the object, that is, the personnel (or the personnel of the enterprise), on the basis of the development of the motivation system in order to achieve the enterprise’s goals. As we have already seen, it is completely invisible in the above-mentioned models and paradigms of personnel management.
Analysis of scientific approaches to the consideration of personnel motivation in the enterprise management system

<table>
<thead>
<tr>
<th>Authors [sources]</th>
<th>The main elements in the enterprise management system</th>
<th>Specifics of consideration of motivation in the framework of the personnel management subsystem of the enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.V. Feshchur, V.Yu. Samuliak, [7, p.101, 103]</td>
<td>Organizational structure, personnel, information and technical means</td>
<td>The subject of system management is the management of the enterprise while the object is the production personnel, motivated through wages in a direct form or a share of profit for interest in achieving management objectives.</td>
</tr>
<tr>
<td>A.O. Razdoroshnyi [8]</td>
<td>Personnel, production, marketing, finance and investment management</td>
<td>In order to achieve the set goals, the subject of management influences the object (personnel) with the help of motivation tools. To achieve the objectives of the enterprise, the subject of management affects the object (personnel) in order to ensure proper cooperation of labor between employees through motivation tools</td>
</tr>
<tr>
<td>Analysts of the international company «UP Trading», [9]</td>
<td>Management of the core business of the enterprise, as well as its support activities, personnel management, finance, logistics, sales management and marketing</td>
<td>Through motivation it is possible to ensure the participation of all employees of the enterprise in achieving the goals, by using incentives for effective interaction between them.</td>
</tr>
<tr>
<td>O.V. Skopin і N.L. Nazarova [10]</td>
<td>Management of personnel, information, technology, technical means, finances</td>
<td>The subject of management through the use of the “motivation” function to influence the enterprise personnel tries not only to stimulate employees to achieve certain goals, but also to adjust interaction between the employees of all structural units of the enterprise to optimize the existing organizational structure.</td>
</tr>
<tr>
<td>I.N. Drozdov [11, p. 35, 40]</td>
<td>Human, material, technical, information, regulatory and legal components</td>
<td>Human, material, technical, information, regulatory and legal components</td>
</tr>
</tbody>
</table>

The established scientific problems of superficial disclosure of the role of the personnel and its motivation in the development and management of enterprises lead to the need to justify and prove the following paradigm: the development of the enterprise depends on the perfection of the personnel management system. Within the framework of this system, a subsystem of personnel management motivated to achieve the goals and objectives of the enterprise on the basis of a scientifically based and logically structured system of staff motivation is recognized as a priority. Figure 1 illustrates schematically the essence of this paradigm.
Demand for the paradigm of personnel management of the enterprise, in which the main emphasis is precisely on the development of the personnel motivation system, is achieved through changes in the mentality of the new generation. This generation is more pragmatic, freer in choosing a country of residence and work,
a field of activity, and psychologically less attached to different moral attitudes and values, unlike individuals belonging to previous generations. Obviously, the subsystem of personnel management can be viewed as a complex, open and dynamic management system, which is inherent in self-regulation.

Functional responsibilities entrusted to this subsystem, are the next ones: personnel management (direct impact) and personnel management (indirect influence). It is precisely indirect influence, in our opinion, that is the basis of the system of personnel motivation, which uses a wide range of motivational and stimulating measures.

Moreover, it is quite new for Ukrainian enterprises to use manipulation in personnel motivation processes. A survey of foreign corporations proves that “clever” manipulations with employees can solve those problems when tools of motivation and stimulation are powerless. Manipulation is considered in the context of this research from the point of view of managerial communication. In general, it is a process of hidden management that manifests itself in the psychological impact on personnel for the formation of intentions, representations, values, behavior of employees that are beneficial to the interests of the enterprise, and reduce the risks associated with excessive freedom of action, independence of employees from each other, or vice versa, the risks of over-control and excessive staffing.

Taking into account the objective existence of manipulative control in the content of the legal (staffing) management, we obtain sufficient grounds for considering its structure and mechanism in the same way as legal and open management. In addition, it is expedient to include it in the system of personnel motivation along with incentive and motivation tools. However, the exploitation of personnel and direct dominance over the person should not be identified with the manipulation of enterprise personnel at all.

Therefore, we consider it expedient to consider manipulation as a constructive, elegant, veiled instrument that reduces intra-organizational tensions and helps coordinate personnel actions towards achieving the company’s overall goals. The functioning of the personnel motivation system in turn ensures the solution of tasks to manage a number of other subsystems and is the driving force for general corporate development, besides it is achieved through an independent evolutionary process of self-education.

For direct and indirect impact on employees of any enterprise a number of scientific and practical methods can be used.

The methods of direct impact are oriented towards recognizing the need for labor discipline, a certain organization of personal activity, culture and the sense of responsibility, and are realized through the functions of the top-management team representatives to monitor the interaction of employees and the application of methods to influence the behavior of employees.

On the contrary, the methods of indirect impact on personnel are associated with the introduction, development and evaluation of the effectiveness of
concepts regarding the selection of personnel, the selection of the most optimal methods of reward, the development and evaluation of staff actions, the creation of a psychological and cultural microclimate in the workplace and, finally, the introduction of techniques from the “behavioral economy” (for example, tools of constructive manipulation).

It should be noted that it is the staff assessment that influences the change in the toolbox of motivation, stimulation and the need to attract manipulation. Actually, it is a peculiar push for the development of the entire system of motivation at the enterprise.

In addition, the set of tools in two cases is different in essence:
- for direct influence, the toolkit is based on the administrative subordination of the object to the subject management (decrees, regulations, standards required for execution, job descriptions, organizational schemes, valuations, orders used in the process of operational management);
- the tools of indirect influence, which, in our opinion, are the basis of the system of motivation of the personnel, they do not have an automatic effect on the object of management, and their final effect is sometimes difficult to determine (economic norms of activity, system of material incentives, establishment of moral sanctions and encouragement, pleasure of cultural and the spiritual needs of workers, the establishment of social norms of conduct, social protection, manipulation, etc.).

So, proceeding from these scientific problems, and taking into account the essence of the advanced paradigm presented in Figure 1, it is important to clarify the concept of “personnel motivation”, which is considered by us as follows:
- from the point of view of substantive theories, the motivation of the personnel is the conscious action of the enterprise employees on the improvement of the subsystems in the enterprise as a system with the purpose of the development of the given subject of management; under the influence of incentives, allows to satisfy the own needs of the personnel and the needs of the enterprise as a whole;
- from the point of view of procedural theories, motivation of the personnel is the process, which is oriented on the improvement of the subsystems in the enterprise system by using incentives for the qualitative performance of functional duties, according to which the needs of the personnel are being met in obtaining just remuneration for work and provision a decent standard of living, and the needs of the enterprise in its further development at the same time.

The main subjects of this system are the HR-manager (responsible for implementing the ideas of the manual on personnel and corporate culture) and other line managers (responsible for the actions of their employees). The task of the HR-manager is to support the policy of management and to report it to the knowledge of the employees of the enterprise through the introduction of the corporate culture system. In addition, HR-managers are engaged in marketing personnel, human resource development and curatorial management.

Obviously, in the first and second definitions, the main drivers of impacts on
employees are incentives. Therefore, the main objective of the development of the system of motivation is to satisfy the needs of the personnel and the enterprise in the development by improving subsystems in the modern enterprise. Thus, the above-mentioned definitions fully correspond to the well-founded paradigm of introducing personnel management.

However, it should be noted that the “motivation of personnel” in any enterprise has the form of the system, because “conscious actions” of the management or the labor collective are possible only through the introduction of a variety of different methods and tools, software, a set of incentives, the creation of the necessary cultural and psychological environment and the use of other levers (including manipulation techniques) to achieve the objectives of the enterprise.

Thus, the system of personnel motivation can be considered as a set of interrelated elements separated from the enterprise environment into a subsystem of personnel management, but one that is necessarily in close interaction with other management subsystems, the functioning of which ensures the use of a set of tools for coordinating, stimulating and manipulating personal interests, the needs, the goals of each employee in the direction of achieving a specific set of goals of the enterprise.

In this context it should be noted that:
- first of all, stimulation is an effective tool and a decisive external factor affecting the employees in the process of motivation development;
- secondly, different types of motivation can be used for this impact on the personnel;
- thirdly, in practice, it is necessary to use manipulation in personnel motivation processes, along with other techniques.

The classification of the possible types of motivation can be created based on the essence of modern theories of enterprise management in accordance with the proposed paradigm of personnel management (See Figure 2).

Thus, based on the studies carried out, the following conclusions can be reached:
- the role of staff motivation is to balance the process of management and the process of development of personnel and enterprise simultaneously;
- enterprise management can be carried out in two forms: open (legal) and hidden one, which in turn are based on the use of various tools for incentives, motivation and constructive manipulation, and provide the creation of concepts for the selection of personnel; methods of its remuneration; development of employees and a general assessment of their work – this is the main idea of the proposed paradigm;
- for the development of the personnel motivation system, and, accordingly, the development of the personnel management system of the enterprise, appropriate methods of material and non-material motivation can be used by selecting incentives, using constructive manipulation tools, which allows to maximize the effectiveness of achieving the objectives of the enterprise.
Fig. 2. Schematic depiction of the personnel motivation system in accordance with the proposed paradigm of personnel management (developed by author)

It is obvious that the proposed paradigm of personnel management of the enterprise based on the development of the personnel motivation system has theoretical and practical significance, however, for its implementation in the activity of a particular enterprise, it is necessary to take into account the specifics of the requirements for personnel, distinctive from other conditions for the formation of mechanisms for motivating it to productive and efficient activity, specific features of the organizational and managerial structure, the form of organization and the
specifics of the operating activities of the enterprise.

References:

The problem statement. The system of taxation of any modern enterprise that is constantly undergoing changes has a direct impact on the financial and economic activities of the given business entity. The instability of economic conditions and the strong desire of the government to maximize the state budget causes excessive tax burden on business entities of different types and ownership forms. These circumstances make it necessary to organize tax management at the enterprise level, that is, to ensure proper functioning of corporate tax management.

The analysis of recent research and publications. The key issues related to the management of tax relations are defined in the scientific papers, written by such famous Ukrainian and foreign researchers as: V. Andryshchenko, A. Atamanchuk, V. Vyshnevskyi, D. Veremchuk, A. Yelisieiev, T. Yefymenko, A. Zahorodnii, Yu. Ivanova, A. Kyzyma, A. Koval, A. Krysovatyi, N. Kreinina, I. Lunin, V. Melnyk, I. Panaseiko, A. Sokolovska, L. Tkachyk, V. Fedosov, A. Frandynskyi, A. Shablysta and many others. At the same time, the lack of sufficient theoretical and methodological framework for assessing the impact of taxation regimes on the financial performance of business entities as a taxpayers, naturally requires continuing further research related to the prospects for the development of corporate tax management in the current conditions of instability in tax legislation and the existence of a number of economic and social factors of negative influence on the level of their financial security.

The purpose of the study. The purpose of the paper is to substantiate the need for corporate tax management and to determine the main directions for managing of the tax payments of an enterprise.

Presentation of the basic material with a full justification of scientific results. In modern conditions of management, a significant part of enterprises become bankrupt as a result of miscalculations in financial management, as well as inadequate allocation of resources and efforts to use them, various inaccuracies in plans and forecasts. Tax security is considered to be an integral part of the economic security of the state as the recipient of taxes to the revenue side of the budget, as
well as the economic security of an enterprise as taxpayer. The tax safety of the enterprise is based on the assessment of tax risks and tax burden by using special methods and tools for the estimation of their impact on economic security and the total efficiency of the enterprise. This is what determines the need to manage taxes at the microeconomic level.

In our opinion, the strategy of the enterprise should have a set of legal success factors that allow for an adequate assessment of the level of tax instability and directly manage it in decision-making process. In general, tax management is often viewed as a management process by using the methods of the tax mechanism influence on the existing tax system with a view to realizing the tax policy. Moreover, the tax management is aimed at combining the subjective intentions of taxpayers with actual circumstances and the organizational effectiveness of the tax system as a whole that is combining the ideal desire with real opportunities under existing conditions.

Tax management, according to L. Tkachyk, should be considered in three aspects: first of all, as a tax management system; secondly, as a certain category of people or the social layer of those who carry out work on tax management; thirdly, as a form of entrepreneurship (i.e., corporate and personal tax management) [7].

The structure of tax management includes not only state tax management, but also corporate and personal tax management.

Corporate tax management concerns directly the taxpayer as a legal entity, and provides for the tax payment organization and optimization of tax payments at the enterprise.

Despite the results of recent scientific studies of such well-known scientists as A. Atamanchuk and N. Pritulyak, we consider it expedient to determine the following components of corporate tax management in Ukraine:

1. Analysis of the external tax environment and of the projected regulatory and legal changes in the current legislation and international conventions and taxation. The legal basis for management decisions ensures their protection and the legitimacy of the revenues of the enterprise, therefore the tax legislation ensures the implementation of the main functions of tax management.

2. The development of the enterprise tax strategy (or tax forecasting) in accordance with the general strategy of economic development and the forecast of external tax conditions and benefits. In the process of formation of the system of goals and long-term target indicators of the enterprise for a long-term period, the priority tasks for certain aspects of tax management should be determined. Tax forecasting provides for the development of a common tax strategy in the process of formation of long-term development goals of an enterprise, taking into account possible changes in tax legislation and economic policy of regional bodies of local self-government.

3. Tax planning. The development of the system of enterprise plans provides for the optimization of production alternatives taking into account the tax burden and
its redistribution in the current market environment. The initial information, which is used for continuing tax planning, includes as follows: target standards of the enterprise economic strategy; changes in tax laws that are announced or forecasted; planned volumes of operating activities; indicators that characterize the market situation; the results of budgeting of expenses and tax accounting.

4. The tax monitoring of business operations. Constant operative analysis of sources of expenditure, tax expertise of projects and contracts, and the development of tax schemes for making settlements allow to influence significantly the tax base, to manage its formation, to legalize minimization of tax liability of the enterprise in specific situations.

5. Tax accounting and reporting. Due to its features and a stable relationship with accounting, an information base of tax management is being formed.

6. Controlling the implementation of decisions in the field of tax management. Coordination of interaction of various functional structures of the enterprise, as well as prompt response to legal innovations and current internal situation, and regulation of production strategies and tax budgets are aimed at achieving the set goals.

7. Organization of interaction with internal structures and external entities.

8. Evaluation of the results of tax management [1, 6].

In order to assess the state of the tax environment in an objective way, it is necessary, in our opinion, to develop certain standards for measuring of the tax accounting system effectiveness at the enterprise. Therefore, it is necessary to establish the standard (permissible) values of indicators for the existing conditions of functioning of the enterprise – the taxpayer and the maximum permissible values of deviations from them.

At the same time, we support the scientific position of A. Yelisieiev, that “the list and reference values of the indicators fixed in the standards should be established individually for each enterprise, taking into account its financial capabilities, total structure determination, the interests of the enterprise management team etc.” Among the above indicators, the indicator of the magnitude of the tax burden is extremely important. Excessive tax burden is a negative factor of the tax policy, which does not allow enterprises to function properly and ultimately restrains the activity of business entities. In turn, an excessively low level of tax burden is a shortage of tax payments, which does not allow the state to fully perform its functions. Under the optimal level of the tax burden, one should understand nothing less than the level at which taxpayers, in respect of their solvency agree to pay state tax payments, receiving the public goods of high quality from the state.

The tax burden indicator at the enterprise level plays an important role in the enterprise’s economy, as it is a study of the effects of the explicit and implicit impact of taxes on the welfare of their payers.

According to the recent research of A. Frandynskyi, the tax burden on the profit tax and the tax burden on VAT tax do not take into account the tax burden on the
enterprise as a whole as an integral indicator, because only two types of tax should be considered. Therefore, other tax payments occupy a significant share in the total tax payments [8].

By citing one of the scientific papers, A. Zahotodnii points out that the method, proposed by M. Kreinina, is related to the comparison of the tax and the source of its payment. In this regard, it is advisable not to include VAT taxes and excise taxes in the tax burden at all [2].

In turn, O.V. Koval notes that the calculation of these indicators does not take into account the tax burden in general, since two types of taxes should be considered only. However, in this context it should be mentioned that some other tax payments occupy a significant share in the total tax payments. In particular, it is necessary to take into account a single social contribution, which is included in the enterprise’s expenses in the amount of 22% of the accrual of profits to the wage fund [4].

Thus, there is a significant amount of methodological approaches to determining the tax burden, which differ both in the hierarchy of the problem and in the set of indicators used in the calculations. We believe that the main drawbacks of these methods of calculating the tax burden are related to the fairly large number of factors, which are as follows:

– the complexity of creating a single unified methodology for calculating the tax burden, since there are different types of taxation in the tax system of Ukraine depending on the conditions and nature of a certain activity;

– in the methodology for calculating the tax burden, there is no single approach to the quantitative and qualitative assessment of the impact of tax payments on the financial condition of an enterprise;

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– in the methodology for calculating the tax burden, there is no single approach to the quantitative and qualitative assessment of the impact of tax payments on the financial condition of an enterprise;

– when calculating the tax burden, other taxes and fees paid by the business entity – the payer of taxes are not fully taken into account;

– the absence of a control indicator of the tax burden, which makes it impossible to compare the level of taxation at various enterprises and other negative factors due to the specifics of the activities of the taxpayer and a combination of external factors of legislative and socio-economic nature.

We share the position expressed by Kyzyma A. [3] that an efficiently organized tax planning system allows to optimize tax payments. Temporal coherence of activities and optimization of this system in the direction of minimizing taxes legally reduces financial costs and strengthens the financial position of the enterprise as a whole [3].

It is indisputable that the need for tax planning is laid down in the very essence
of the tax law, which provides for specific tax regimes for different situations, allows for various methods for calculating the tax base and offers various tax benefits to the taxpayers. Tax planning has an objective character dictated by the requirements of market competition and the desire of the business entity to reduce tax expenses and increase its own funds for the further development of entrepreneurial activities.

Basically, tax planning is identified with the concept of an enterprise tax policy, without using the latter concept at all. In this case, there is a second approach, when tax planning is equated with planning as such which is carried out by the enterprise as a whole and includes forecasting.

Both approaches in our opinion do not fully reflect the concept of tax policy and planning, although it can not be said that tax policy and planning are the same, since the tax policy of the enterprise is much broader and more multifaceted than tax planning is. However, it is not advisable to consider these approaches separately, since the entire tax policy is based on tax planning and forecasting. At the same time, priority tasks of tax planning should be defined: preservation of working capital; increasing the overall efficiency of economic activity; prevention of negative consequences of management decisions; control over the effectiveness of schemes for minimizing taxation and so on.

Depending on the selected criteria and business orientations, corporate tax planning, according to I. Panaseiko, can be classified according to the following types: illegal and legitimate corporate tax planning [5].

The process of tax planning consists of several interrelated stages, which should not be viewed as a clear and unambiguous sequence of actions that necessarily guarantee a reduction in tax obligations. This is due to the fact that tax planning successfully combines the elements of science and an art of financial analytics.

In practice, all these stages of tax planning can operate together or separately from each other, depending on whether the enterprise is created, or already functioning. Moreover, these steps should be taken into account when modeling the enterprise’s tax burden at the optimal level for it, depending on the stages of the enterprise development and the tasks to be performed.

The realities point to the fact that of the two types of tax planning the first one is used more often. This can be explained by the inexpediency of long-term planning, and not by the lack of the desire of business entities to engage in planning activity. At a time when there are constant political, economic or social changes and changes in legislation, even current planning can not be accurate. That is why to predict exactly what will happen in 2-3 years seems to be unrealistic.

The generalization of modern practice and pragmatics of the organization of tax relations of enterprises as taxpayers with fiscal bodies gives grounds to conclude that the most common ways of documenting the processes of tax planning are reflected in:

- tax payment calendar, which can be used to monitor the timeliness and accuracy of tax payments;
− order on accounting policy of the enterprise;
− job descriptions for all participants in tax relations;
− internal rules (standards) of tax planning at the enterprise.

The tax payment calendar is developed on the basis of the current tax forecast taking into account the specifics of the mechanism for collecting and charging an individual tax. To date, there are various approaches to the construction of a tax payment calendar, the generalization of which allowed us to propose our own vision of the form of the tax payment calendar (Table 1).

### Table 1

<table>
<thead>
<tr>
<th>Period</th>
<th>Estimated payment amount</th>
<th>Income Taxes</th>
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<th>Ecological tax</th>
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<td>… etc.</td>
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<tr>
<td>Total amount per year</td>
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<tr>
<td>Sources of means for payment of taxes</td>
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<td>Total revenue from sales</td>
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<td>Cost of sales</td>
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</table>

Source: [authors’ own development]

Tax planning should be identified as one of the defining elements of the formation and development of the tax strategy of the enterprise as the taxpayer. The development of a strategic tax plan is closely related to the tax policy of the enterprise and its other strategies. Thus, the production strategy of an enterprise depends on the taxation, since it must develop its production taxation strategy based on the state taxation system, tax rates and the amount of tax payments. The amount of payment for most tax payments is determined by the total volume of enterprise activity. At the same time, a direct relationship exists between the strategy of tax payments and expenditure strategy, foreign economic activity and incentive strategy of an enterprise.

We support the position of many famous scientists, in particular S. Panaseiko and I. Sanina, that the development of the tax payment strategy, as an integral part of the overall financial strategy, should include the following stages [5, 7].

So, at the first stage, the overall validity period of the tax payment strategy is determined. This stage depends on the period and conditions of the overall strategy.
At the second stage, external factors that influence the tax payments of the enterprise should be investigated. First of all, this concerns the legislative base of the state and its stability.

The third stage provides for the formation of strategic objectives of the tax policy of the enterprise.

Within the framework of the fourth stage, the tax policy, plans for certain types of taxes and activities should be developed.

The fifth stage includes the development of various measures to achieve the tax policy strategy and its implementation, as well as the definition of the management system and the composition of the executors of the strategy, goals, objectives and activities.

At the sixth stage, the efficiency of the developed tax policy strategy is assessed. This stage is the final one, so it is conducted in different directions: coordination of the tax payment strategy with the overall economic strategy of the enterprise, as well as with its development strategy; conformity of the predicted development of the environmental environment to actual changes; an assessment of the internal linkage of tax payment strategies with such strategies, as the financial, production strategy and others; the implementation of tax payment strategies (this relates to the possibility of its overall implementation by directions and in time); effectiveness of the developed strategy.

Conclusions. Summing up the conducted research it should be mentioned that the tax management system is an important element of the overall enterprise management system. If it is based on strict observance of laws, it will be able to ensure fair and objective collection of taxes and to ensure a high level of financial security of the enterprise.

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DETERMINING THE ADMINISTERING RADIUS AND MANAGEMENT DENSITY FOR BUSINESS PROCESSES OF THE CORPORATIONS

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The problems of developing and improving the systems of administrative management of the enterprise based on up-to-date theoretical and methodological approaches to streamline management activities aimed at forming the optimal organizational and economic structure of “business-production” systems, identifying the unused resources of business companies, strengthening the synergistic effect to their management systems were considered in the monographic works of several national and foreign scientists, in particular: M.P. Voynarenko [1, page 50]; I.G. Krupelnytska [2, p. 52]; I.I. Muzur, V.D. Shapiro [3, pages 178-251] etc. Meantime, in our opinion, there still remain unsettled issues regarding the possibilities for improvement and development of national corporate business companies (hereinafter referred to as the corporations) with purposeful optimization of their business administration.

The goal of study is to deepen the theoretical and methodological principles in respect of optimizing business processes of business administration in the organizational and economic development of the corporation.

Basic material thesis. Summarizing the results of theoretical and practical
aspects of the research of presented by national and foreign scientists upon improvement of business administration processes in the management of organizations [1, pages 49-51; 2, page 52; 3, pages 178-251; 4, pages 17-19 etc.], with regards to current changes in several laws of Ukraine [5; 6; 7], in our opinion, the category of “business administration” can be defined as the activity of a business entity (enterprise, corporation, company, firm etc.), aimed at systematic step-by-step coherence of functioning all the processes of its production and economic activities by means of rational management organizations of business structures at different levels of the corporation.

Activity performed by managers of such subdivisions or departments of the corporation has been assessed on the grounds of efficiency of operating the funds entrusted thereto. Therefore, it is possible to emphasize importance of the business administration principles as a component of management tools in view of intensification of the competitive confrontation in the market space and serving as grounds for theoretical and methodological approaches to formation of the organizational and economic structure (regarding tasks of integration and decentralization) and functions of today corporations in the context of business administration of business processes regarding the rational use of their productive and economic potential. In this regard, let us define the fundamental principles, which in fact serve as the conceptual basis for prescribing rules of conduct and behaviour of the management system of an up-to-date corporation. In our opinion, basic provisions on the rational organization of situational control and regulation in the business administration of business processes in order to secure effective management of the production and economic potential of the corporation should be formed on the grounds of systematic principles used for fixing mandatory rules of conduct and behaviour in order to coordinate and regulate activities of all the subordinated structural business units (SBUs):

1) Compliance with the general purpose of the development and/or reorganization of business processes according to a logically justified sequence of transition from the goals of the corporation to its structure;

2) Adaptability of the structure and functions, i.e. ability to adapt effectively to new tasks and the conditions for their solution (detailed content of the structural and functional blocks of the corporation and its individual SBUs shall be reformatted constantly in line with changes in the consumption market, its conditions of operation and load);

3) Possibility of effective impact on the final technical and economic indicators of business projects at all the stages of project cycles, including at the earliest, i.e. pre-investment stages of project analysis;

4) Security of the optimal level of centralization of corporation management, which is usually based on reducing the number of functional connections, closed on top management and clear separation of management functions and improvement of the structure of the management apparatus (rationalization of “management-
subordination” and “centralization-decentralization” relations, organizational mechanism of coordination and control system; clear regulation of the SBU activity; appropriate adjustment of the structure and content and drafting new regulations on the structural units and offices);

5) Systematic use of the concept of Project Management with in-depth and comprehensive elaboration of the initial (pre-investment) stage of management projects for the purpose of developing and optimizing production and economic programs as separate SBUs and corporations as a whole;

6) Effective support and coordination of projects aimed at reducing project cycles;

7) Availability of internationally certified quality system of products and services of the corporation;

8) Regular work on improving the integral system of corporate and production-economic planning “with regards to national peculiarities and experience of the principles and recommendations required for improving the corporate management practice in Ukraine” [7];

9) Availability of a mechanism for organizing a flexible project financing system at the corporate, national and international levels;

10) Systematic use of up-to-date information technologies;

11) Marketing system development with the transfer of its functions of improving the range;

12) Existence of a subdivision being responsible for the entire complex of issues related to so-called public relations;

13) Existence of a system of personal responsibility for performance of each function of management of production and economic activities of the corporation;

14) Structure of the corporation shall provide a standard level of subordination. Transfer of the corporation departments to new economic relations (in the status of the Central Department) facilitates the allocation of newly formed working capital in the amount of their remaining balances at the moment of making the decision to move these units to a new status.

In our opinion, it is advisable to form a system of centres of responsibility of a modern corporation based on relatively independent production and commercial divisions (SBUs) which combine all functions and activities necessary for development, production and sale of any particular type of product or group of products: revenue centres; profit centres; cost centres; investment centres. In such case, the central place and the main role assigned to the corporate centre of the corporation, where one of its key tasks is monitoring and diagnostics of assessment of the current and anticipated state of organization and management of the company based on a certain set of quantitative assessments of organizational and managerial analysis of the enterprise [3, pages 200-210] (Fig. 1).
Let us consider the example of individual specifications of the level of business administration of their business processes based on the use of such key indicators of the proposed system of formalized quantitative assessments of organizational and managerial analysis shown in Fig. 1, as the radius of administration and the average density of the corporation management with its several SBUs in different strategic zones of management.

The above indicators of the system of formalized quantitative assessments of organizational and managerial analysis of corporations are recommended to be calculated under the following formulas:

1) average radius of administering the corporation ($\overline{R}$, km):

$$\overline{R} = \frac{\sum_{i=1}^{n} A_R R_i}{\sum_{i=1}^{n} A_R}$$

where $A_{Ri}$ means annual scope of works in the remote (i) SBUs, representative
2) average density of the corporation management (, monetary unit per square km):

\[ H_C = \frac{A_O}{\pi \cdot (\bar{R})^2} \]

where \( A_O \) means annual scope of works in the remote territory, monetary units:

\[ A_O = \sum_{i=1}^{n} A_R \]

In this case, the optimum value of the average administering radius \( \bar{R}_{\text{optimal}} \) of the corporation can be determined by the formula (1) with regards to the coordinates of individual remote SBUs on a geographic map calculated by the method of gravity center [8]:

\[ \bar{X}_{\text{optimal}} = \frac{\sum_{i=1}^{n} A_R X_R}{\sum_{i=1}^{n} A_R} \quad \bar{Y}_{\text{optimal}} = \frac{\sum_{i=1}^{n} A_R Y_R}{\sum_{i=1}^{n} A_R} , \]

where

\[ R_i = \sqrt{(X_R - \bar{X}_{\text{optimal}})^2 + (Y_R - \bar{Y}_{\text{optimal}})^2} \]

However, in practice, usually real values of the coordinates \( (\bar{X}_{\text{real}}; \bar{Y}_{\text{real}}) \) of the average administering radius \( \bar{R}_{\text{real}} \) of a currently existing corporation do not coincide with the corresponding optimal coordinates determined by the method of gravity centre.

Therefore, the distances to individual SBUs, with regards to actual values of coordinates \( (\bar{X}_{\text{real}}; \bar{Y}_{\text{real}}) \) of the average administering radius of a currently existing corporation, should be calculated according to the formula:

\[ R_i = \sqrt{(X_R - \bar{X}_{\text{real}})^2 + (Y_R - \bar{Y}_{\text{real}})^2} \]

According to the foregoing, we may propose the following target function for optimizing the level of average density of management of the corporation with the branched-off network of SBUs:

\[ F = \sqrt{(\bar{X}_{\text{real}} - \bar{X}_{\text{optimal}})^2 + (\bar{Y}_{\text{real}} - \bar{Y}_{\text{optimal}})^2} \rightarrow \text{min} \]
As shown by the target function (6), by means average administering radii $\overline{R_{optimal}}$ and $\overline{R_{real}}$ which determine the corresponding density of the corporation management with the branched-off network of the SBUs, it is possible to present some aspects of the integrated specifications (in the form of average circles of administering efficiency level) in order to assess the results of the situational control process and regulation of business processes in business administration, in order to secure the effectiveness of implementing the potential of the corporation management as a whole.

Therefore, if the circle area formed by means of the average administering radius $\overline{R_{optimal}}$:

$$S_{optimal} = \pi \cdot (\overline{R_{optimal}})^2$$

is accepted as a standard integrated assessment of the impact of administering density efficiency level, correlation between cross-sections of the areas $S_{optimal}$ and $S_{real}$ (formed by means of the average administering radius $\overline{R_{real}}$) against the area $S_{optimal}$ [9]:

$$E_{adm} = \frac{S_p}{S_{optimal}} = \frac{1}{2\pi \cdot \overline{R_{optimal}}^2} \cdot \left[\overline{R_{optimal}}^2 \cdot (F_{optimal} - \sin(F_{optimal})) + \overline{R_{real}}^2 \cdot (F_{real} - \sin(F_{real}))\right]$$

may be treated as an integrated assessment of the impact of administering density efficiency level on management of the corporation with the branched network of SBUs.

Fig. 2 shows a conditional example of determining the level of average radius and density of administering the corporation business process (with main branch located in Kryvyi Rih and SBUs located in other cities in the regions of Ukraine).

Fig. 3 shows a conditional example of optimizing business processes of the corporation in order to increase its efficiency of using its production-economic potential based on improving the value of average radius and density of administering the corporation (by formulas (1) - (8)), with regards to actual values of their geographical coordinates.
In order to demonstrate the essence of the proposed methodological approach aimed to assess efficiency of using the potential of the corporation in order to optimize the functioning of its SBUs in the context of business administering its organizational and economic development, it is assumed that distances from the administering centres to individual SBUs are calculated by formulas (4) and (5). Meantime, it was assumed that annual volumes of work performed in the remote (i)
SBUs of the corporation for Variant 1 are equivalent, while for Variant 2 they are simulated, so the target function (6) could reach the minimal value.

Results of the calculation of the integrated assessment of the impact of administering density efficiency level for two variants, in the context of improving the organizational and economic management of the corporation with the branched-off network of the SBUs, as conditional example (Fig. 2, Fig. 3), are given in the Table 1

| Table 1 |
|---------------------------------|----------------------|----------------------|
| Results of calculating integrated assessment of the impact of administering density efficiency level, in the context of updating the corporation organizational and economic management |
| Variant No. | Variant 1 (fig. 2) | Variant 2 (fig. 3) |
| Average administering radius, km | optimal | 236.51 | 217.47 |
| | real | 239.58 | 212.57 |
| Distance between optimal and real administering centres, km | 81.01 | 20.3 |
| Administering density in respect of corporate centre, monetary unit per square km | 7.21 | 40.15 |
| Integrated assessment of the impact of administering density efficiency level, unit share | 0.79 | 0.92 |

According to the results of a conditional example of optimizing business processes of the corporation in respect of increasing efficiency of the use of industrial and economic potential of its SBUs, we got an increase in the integrated assessment of the impact of administering density efficiency level by 16.46%. (correlation between Variant 2 and Variant 1).

References:


CORPORATE MANAGEMENT: INFORMATIONAL ASPECTS

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Information as a phenomenon is a special universal immaterial good, which, depending on its content, form, purpose and application sphere, can become an effective business activity influence tool. On the one hand, well-used information can become a powerful engine for enterprise’ progress and development, in the other - a devastating force. In both cases, information at the stakeholders hands serves as something to reach a certain goal, so it is important to understand the role and importance of information within the business activities.

The corporate organizations peculiarity is that their authorized capital is divided into shares among owners, the number of which can be very significant (depending on the organizational and legal form of the partnership). Each shareholder has equal rights and can exercise it at his own discretion. Naturally, a situation arises when each owner wants to realize and protect his property interest - to get the most revenue from his property. Each participant understands that the activity stability and the corporate organization development is a way to profit and increase the value of its share within authorized capital in general.

Access to corporational information can become an effective instrument of influence on the corporate management mechanism in order to increase its efficiency,
obtaining the shareholder the maximum income from their property, and at the same
time as an instrument of protection against unlawful violations on it.

As known, information becomes strategic only if it has the following features:
authenticity; completeness; affiliation; topicality; the legality of receiving, using,
distributing, storing and protecting. In order to have all the features above and
become a way to achieve the objectives, the legislator gives the owners the relevant
powers in other words – the legal opportunities for obtaining relevant information
about the corporation. These powers derive from the content of legislation and are
conditioned by the relations that arise between a business organization and the
Corporate owner’s rights in relation to it. These legal possibilities themselves are
 informational component of corporate management.
Conditionally, they can be divided into 2 groups according to origin field: -
within the sphere of business organization management; - within the authorized
capital according to property shares redistribution between owners of business
organization.
The Ukraine legislation establishes the right of the company participant to take
part into the company management as a direct personal participation in the activities
of the company’ management bodies - general meetings, supervisory board, boards,
revision commissions, etc., and indirectly - through the above mentioned governing
bodies formation by electing their members or appointment their representatives,
who manage/manage on behalf the owners’ interests.
Information about the direct activity of management bodies arises within the
business managing field and includes information on:
- the company management bodies structure, the list of their officials, the
  composition and their election (appointment) procedure;
- the legal documents content according the basis of which they carry out their
  activities;
- dates, places, meetings agenda;
- the results of their direct activities and decisions taken.
The Ministry of Justice letter dated January 24, 2005, № 19-45-1626 / 19-
45-1628, provided an explanation of Article 10 part 1 of the Ukrainian Law «On
Business Associations» and Article 116, Clause 5 Part 1 of the Ukrainian Civil
Code, according to which the members of the economic partnership have the right,
in particular, to receive information about the company activities. At the participant
request, the company is required to provide it with annual balance sheets, reports
on company financial and economic activities, audit committee reports, of the
management bodies minutes of meetings, etc.
In clarifying of the National Securities and Stock Market Commission of
Ukraine, from October 29, 2002, № 5 about «The procedure for the point «g»
application from Law of Ukraine, Article 10 «On Business Associations» states
that: «Providing shareholders with information about the company activities is a
executive body’ duty at a joint-stock company» [1].
Regarding information competence in the shares redistribution area within the company charter capital, Article 55 «On Business Associations» from the Law of Ukraine provides that the alienation in the direction to third parties of a shareholder’s share (its part) with limited liability is allowed, unless otherwise established by the partnership charter. Thus, a participant of a limited liability company has the right to sell or otherwise withdraw its share (part thereof) in the authorized capital of one, several company’s members or third parties [4].

Participants of the partnership enjoy the preemptive right to purchase a share (its part) of a participant according to proportion of their shares ammount, unless the partnership charter or an agreement between the parties does not establish another procedure for the right exercise. Purchases are made at the price the share (part thereof) was offered for sale to third parties or taking into account other conditions. If the members of the partnership do not exercise their preemptive right within a month from the notification date of their intention to sell the share (its part) or within another term established by the partnership charter or participants arrangement, the participant’s share (part thereof) may be alienated to a third side [4].

This state of the law indirectly disclose the primary right of the corporate rights owner to receive information about the participant intentions to dispose its share, its value and the timing of these actions. In case of participant share (its part) acquiring at limited liability company, it is obliged to sell it to other participants or third parties within a one year term, or to reduce its authorized capital in accordance with the legislation requirements. During this period, the profits distribution, as well as the voting and quorum determination in the supreme body, are carried out without taking into account the acquired share.

In addition, a special group of information rights arises at the company members as an change wave within the company authorized capital size by it increasing or decreasing, because shareholders have the preferential right to purchase shares that are additionally placed and the right to buy shares of the company if the shareholder voted against the increase or decrease within the authorized capital [5].

In this case, the member of the partnership has a right to obtain information about the reasons for making such a decision, the procedure and procedure timing, the legal consequences for a particular partnership participant above mentioned events. It should be noted that as opposed to information legal opportunities regarding access to information about organization the owner assumes the responsibility not to disclose the information about his rights realization which is commercial secret and / or confidential information.

In considering these issues, the peculiarities of information aspects within the corporate rights management were investigated with attention to agreements between shareholders in terms of realizing their interests.

As a result of the research, the following features of the agreement between the company’s shareholders are highlighted as a form of their interaction and realization of their corporate rights and interests:
First, it is an agreement between stockholders, based on the voluntariness principles, equality, agreement on the interaction essential factors. It follows that no shareholder can be compelled to coordinate his actions by concluding such an agreement. Also, all shareholders participating in such an agreement are equal in their rights and obligations. In addition, the agreement is reached on such implementation aspects of corporate rights and interests of each agreement parties, which may have significant consequences for the entire company as a whole.

Secondly, this is an agreement where its parties can only be a shareholder.

Thirdly, this is an agreement, the subject of which is the sale by shareholders of shares rights and / or refraining from the exercise of those rights. The Law of Ukraine «On Joint Stock Companies» stipulates: «The agreement between shareholders may provide for the parties to vote in the manner prescribed by such agreement, at the shareholders general meeting, agree on the acquisition or alienation of shares at a predefined price and / or in case of occurrence to refrain from alienation of shares to the circumstances occurrence which are specified in the contract, as well as to take other actions related to the management of the company, its suspension or the separation from it of the new partnership»[5]. The subject of such an agreement may not be the party` obligation to vote in accordance with the management bodies instructions, whose shares are entered into this contract, unless the contract party is a person who is simultaneously a member of the such company management. Any other conditions of an agreement between the shareholders that conflict with these requirements can not be taken into account in the corporate management implementation.

Fourthly, this agreement is based on the law norms, the charter and other internal documents of the company. That is, an agreement between shareholders may stipulate conditions or a procedure of determining conditions in which a contract shareholder is entitled/obliged to acquire/sell shares and to determine cases (which may or not depend on the parties actions) when such right or obligation arises. There are some manipulation methods into using agreement by the interested party:

(1) using of the defects within the form and order of the contract conclusion or its falsification. As you know, the agreement between the shareholders has writing form, which records the authenticity of parties signatures, the entry into force date. An agreement on rights of the shares concluded by an agreement party between the shareholders when violation of this agreement happen, it may be declared invalid by the court in the party’ suit only if it is proved that the one knew or ought to know about agreement restrictions;

(2) using of the contract information. Unless otherwise provided by law or an agreement between shareholders, information within the agreement content between the shareholders is not subject to disclosure and is confidential;

(3) abuse by obligations default under the contract. Agreement violation between the shareholders can not be the basis for the management decisions invalidation. In addition, the agreement between the shareholders may provide ways of ensuring
for fulfillment of obligations arising from such an agreement, and civil liability measures for failure or improper performance of such obligations;

The rights of the agreement parties between the shareholders take origins from such agreement, including the right to claim compensation for damage caused by a agreement violation, the penalty imposition (fine), compensation payment (fixed amount or amount to be determined in accordance with the procedure provided for by the shareholders agreement), the application of other liability measures in connection with agreement violation is subject to judicial protection;

(4) abuse of the way and size of the controlling shareholding formation. As you know, a shareholding of more than 10, 25, 50, 75 and 95% can be determined as significant or controlling. A person who, in accordance with the shareholders agreement, has the right to determine the voting version at the shareholders general meeting in accordance with the shares of the company, is obliged to notify the partnership of the acquisition of such a right, if, as a result of such acquisition, this person, either alone or in association with his affiliated person(s) directly or indirectly receives an opportunity to dispose of more than 10, 25, 50 or 75 percent of the votes cast for the company’s ordinary shares.

Thus, in corporate management, contractual relations between shareholders are the tool through which possible functional solutions to the enterprise's problems, but it is necessary to take into account the peculiarities of the direct conclusion of shareholders contracts in order to prevent possible abuse of both individual shareholders and the governing bodies of the company. What can negatively affect its effectiveness.

The conducted study made it possible to conclude that the information aspect of corporate management covers all components of the corporate governance mechanism functioning and is intended to provide the owner with the necessary opportunities for more effective management and control over the company's economic activities in which he has corporate rights and thus acts as an effective protection mechanism and legitimate interests of their owners.

References:


Over the years, there is a sharp increase of the negative impact of society economic activity on the state of environment. Particularly relevant issue of rational and sustainable use of natural resources is presented in the agricultural sector, which is the most sensitive contact zone in the system of mutual economic and environmental interests of humanity. For many years the destructive effect on the environment increased in agriculture. This necessitated fundamentally new vision capabilities ensuring the environmental and economic balance in the agribusiness.
Problems in the field of agriculture and improvement of its competitiveness can be addressed through effective strategies and mechanisms for innovation. Such innovation strategy, in our opinion, should be the ecologization marketing strategy of agriculture that ensures high quality of life, national security, environmental protection and high technical level of agricultural production in Ukraine.

This marketing strategy is capable of ensuring principle of unity for economic and ecological processes in the management of agricultural production and promote radical restructuring of the relationship of the production process from the environment.

Works of local researchers Reshetnikova [12], Kudenko [6] and others are devoted to the issue of developing marketing strategies for transformational period.

Research of Prokopenko [11], Hromushyna [3], Shkuratov [14], Melnyk and Egorova [7], Kalinichenko, Havrysh and Perebyynis [5] and other scientists are devoted to the issue of the formation of the economic mechanism of environmental regulation of agricultural production and environmental protection.

Economic approaches to improve the mechanism of production and consumption of environmentally friendly products are also considered in the works of Patyka et al. [10], Mishenin and Yarova [9] and others.

Despite the potential of natural resources, favorable climatic conditions, as a result of certain socio-political and environmental factors there is the decrease in agricultural production and a significant deterioration of its quality [3].

Ecological and economic crisis in the agricultural sector, in our opinion, can be caused by the following problems:

– degradation, pollution and land exhaustion;
– loss of natural and assimilative capacity of natural resource potential of agricultural production;
– imperfection of agricultural products standardization;
– imbalance between the production process and the environment;
– lack of government regulation, regulatory and legislative framework of ecological and economic relations entities;
– non-compliance with modern requirements and technical base for the development of new technologies for the production of agricultural crops;
– lack of understanding in society priorities of environmental preservation and sustainable development benefits.

In recent years the market environment with operating economic actors is changing significantly: growing its degree of uncertainty, there are unmeasured risk factors [1].

Marketing in the agricultural sector and the development of environmentally oriented marketing meet the requirements of social responsibility agricultural production, development of economic management mechanism on environmental and economic grounds, and is an integral part of environmental and ecosystem management in the agriculture [15].
In our opinion, adaptation of marketing processes based on environmental requirements is essential for the effective implementation of marketing in agriculture. Thus it is not just a one-time use innovation to achieve instant benefits but the continuous, detailed planned strategic innovative development, which is based on methods of ecological and economic management. Just through environmentally oriented marketing strategy the contradiction between the economic interests of producers and preservation of the environment, that is ensuring of environmentally safe life conditions, can be solved [4].

Table 1
Factors of positive and negative motivation for agricultural enterprises to adopt environmental marketing strategies

[Author’s study]

<table>
<thead>
<tr>
<th>Factors of positive motivation</th>
<th>Factors of negative motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings due to conservation of resources</td>
<td>Imperfect legislation concerning to rules and regulations for production of “clean” products</td>
</tr>
<tr>
<td>Reduced costs for risks of environmental charges</td>
<td>Lack of clearly defined development strategy with appropriate information and legal support</td>
</tr>
<tr>
<td>Improved natural resource and market potential.</td>
<td>Lack of state support for producers of ecologically safe products and control system links all product life cycle</td>
</tr>
<tr>
<td>Improving the overall image of the company</td>
<td>Lack of economic instruments to encourage the production of ecologically clean products</td>
</tr>
<tr>
<td>High competitiveness of environmentally safe products</td>
<td>Risks of crop losses and lack of Compensation associated with the production of ecologically clean products</td>
</tr>
<tr>
<td>The emergence of new environmental needs (need for environmental safety), environmental interests and culture of the population</td>
<td>Speculative price premium processing enterprises and traders, because of which agricultural producers of organic products loses a significant amount of money as a result of its implementation, and the bulk of the profits remain in the sector of processing and trade</td>
</tr>
</tbody>
</table>

The emergence of environmental marketing is the result of increasing consumer demands for quality and environmentally cleanliness of the products they buy, its impact on human health and environment [9].

With forming of ecologization strategies for agriculture production we propose use of the key strategic categories: mission statement, goals and objectives; strategic analysis of macro and micro factors; choice of priority strategic directions, forming tools for the implementation of this strategy; assessment and monitoring its implementation.

The process of developing a ecologization marketing strategy should be began with identification of key industry issues: economic, political, social, technological and environmental, which need strategic analysis. Formation of the mission and goals has to be made only after a detailed analysis of strategic problems occurring
in the industry and its external surroundings.

The main purpose of environmental marketing at national and regional levels is to create conditions for economic entities in which they are interested in maintaining and restored natural resources while implementing innovative approaches in their work [8].

We have attempted to summarize the positive and negative factors motivating agricultural producers regarding the use of environmental marketing (Tab. 1).

At the entity level environmental marketing main goal is to develop economic organization and economic mechanism of agricultural enterprise using its main components: planning, promotion (motivation), organization management, control and so on. It is necessary to orient production to meet the environmental needs of consumers [7].

**Table 2**

Criteria for effective state regulation of agricultural production
[Autor’s study based on 16]

<table>
<thead>
<tr>
<th>Types of criteria of state regulation</th>
<th>Essence and efficiency features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-sufficiency of food</td>
<td>Self-sufficiency ratio is defined as the ratio of total volume of domestic food production to the volume of its domestic consumption. To support sovereignty state is to reduce dependence on imported food, especially for those products that can be produced on its territory</td>
</tr>
<tr>
<td>Trends related to population income</td>
<td>Criterion takes into account the trend of slowdown in revenue growth of agricultural enterprises in relation to other economic sectors. It is one of the criteria for support of agricultural production of the state. State regulation is intended to support the current level of prices.</td>
</tr>
<tr>
<td>Development of the social sphere</td>
<td>Recognizes the trend of decline in the share of the agricultural sector in national economies of the developed countries and Ukraine in particular. This is reflected in the disappearance of entire rural landscapes. It is one of the criteria which points to the need of state support for Ukrainian village, because it allows to keep rural way of life.</td>
</tr>
<tr>
<td>Environmental criteria</td>
<td>The most important criterion for state intervention in the development of agricultural production. Factors of negative effects are becoming increasingly visible environmental degradation indexes. Negative externalities should be regulated by the state.</td>
</tr>
</tbody>
</table>

The objective of environmental marketing for agricultural producers is assistance to reducing the burden on the environment in the planning, coordination and control of all management operations.

We believe a significant role in the elimination of negative factors in the market belongs to the state.

The effectiveness of state regulation of agriculture in the market depends on the
criteria that were formed for a long time and that can be divided by priority (Tab. 2).

Component part of formation of ecologization marketing strategy is analysis of macro- and micro-surroundings, analytical assessment of its parameters and adjustment of marketing strategy in accordance with the dynamic changes in the environment [6].

From the above information be noted that there is quite a lot of negative factors motivating agricultural producers of ecologically clean products, the main of which is the inefficient functioning of the market of environmentally safe products and its slow development in Ukraine [2].

Economic management methods in the ecologization of nature management should include the creation of economic conditions that would encourage land users to achieve better results in their work.

The state should perform important functions to stimulate agricultural growth, social protection, rise of quality of life. This priority role of state regulation of agriculture in any case does not reduce the importance of market self-regulation. Mechanisms of state actions should focus on supporting private initiatives aimed at the development of new technologies, stimulate innovative activity in rural areas [14].

Economic instruments include promotional leverage, the use of preferential taxation and credit, and price incentives of environmental activities.

Environmental management tool provides certification and labeling of ecological products, which prove that they comply with the identified facility specific regulations. The process of certification and standardization should be conducted according to international standards, adapted to the conditions of Ukraine [13].

Ecological and economic tools, in our opinion, are the part of an environmental marketing and include:

– production of ecologically safe agro products and its environmental positioning;
– pricing taking into account environmental costs;
– development of ecologically safe products market, which is based on international standards for ecological agricultural production;
– distribution of ecologically safe food products;
– establishment of Information and Communication promoting agrarian food products.

Formation of strategy of environmental marketing in the agricultural sector, in our opinion, is the integration of all administrative functions that also contribute to the ecologization of agricultural production, allocation, planning and forecasting of business initiatives for investment basis, which is linked to production, formation and stimulate demand for ecosafety agro products, and agricultural products and ecosystem services.

Environmental marketing involves environmental awareness; formation of environmental needs, social responsibility, marketing strategy, marketing management, environmentally focused market research, environmental and
economic tools of marketing management in manufacturing environmentally safe agricultural products (product, price, distribution, promotion system).

Table 3
Economic management methods of agricultural production
[Author’s study based on 3]

<table>
<thead>
<tr>
<th>Economic incentives</th>
<th>Economic sanctions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing favorable short- and long-term loans to implement projects of ecologically safe and economically effective technologies</td>
<td>introduction of compensation for losses related to the impact on the environment</td>
</tr>
<tr>
<td>Partial or complete exemption from income tax in the case of funds for the purchase of ecologically safe fixed assets</td>
<td>Increase and differentiation of the range of payment systems for the irrational nature management, above-limit usage of natural resources, and environmental pollution to uneconomical levels for the agricultural entities</td>
</tr>
<tr>
<td>Preferential taxation and crediting for agricultural enterprises producing ecologically safe products and environmentally friendly production</td>
<td>differentiation of the land tax depending on its quality of locality</td>
</tr>
<tr>
<td>Encouraging employees of enterprises producing ecologically clean products and compliance with environmental legislation (soil fertility, quality standards of production, improvement of environmental parameters)</td>
<td>Comparison of the factors of positive (gain on disposal of waste benefits tax credit benefits, price increments) and negative motivation (payment for excessive use of natural resources, fees for excess pollution, waste disposal fees, fines, additional tax) expressed in environmental costs</td>
</tr>
<tr>
<td>Development of the possible variants for refund of damages related to crop shortfalls in the production of ecologically safe products</td>
<td></td>
</tr>
</tbody>
</table>

Combination of environmental, economic instruments at state regulation of environmental and economic components is important in implementing of the ecologization marketing strategy for agricultural production.

Implementation of environmental marketing in practice will help to identify new market niches, empower diversification of agricultural enterprises. The production of environmentally friendly and safe products can generate additional revenue, because these products are of higher quality. Environmental marketing can act as an effective instrument for economic development mechanism and to be the basis for environmental security of the national economy.

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2. Danylyshyn, B.M., Lubchenko, O.M. (2008). The marketing strategy of


ORGANIZATIONAL AND ECONOMIC MECHANISM
OF MANAGEMENT OF THE
NATIONAL ECONOMY COMPETITIVENESS

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In the context of global crisis phenomena, the problem of the formation of sustainable competitiveness has acquired a particular urgency due to increased variability of the external environment and insufficient scientific and methodological development of many aspects of the formation and implementation of competitive advantages of the national economy.

The growing competition in the world markets and the unstable financial and economic situation of the global environment lead to the fact that governments are compelled to look for ways of the country’s stable economic development by using the existing competitive advantages, as well as to develop and implement certain measures and mechanisms for attracting investments and technologies to modernize production processes and to produce more competitive products.

In recent years, competitiveness has become a leading management concept. On the basis of international openness of the national economies and globalization of economic relations, not only developed countries, but also those countries that are developing rapidly, declare competitiveness as one of the main tasks of their economic policy.

The urgency of solving the problem of managing the national economy is obvious, since its various aspects are reflected in the studies of international organizations [1, 2, 5, 10] and the scientific works of scientists and researchers, in particular: [3, 4, 6, 7, 8, 9] and others. However, the model of the government management of the national economy, which was created in the transformation period and based on the key role of the central authorities in solving economic development issues, does not correspond to modern trends.

At the same time, modern economic science does not sufficiently address the issues of the formation of the adaptive mechanisms for managing competitiveness, both at the national level and at the international level of socioeconomic relations.

All this has made it necessary to determine the components of the organizational and economic mechanism for managing the national economy competitiveness.

The national economy competitiveness is considered to be a multifaceted economic category that was formed in the process of economic thought development. It is believed that for the first time the concept of the economy competitiveness was introduced in 1990 by M. Porter, Professor at Harvard Business School, who has defined the need to consider the above-mentioned concept not only at the enterprise level, but also at the level of the country as an object of research [2].
Gradually, the scientific community formed a broader approach to the notion of the national economy competitiveness. According to the most common interpretations of the new approach to its understanding, the national economy competitiveness should be described as “… something more than the competitiveness of the enterprises, since their successful or unsuccessful strategy depends not only on their efforts, but also on the structural characteristics of the national economy” [9, p. 242]. In this study, the term “structural competitiveness of the country” was first introduced. In general, this term refers to a set of factors characterizing the development and effectiveness of its structures, as well as the external factors for enterprises. Since that time, the country’s competitiveness began to be considered as an indicator integrating three basic components: price, technological and structural one.

Further development of the competitiveness category of the national economy was achieved in the early 90s of the 20th century as an important part of the OECD Program, widely known as the “Technology and the economy: the key relationships” [9, p. 157]. According to this program, the technologies used, as well as the existing innovation systems and common institutional and social environment, along with the strategy of an enterprises and the effective use of their human capital are considered to be the key elements of the national competitiveness.

Vdovin S.V. in his scientific work emphasized that the essence of the competitiveness of any subject (enterprise, industry or country) consists of its ability to create and realize the advantages by which it is possible to compete in a certain market, in a certain period of time, while the essence of the competitiveness of an object is the aggregate of its advantages over the other objects [8].

A review of the recent scientific literature showed that most studies consider the essence of the national economy competitiveness can be defined in several ways, which are as follows:

– the achieved positions of the state or commodity producer in the domestic and foreign markets, respectively, caused by economic, social and political factors. In the conditions of an open economy, this concept includes the ability of a country or an enterprise to resist international competition in its own market, as well as in the third-country markets [4];

– the ability of the economy in a free competition to produce goods and services that meet the requirements of the world market, the implementation of which not only increases the welfare of the country and its individual citizens as a whole, but also increases the socio-economic optimality that is reflected in a high social effect [7];

– a characteristic that determines the country’s stable position in the domestic market, due to various economic, socio-demographic, political, environmental factors, as well as the ability to overcome barriers to entering the external market and the ability to compete [3];

– the country’s ability to create legal, infrastructural, scientific, financial and,
in general, the whole range of institutional conditions that allow the economy to develop rapidly by using innovative technologies at all possible levels, and on this foundation to create conditions for increasing the well-being of citizens and improving social and economic performance that is reflected in a high social effect. All this indicates that the country’s competitiveness is its ability to provide sustainable economic growth and a high social orientation of the national economy [10].

The modern formulation of the definition, provided by an International Forum for Management Development, defines competitiveness as a sphere of economic knowledge that analyzes facts and policies, shapes the nation’s ability to create and maintain an environment that can ensure the creation of growing value in its enterprises and the prosperity of its people.

Consequently, representatives of an International Forum for Management Development have identified four factors of competitiveness, which can be used to determine the general state of the national competitive environment. These are as follows:

1. The economic performance. This factor measures the macroeconomic development of the national economy, foreign trade, international investment, employment and the level of prices in the country.

2. The government efficiency. The given factor is based on assessing the state of public finance, tax policy, institutional framework, legislation and education, determines how the government policy contributes to the growth of the national economy competitiveness.

3. The business efficiency. This factor reflects the level achieved by the enterprise in the field of innovation, profitability and reliability, which is estimated from the data of labor productivity, the labor market, and the state of finance, management practices and the impact of globalization.

4. The infrastructure. The given factor determines to what extent the needs of the business entities are met by the available resources, technology and science. For this purpose, it is advisable to consider the level of the development of the basic, technological and scientific infrastructure, the health status of the population and the state of the environment, as well as the system of national values [5].

Today, in the most general aspect, the country’s national competitiveness is defined as the aggregate of economic, scientific, technical, production, organizational, managerial, marketing and other opportunities realized in goods and services that successfully compete with foreign goods and services both on the domestic and foreign markets.

On the basis of the above-mentioned definitions of the essence of the national economy competitiveness, a number of essential characteristics of this concept have been singled out.

First of all, the national economy competitiveness is an objective process that reflects the continuity and dynamism of the national economic system development.
Consequently, competitiveness requires constant monitoring and maintenance of a certain level of development and implementation of corrective actions within the framework of the state policy.

Secondly, the national economy competitiveness directly depends on the level of competitiveness of the domestic enterprises and the products they produce, which are distributed both on the international and national markets. In addition, the efficiency of production, distribution and sale of goods includes both the ability of economic institutions to create favorable conditions for competitiveness, and the ability of organizations and industries to use such conditions to create and retain certain competitive advantages.

Thirdly, the international competitiveness of the economy as an integral part of the national economic policy is viewed as a central problem and an essential tool for raising living standards and improving public welfare. Ultimately, the goal of the population of the international competitiveness for residents of the country is a high level of social development and sustained economic growth in the long run, support for the socio-political and legal stability of society.

And, finally, modern concepts and strategies for increasing the competitiveness of the national economy are formed on the basis of the country’s innovative capacity, the development of its scientific and technological potential, and the productivity of the resource use. At the same time, the country is able to increase (or maintain) its market share by product categories that determine its international specialization, as well as to form new niches in the world market of high-tech products.

The competitiveness of the economy is influenced by four groups of factors:
- economic performance;
- government efficiency;
- business efficiency;
- and infrastructure (See Figure 1).

Nowadays many countries manage their own economies according to the “fundamental forces”, which are the four measures that determine the level of the national economy competitiveness.

Mostly they are the result of traditions, history or the current situation in the system of values of a society and originate in the “mode of action” of the country. The proposed theory describes the relationship between the four “forces” of the competitiveness in terms of the systems approach.

This concept pursues the goal of determining the profile of competitiveness that characterizes the national economy. Therefore, in the case of ensuring a favorable combination of all the components, the stability of enterprises and the state as a whole can be achieved. Sustainability is an important criterion of the competitiveness. In addition, the state of the competitiveness is directly affected by the value-added creation, under the influence of which it is possible to achieve a higher level of welfare of society.
In this regard, the “cube” of competitiveness, proposed by the experts of the International Institute for Management Development, consists of additional parameters of the external environment, regarding to the next ones: attractiveness and aggressiveness of the environment; globality and proximity; assets and processes; risk taking and social responsibility.

The interdependence of the processes of competitiveness and economic growth of the country, as well as the complexity and depth of the necessary economic transformations in accordance with the trend of globalization, determine the need for organizational and economic components, factors and conditions for ensuring the national economy competitiveness. Taking into account the generalization of these approaches and the concepts of managing the competitiveness of the national economy, a conceptual model of the organizational and economic mechanism for
managing the competitiveness of the national economy is proposed (See Figure 2).

The theoretical and practical significance of the research is that the proposed conceptual model of the organizational and economic mechanism of management of the national economy competitiveness makes it possible to raise the level of the competitiveness and succeed in market competition.

A promising direction for further research will be related to the determination of specific features of the implementation of the components of the proposed mechanism in the process of ensuring the national economy competitiveness.
Reference:


Formulation of the problem. The rapid pace of economic processes in the business world forces the necessity to optimize the business processes of socio-economic systems. In fact, applying the change management methods and the capabilities of modern information technology can accomplish major improvements.

Analysis of recent research. The late twentieth century studies showed that one of the most effective sources of increasing labor productivity is the enterprise restructuring. This was confirmed in the publication in 1993 of a monograph by M. Hammer and J. Champi, where the essence of BPR (Business process Reengineering) was disclosed [17].

This business optimization approach was enhanced by our Ukrainian researchers: Vinogradova OV [1], Milner BZ [3], Novikov MV [4], Filinov EN, Boychenko AV [14] and others.

Unsolved Problems. Scientists have described and developed many implementation problems and using business modeling in socio-economic systems, but the problem of creating a comprehensive mechanism for organizational design has not been thoroughly investigated.

Purpose of the study. The main aim of the study is to enhance the idea of increasing the competitiveness of the business entity by developing a comprehensive mechanism for organizational design.

Main results of the study. Corporate reorganization is certainly in vogue. In the survey conducted by The Boston Consulting Group, almost 80% of respondent companies reported under-going a recent reorganization of large-scale enterprise-
Practical activity on management and optimization of business processes is implemented with the help of technology of business-reengineering, which performs in the following stages [6, 5, 10, 11, 13, 15]: creation (design) of future business processes, diagnostics of business management processes, change (adaptation) of business processes, optimization of business processes, documentation of business processes. No we will consider the following stages in more detail.

1. Development (design) of business processes. For this intent, we will need to apply a special language for describing business processes. In fact, it will provide opportunities to describe the current state of business processes, as well as develop future models. First of all, the participants in the process will fulfill their functional responsibilities within the frames of this model. Second of all, each employee clearly knows all his/her actions in all the processes in which he/she is involved [6]. In fact, when describing business processes, as a rule, the method of SPA (Structured Process Analysis) [8] is applied. The SPA method does not discard the possibility of using various schemes of algorithms for describing the process, instead, it replaces them at the highest level of detail when developing a complex process map; providing to scale processes to the necessary level for business process reengineering, [1]. As the description has a multi-level structure (first the process is described at the macro-level, i.e., at the enterprise level, and then proceeds to the description of the lower level with a higher degree of detail), this ensures systemic and structural interconnection. The actions of all units and employees performing their duties in accordance with this model should be streamlined, coordinated and channeled into the mainstream to achieve a system-wide result [6]. Systemic implementation of the creation of business processes requires the coordinated efforts of all subjects of government, which is confirmed by the words of the American researcher M. Mesarovic [2]: «The system needs to be designed as a whole, rather than starting with the process and then only adding the necessary control. Examples can be provided such that the design of the process technology considers the presence of control subsystems, however, the system-wide approach without separation is still not implemented.»

In order to manage processes as a system, it is pertinent to form a process structure, that is, to build them in a certain and interrelated order. Since each process is designed to produce a result that is used to produce the next result at further stages and higher levels, this structure should ultimately achieve the overall company’s objectives. Then the process improvement becomes the most effective way to achieve the goals [6].

At the same time, few people today understand the relevance and necessity of maintaining the integrity of the built-up facility and activities. The second factor which hinders the achievement of high performance of the analyst of business management processes is the multi-purpose direction and activities of the head. As a result, there is an impression of lack of «professional» integrity, both in the
First of all, there is a connection with the standards that are used to describe the business management processes in order to link the schemes of the current operating activity with the activities of managers, analysts, etc. Second of all, the organization is described as a set of structural units and positions but not as a single «organism», on which the possibility of applying the process approach is based. As a result, the incorrect formulation of the described problem and the inefficient use of the models themselves occurs. In the best scenario, the modeling of manager’s activities is limited to one function with many inputs and outputs, which does not solve in overcoming the challenge of achieving integrity [4].

The development (design) of business processes involves the following actions: the development of the image of the future organization and the development of the business model of the new organization [16].

- The development prospective organization image should be implemented using an integrated approach based on a combination of strategy development processes and business requirements. These activities of the first stage include the specification of the main objectives of the organization, based on its strategy, customer needs, the general level of business in the industry and the current state of the organization. The main intent of this stage is to develop a view of the new organization and formulate it in terms of the specification of the organization’s goals [18].

- Recently, a four-stage method for developing a model of redesigned processes or for developing a «new» organization has been widely used. These are the following four stages [18]:
  1. Developing an external model of the future organization.
  2. Developing an internal model of the future organization.
  3. Designing an information system to support future business processes.
  4. Testing the redesigned business process on a small scale prior to implementation.

Modeling and simulating of the processes carried out with the obligatory use of any modeling language. The modeling language should express how the internal or external process is turned to reality with the help of human or technical resources, and what functions these resources will require. It is especially pertinent to portray how the process can be supported by the information system [18]. In principle, the information technology is now a powerful «locomotive» of change, which sets in motion all other parts of the organization. As with the change of the business environment, the company not only faces new operational issues but also new strategic development tasks whose solution requires new information: new one reflecting not only the state but also on the structure of the business system itself. Information systems reflect the recent technical achievements, as well as experience and knowledge in the management’s subject areas. The information system unites all the company’s departments providing automation of many functions for the collection and processing of information [4]. In fact, the primary conditions that must be presented to the new information system are flexibility and
ease of modification, which permit the tracking changes in business [1]. In addition, according to [7,8,10,11, 14,19,16] and with the help of information technologies it is possible to achieve various categories of changes that welcome improvement not only of the temporal characteristics of processes but also the reorganization of the sequence of steps in performing operations in business processes and separate precedents. Furthermore, the information systems will provide unification and to speed up the process of diagnosing the business processes.

2. Diagnostics of business management processes. The process model (available or anticipated), thanks to the clarity of the description enables the effective analysis of how it optimally leads to the goal. Due to the analyzed factors, the logistics of the process, its duration and cost (including their distribution by stages), and others, on which the effectiveness of performance can depend and act on. The analysis data allows to change the process, constantly enhancing its quality [6].

Quantitative indicators of the processes demonstrate the effectiveness of their management in a certain stage of the organization’s development. In fact, resources are managed by the processes and they also transform resources into finished products, which you can quantify the effectiveness of process control. The quantitative indicators of the process management are: the complexity of processes, cause and effect relationships between processes, process controllability, process costs, and the degree of process controllability [18].

The analysis of business processes is implemented with the purpose of development of offers on elimination of problematic zones in processes of the organization. In order to achieve this, a «snapshot» of the technology of process execution is made-a model of business processes «as is» is built, which allows the customer to get a comprehensive view of what is happening in the company. During the analysis of the model, the current problems of business processes are revealed: double subordination, duplication of functions, absence of information link between processes, and processes’ inconsistency. Suggestions are made for the future direction of changes (adaptation) of business processes based on the results of the analysis.

3. Change (adaptation) of business processes. Any changes of business conditions such as the emergence of a new line of business, the expansion of the range, changes in the supply chain technology require an immediate transformation of the affected business processes. The existing model is then adjusted, the changes are communicated to the executors, and they begin to perform functions with respect to the new conditions. Constant adaptation of business processes to changing conditions is business management’s effective mechanism [6].

Implementation of changes is the most challenging and critical phase of reengineering. For instance, in order to minimize the risks associated primarily with the resistance of the internal environment a very thorough detailed and consistent work with the personnel is implemented. In addition, all the employees of all levels are involved in the process of changes and are motivated to achieve the set result
of an optimally working and flexible company. For this purpose, it is necessary to screen the employees for compliance with new job descriptions; determine the need and quality of qualified personnel and to adapt employees to new job responsibilities and to check the correctness of employees’ compliance with all the new working rules.

The result of this stage is not only the direct implementation of all changes, but also the rigorous training of the company employees in a new style of work; more dynamic, result-oriented, and therefore competent and competitive.

The company then transitions to a qualitatively new level working organization. The main result these introduced changes is that the company itself is pawns by the mechanism of reengineering; continuous changes and adaptability to environmental conditions. The organization gains an additional competitive advantage in the market and the opportunity to optimize the business processes with the aim of developing a new business model.

4. Optimization of business processes. In order to determine the reserves to improve the efficiency of the organization and optimize business processes, monitoring and analysis of business processes must be implemented. First of all, this allows the elimination of the following factors: duplication of functions, «bottlenecks», excessive cost and the presence of surplus operations, as well as their poor quality of implementation, inconsistency of actions of participants, etc. Optimization consists of two types: continuous improvement of processes (evolutionary path) and periodic radical change (revolutionary path). The first method is used in the framework of current activities when the enterprise does not require drastic changes. The second method is used when changes are necessary in connection with a significant change in the order of activities. For example, implementation of the complex automation. In all such cases, the task is to «start everything from scratch». This approach prevents the application of new technologies to old and previous processes [6].

Furthermore, there is a necessity to fix the existing business processes in order to assess their effectiveness. If this is not currently done, the future significant costs are possible due to inefficient work of employees, breach of contractual obligations, the need for restructuring, etc. This entails both serious financial costs and the decline of the company’s image [9].

In order to see the activities’ bottlenecks and to effectively manage the company, it is essential to link the implementation of certain processes and works with its target strategic indicators. In addition, to effectively implement this, we must compare the strategic goals and objectives of the company with the inputs and outputs of the processes. The dependence of the results of the company’s activities on the results of the process is revealed. The indicators for which management will be selected are selected will strongly depend on these indicators. As a result, the organization’s activities at all levels are aimed at achieving these results and the company’s owners and managers get an objective mechanism for assessing the results of their activities
and the organization’s activities.

Based on further results of the analysis of business processes, the model «as is» is amended that forms a model of processes «as it should be» as follows:

• Proposal for the optimization of the business processes are developed in detail (functions are redistributed among the participants in the process, duplication of functions is eliminated, information gaps between the blocks are eliminated, the system of document circulation between the structural units participating in each process is optimized).

• The cooperation with the employees of the company-customer, schemes of information flows on optimized business processes are developed, a list of information entering and proceeding from the structural units is drawn up: the type of the outgoing document, the addressee, the officials responsible for execution and approving the document, the terms of submission.

• The regulating scheme of documents movement, development (optimization) of the regulation on document circulation (regulations) for the main blocks of each business process, indicating the participants (including responsible), and the timing and forms of information transmitted within each business process.

• Suggested recommendations for optimizing the organizational structure of the customer company considering an optimized management system (optimized business processes).

The optimization results are business process models «as it should be», considering their optimization and a package of updated (newly developed) internal regulatory documentations (regulations on departments, job descriptions, process execution rules).

5. Documenting Business Processing. All the management’s actions and changes of business processes must be documented. Business process models are designed in the form of descriptions, representing diagrams on paper and electronic media. This resembles a complex repository of business processes of the enterprise. Any changes are necessarily reflected in the models so the company can perpetually maintain the current version of the entire set of business processes. Similarly, you can plan future processes and save them as versions that are analyzed, checked and debugged, and only then become workers [6].

Organizational change planning involves analytical and forecasting activities, the development of possible measures and the selection of an appropriate strategy. At the same time, various levels of intervention in the old structure (individual, group, division, organization as a whole), as well as numerous organizational parameters, in particular the following [17] should be considered:

• Structure and processes (recently more and more often in the direction of «smoothing» the hierarchy and strict orientation in the process of creating benefits in «horizontal organizations»).

• Production and information technology (for instance, minimized production of resources).
• Organizational culture as a model of the fundamental values and principles shared by the members of the organization (radical change is extremely difficult).

• Human resources. For instance, by selection, development of personnel, incentive systems and motivational (with "transformation" of behavior and attitudes) of personnel management.

It is of paramount importance to distinguish the differences between the partial and radical changes. The first ones are based on the existing value systems, structures and processes. In the course of partial transformations, the practical suitability of the project dominates and not in the unconditional achievement of an ideal (conceptual) state. Radical changes are urgently needed due to the rapid development of the surrounding market environment after a long phase of stability and a long-term disregard for the necessary adaptation steps. Such a «revolutionary» process of change to achieve advantages in the relation to competitors may be desirable strategically and to encounter the strong resistance from the staff [17].

Consequently, reengineering should be referred to as an applied method to the special periods of the organization’s development, especially when it becomes necessary to make a qualitative change in the organization in a radical way and with a sudden jump in a new state that was not present until this current moment of the development.

The necessity to adjust the management system are due to [12]:

1) The feedback, i.e. the impact of the results of the operation of the control object (in particular, the discrepancy between the normative and actual parameters of the object).

2) The necessity to review the goals, methods and processes implemented by the management system.

3) The software development and the technological tools and the progressive management methods.

Conclusions and prospects for further development. Therefore, we have seen that the reengineering approach allows to transfer management of the organization from the functional principle to the principles of the process organization. This in fact is inherent in the process control structure and process teams focused on the tasks of a particular business process. Furthermore, this approach is focused on the growth of investment activity and creates prerequisites for the growth of innovative activity. Moreover, the process orientation determines the peculiarity of reengineering: creation of new technologies, technical means of production and as a result encourages the development of innovations and technological progress.

References:


It is a well-known fact that each region of Ukraine has a diverse resource potential and the problem of regional competitive advantage formation on this basis is widespread. The optimal resource provision not only influences the sustainable development of the region and effectiveness of the economic development of certain socio-production systems but also has a certain impact on the level of human development, health, living standards, the overall outlook of environmental and socio-economic development and institutional components of its support. It should be recognized that in contrast to the contemporary problems of the regions it is advisable to create a proper management system, focused on the most effective use of regional resources, especially in the planning period, which could provide significant growth of budget revenues of a region, prevent possible risks and expand access to investment resources. This approach updates the objectives of the study regarding the quantity and quality of available resources, their rational use, as well as capacity-building for effective regional development. A comprehensive solution of the regional problems of optimal resource provision requires the determination of top priorities in the next steps of the decentralized policy of the State, which confirms the topicality of the research.

Basic findings on regional development, including those in the context of limited resource provision are set out in works by A. Amosh, M. Butko, V. Geyts, Y. Gladko B. Danylyshyn, I. Degtyareva, V. Heyets, I. Novak, L. Cherniuk, N. Koretsky, M. Orlaty, T. Pepa, S. Romaniuk, Z. Varnaliy, Y. Zhalilo, Z. Zhyvko et all. However, it is necessary to improve the study of this problem in the conditions of strengthening
of decentralization processes and of limited resources, create long-term competitive advantages and reliable information component regarding the ownership and disposition of available resources. The content of effective mechanisms of formation of the best possible resource provision at the regional level in modern conditions is of immediate interest.

The assessment of the impact and interdependence of resource support from internal and external socio-ecological-economic factors and market conditions in the development of the region, the lack of specialized common regional databases with a broad user access, fragmentation and inconsistency in monitoring processes of the effectiveness of the disposition of resource potential preventing from obtaining reliable information about the availability of resources and timely assessments of their prospects are the issues that require further investigation. A number of issues for resolving the problems of monitoring of resource supplies for socio-economic development of the regions, proportional and optimal redistribution of financial resources through the state budget, effective use of means of the Fund of regional development have not been studied yet.

The aim of the research is a scientific justification and the identification of priority actions to build the foundation of optimal resource provision of regional development in a decentralized policy.

It is well known that one of the main tasks of regional policy is the rational use of all available on-site resources that is the source shaping of the region’s ability to develop and is aimed at meeting the needs of the population in relationship to socio-ecological-economic and management factors. However, the region’s competitiveness is largely dependent on resource provision, necessitating a strict control and timely diagnosis of problems related to irrational use of resources, their depletion or threats in the external environment influencing their operation.

Miroshnoikova, Pavlova and Zhyvko [1; 2] consider that since the resource support of the socio-economic development of the region includes all existing on-site resources such as material (natural, infrastructural, human, financial-economic, agricultural, industrial, social) and intangible ones (intellectual, informational, organizational management, education and research), it is evident that the development of the mechanisms contributing to the further preservation and enhancement of the regional resource base with further management effects about the maximum result of their use is urgent.

The success of transformational economy of the modern period is directly dependent on the mobilization of existing and potential resources of a society, the regional level included. It is legitimate to explore the resource potential of a region in the overall system of socio-economic development of a region. The key unit in the system of formation of effective resource support of a region is the adoption of management decisions and selection of an optimal course of action from two or more alternatives. The selection process is based on the solution of specific problems of the formation, use and reproduction of the resource potential of a
region to achieve goals in sustainable operation and development of the region. It is also expedient to take into account the basic conditions referred to the state powers, granted subventions, taxes and expenses that will allow to generate and to properly assess the resource potential of a region [3]. In its turn, the organizational conditions coordinate and efficiently organize the use of resource potential of a region.

Resources control system is based on the principles of comprehensiveness, consistency, continuity. These principles help formulate more meaningful and comparative methods for the assessment of resource provision, and optimize the system of formation of effective resource support of a region.

The interconnection of socio-economic process with the resource providing a region helps expand possibilities of the management based on the system approach with respect to integrity. Different types of resources in the region can be the elements of the socio-economic process, which together can enter into the resource potential of a region, or there may be certain factors for the development of the resource potential, as for example, intangible resources are the most dynamic at present.

A set of indicators reflecting the effectiveness of the management of a regional resource potential should be based on the criteria that can fully use the system of economic levers and incentives. To improve the validity of indicators on the basis of the criteria of the results evaluation (achieved value of the indicator) grounded on the use of indicators of a resource potential of a region (standard capacity). It is advisable to incorporate the following in the complex of indicators reflecting management efficiency of the resource potential in a region: the utilization of the resource potential of a region; the indicator of assessment of the level of under-utilization of the potential possibilities of the economic system; the utilization factor of the active part of the regional resource potential, which takes into account the cost of technology and innovation; the ratio of involvement of resource potential of a region; the predictive indicator of the economic system efficiency taking into account the coefficient of the cost recovery on use of natural resources [4].

A system of methods that will stimulate economic development must be based on the use of a new principle: the combination of assessing of the achievement use level of the total resource potential and the responsibilities of execution of major socio-economic indicators, reinforcing a balanced development of the region in the future. Such a construction of a system of economic incentives, when incentives are subordinated to the main benchmarks, and the assessment of the socio-economic functioning of the region is determined depending on the level of economic opportunities, promotes an optimal balance of approaches to the economic regulation and effective management.

There is a general system of the resource management of the socio-economic development of a region, whose aim is the organization of an effective mechanism of available resources application in the region with the vector of future development and ensuring budget revenues of the region. The appropriate economic assessment,
the administrative-territorial structure, conditions of placing of productive forces and the specialization of the region must be the basic element of the mechanism. While forming the effective system of regional governance, the resources, that are in close current regional use and possession, are involved in the regional exchange and satisfy socio-economic needs as well as resources that can be included in the regional management system (possible and potential) must be taken into account.

The stage of determining the needs of the resource, examination of the potential, necessity and possibility of its development; the preparation and use of the resource; the step of evaluating the economic efficiency of resource use are of primary importance [5]. Regarding a strategic regional development, when the most important management decisions are developed and made, the management mechanism of advanced resource provision with the reference to the priorities of socio-economic development of a particular region requires a substantive and constructive study and practice.

The value of prospective resources should be determined not only taking into account the development needs of production, but also considering environmental constraints. We are talking primarily about the impossibility of the use of resources, if this causes irreversible consequences to the environment; the value of the land, forest and water resources will be considerably reduced. It is obvious that along with the environmental constraints it is necessary to consider the economic constraints leading to the inappropriate development of the resources, the costs of which are currently higher than the costs of similar resources and the supply of which from other regions can be established in the shortest possible time and at an affordable price [6].

Next step in preparation for specific investment decisions is the calculation of the planned costs when the expected budgetary and commercial effectiveness for each phase of the development of specific promising resource is established.

The economic rationale for the use in business of prospective resources possessed by a region is based on the assessment of current and future resource needs of a region’s economic complex and the need to satisfy them at the expense of own resources; reassessment of existing resources with the respect to the efficiency of their use through the application of traditional technologies; the assessment of prospects of attracting resources to the turnover position of necessity to attract additional financial and technical resources.

In the management of resource provision of a region there is the pressing question of awareness, that is, set of interrelated elements that include the official information electronic databases and other information resources, the formation of which involves respective status authorities and contains information about socio-ecological-economic system of the region, as well as helps organize, process, and supplement data in accordance with the policy needs of a region and its control system. The materials underlying the information should be available to all interested parties, which is necessary to provide the information predominantly in
an electronic form to ensure easy and effective use by analysts.

In this regard, the system of resource monitoring to ensure ecological and socio-economic development of the region is introduced, which would represent a system of data collection on regional projects defined by using certain key indicators for operational diagnosis and assessment of rational use of the resources of the area taking into account external factors and internal characteristics of a region, can become the compass that provides and creates new competitive advantages of the region [4, 7-8].

The necessary condition for its good functioning is a comprehensive study of the current region resources, taking account all factors influencing their intended use, linkages between monitoring actors. The collection and processing of information that should be brought by both the state and local governments, is of stable character, a number of facilities for regional management requires constant monitoring because of their specificity, or tendency to change, that is why it is necessary to constantly update the data.

It should also be noted that a region, as the system, has a tendency to development and transformation, which must occur without significant fluctuations, be fit for purpose and take into account the interests of a modern society. Resource provision of a region is the basis of its development, so getting the information about resources is the result of the work of the regional monitoring and is of particular value to regional authorities.

The main purpose of the monitoring system of the resource base involves the collection of data that adequately characterize the problem situation connected with the object and objectives; an analysis of the situation, through the development and calculation of indicators measuring the effectiveness and resource intensity of the process of solving specific problems or tasks; development of project management solutions aimed at ensuring the competitiveness of a region and its socio-economic development based on the assessment of the situation; reduction of the time of managerial decision-making.

The problem of dependence of local budgets on transfers from the state budget while reducing social spending, without adequate compensation for stable sources of income and shifting to the region, those spending powers to the regional level it is often impossible to cope is another aspect of the study of the interaction of optimal resource provision and decentralized policies (Analytical materials of the Ministry of Regional Development). Issues indicate that the carried out measures are not enough to increase the level of autonomy of local budgets, as well as to preserve, renew and use efficiently the resource potential of certain administrative-territorial units.

**Conclusions.** The basic principles of modern regional development are influenced by the decentralized policy of the State; therefore, scientific approaches to the formation of the optimal resource support have to be developed on the basis of the characteristics of these processes. Priority areas for optimal support of
regional development in conditions of transformation economy, first of all include the rational use of all existing on-site resources integrated to form the region’s ability to develop and are aimed to meet the needs of the population in relation to socio-ecological-economic and managerial factors; involvement in the management system of the most dynamic ones in the present, the intangible resource of the state and regions; improving the reliability of the estimates through the application of criterion-evaluation of the results; the organization of effective mechanism of use of available and potential resources in a region with the perspective vector of ensuring budget revenues of a region; the value of prospective resources should be determined not only by taking into account the development needs of production, but also taking into account environmental constraints. In addition, special attention should be given to the formation of official information electronic databases and other information resources containing information about the socio-ecological-economic system of a region and organize, process, and supplement data in accordance with the policy needs of a region and its management, as well as the introduction of a monitoring system of the resource to ensure ecological and socio-economic development of a region for the rapid diagnosis and assessment of rational use of the resources of the area taking into account external factors and internal characteristics of the region.

In the future, it is advisable to explore issues aimed at improving the system of institutional measures of optimal resource provision as well as the potential formation of inter-regional integration with the aim of providing a perspective of the motivational mechanism of regional development.

References:


INFLUENCE OF THE MINIMUM SALARY LEVEL INCREASE ON THE BUSINESS ENTITIES ACTIVITY

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On the modern level of productive forces’ development the government of Ukraine in its social-economic programs introduces the policy of the social standards’ increase. It takes into account the rate of minimum wages for the employees of different business patterns, and it does not take into account increase of tax burden on the business entities. It is necessary to state that in terms of modern market relations in the country’s economy to the negative consequences of wages increase one should refer: low level of real income of the population, low level of pension provision, inflation risks, high level of tax burden, strengthening of fiscal control, raise of corruption [1].

All mentioned above conditions the timeliness of the research topic and its main aim, which is in the implementation of the complex economical justification of influence of labour remuneration level increase on the economic activity of the business entities. The subject of the research in this article is the development of theoretical and methodological issues as to the formation of the social standards in the business organizations’ activity. Under the term “business entities” we mean entities of economic relations, which perform business activities [2].

The level of employees’ labour remuneration plays an important role in the effective social welfare provision of the enterprise. J. Chesloch and T. Callie were researching the changes of the labour remuneration in the consulting companies and educational establishments [3]. They established the differences between the business-sectors and levels of state funding of these sectors. While studying of labour remuneration key features it is necessary to pay attention to the salary structure in various categories of employees. Thus, in the works of scientists M. Malul and A. Shoham [4] special features of salary accounting for the top-management depending on its real qualification are studied. Authors of this article consider it
to be the basic feature for the establishment of the level of labour remuneration according to qualification of the company’s top-management and its possibilities to adopt effective managerial decisions [1].

A valuable issue in the research of remuneration changes in business structures is the study of resource possibilities of business organizations, which can be directed to increase of employees’ labour remuneration. This problem was studied in the work of scientists V. Ng and D. Feldman [5], in which scientists studied the problematic issues of financial resources preservation and delays in the reaching high level of labour remuneration because of career. The issues of negotiations between the employer and employee concerning the changes in the remuneration, namely development of flexible approach to the interconnection between the chief and the subordinate in the sphere of the establishment of the optimum level of remuneration for both sides, were studied in the work of the scientist D. More [6].

![Fig.1. Dynamic pattern of the minimum labour remuneration growth in Ukraine during the period 2004-2015](image)

Among the research works, devoted to the role of labour remuneration and social welfare provision in the activity of business organizations, little attention is devoted to the establishment of dependence between the payroll budget growth and social contributions, which are compulsory to be paid by the entrepreneurs. That is why this issue is to be studied in this article. Scientific hypothesis implies the improvement of methodology of influence of labour remuneration growth on the activity of the business sector entities [1].

During the study of organization-economic issues the level of social standards in
the country should be distinguished. Dynamic patterns of the growth of the minimum salary in Ukraine during 2004-2015 should be analyzed. It was established that in the period 2004 -2015 in Ukraine there took place the dynamic pattern of the initial increase of the minimum labour remuneration in the equivalent Dollar amount, and in the period 2012-2015 inclusive the dynamic pattern was negative, as the decrease of the level of minimum labour remuneration from 134.29 USD till 57.42 USD (difference 76.87 USD) took place [1].

According to the data of Ministry of Social Policy of Ukraine minimum salary is officially received in Ukraine by 3.7 mln employees (2.6 mln employees in the private sector) [1].

It was established that the situation, which leads to the shadowing of relations between the employer and employee is observed. It is better for the business entities to show minimum salary in the income declaration then to set high salary to the employees and pay high taxes. As a result these processes lead to the decrease of income into the country’s budget. The steps of the country government’s policy aimed at the social standards’ raising in order to increase budget’s income are quite understandable. While the formation of the effective social policy, aimed at increase of the social standards level, it is necessary to work out main rules of effective social welfare provision which take into account necessities of the business entities. They characterize the effective direction of the minimum labour remuneration increase for all entities of this process. To these rules authors refer:

- equilibrium principle, which characterizes balanced increase of social standards, accounting economic situation in the country, price level, paying capacity of the population;

- pro rata principle, which establishes the dependence between the labour remuneration increase and level of the tax burden, which has to be optimum for performing effective business activity;

- principle of equality, which includes equal rights among all participants of the process before the law and their keeping to laws and regulations. The participants are: entrepreneurs, employees, taxation bodies;

- principle of non-refoulement, which contains the realization of the components of the sustainable development in the entrepreneurs’ activity. It means that business-processes of the business organizations have to be aimed at stable growth, social responsibility and increase of the business competitiveness level [1].

Authors claim that the developed rules of the effective social welfare provision in the activity of the business entities characterize development of theoretical issues and social welfare provision in context of sustainable development. Practical grounds of the consequences of the minimum salary increase for the entities of the business sector should be analyzed. There should be studied salary growth level and social contributions during the period of the fourth quarter of 2015-2017 in the activity of the enterprises TOV “BBB”, TOV “Avtogazproject”, TOV “LMG” (Table 1) [1].
### Comparative analysis of the payroll budget and social contributions in the activity of TOV “BBB”, TOV “Avtogazproject”, TOV “LMG” [1]

<table>
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<tr>
<td>War Tax, UAH (USD)</td>
<td>192 (8)</td>
<td>205 (8)</td>
<td>446 (17)</td>
</tr>
<tr>
<td>TOV “Avtogazproject”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll budget, UAH (USD)</td>
<td>35304 (1526)</td>
<td>38700 (1439)</td>
<td>78900 (2934)</td>
</tr>
<tr>
<td>United social tax, UAH (USD)</td>
<td>13239 (572)</td>
<td>8514 (317)</td>
<td>17358 (646)</td>
</tr>
<tr>
<td>Personal Income Tax, UAH (USD)</td>
<td>5296 (229)</td>
<td>6966 (259)</td>
<td>14202 (528)</td>
</tr>
<tr>
<td>War Tax, UAH (USD)</td>
<td>530 (23)</td>
<td>581 (22)</td>
<td>1184 (44)</td>
</tr>
<tr>
<td>TOV “LMG”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll budget, UAH (USD)</td>
<td>42972 (1858)</td>
<td>46350 (1724)</td>
<td>97500 (3626)</td>
</tr>
<tr>
<td>United social tax, UAH (USD)</td>
<td>15797 (683)</td>
<td>10197 (379)</td>
<td>21450 (798)</td>
</tr>
<tr>
<td>Personal Income Tax, UAH (USD)</td>
<td>6446 (279)</td>
<td>8343 (310)</td>
<td>17550 (653)</td>
</tr>
<tr>
<td>War Tax, UAH (USD)</td>
<td>645 (28)</td>
<td>695 (26)</td>
<td>1463 (54)</td>
</tr>
</tbody>
</table>

Taking into account National Bank of Ukraine currency exchange rate for the date of estimation (USD/UAH 1:23.13 in 2015; 1:26.89 in 2016.) the great leap of expenditures for the labour remuneration in the predicted period was established. In TOV “BBB” it amounted 215%, in TOV “Avtogazproject” it amounted 205%, and in TOV “LMG” – 210%. This growth of expenditures is certainly a negative
factor, and it influences the cost of all business processes and additional cost of the performed services for all participants of the business sector [1].

Regressive analysis, which characterize formation of the regressive function of four variables and formation of the mathematical equation \( y \) of dependence of the payroll budget (accounting the minimum salary growth) and social contributions, should be conducted [1].

\[
y = \sum_{i=1}^{n} f(X_1, O_2, X_3, X_4) \rightarrow \min
\]

where \( f \) – the function of the description of the payroll budget and social contributions dependence; incoming data: \( X_1 \) – payroll budget; \( X_2 \) – united social tax; \( X_3 \) – personal income tax; \( X_4 \) – war tax; \( n \) – number of business entities.

Herewith, it is necessary to state some limits for this function, namely:

\[
X_1, X_2, X_3, X_4 \geq 0; n \in [0; \infty]; u_2, u_3, u_4 = const
\]

where \( u_2 \) – rate of the united social tax account; \( u_3 \) - rate of the personal income tax account; \( u_4 \) - rate of the war tax account.

While the research, authors distinguished following economic models \( y_1, y_2, y_3, y_4 \), which characterize dependence of the payroll budget (accounting the minimum salary growth) on the variable of united social tax payment \( f(X_1, X_2) \), personal income tax \( f(X_1, X_3) \), war tax \( f(X_1, X_4) \); total social contributions \( f(X_1, X_2, X_3, X_4) \). These models are presented in the fig.1. [1].

During investigation it was established that functions of the payroll budget dependence on the social contributions are presented by the simple linear regression, that is substantiated by the dependence of the payroll budget growth level (PB) (axis OX, independent variable, characterizing the salary value– \( x \), size \([0-3719] \) (USD)), on the growth of the amount of the social contributions (SC) (axis OY, size \([0-1673] \) (USD)) (UAH / USD currency exchange rate of the National Bank of Ukraine on the date of estimation: December, 2016 (1:26.89). Also, linear equations, presented in the fig. 1 were chosen according to the criteria that means the maximization of the approximation consistency, that increases authenticity of obtained data [1].
Authors proved that the established dependence between the growth of the payroll budget by means of minimum labour remuneration growth and increase of social contributions has negative influence on the economical activity of the business entities because it influences the increase of the tax burden rate in their activity. Moreover, creation of the favorable social-economic and regulatory climate for their further sustainable development is an important issue in the effective functioning of social-economic system. In the article of I. Sotnyk, T. Kurbatova, and G. Khlyap [8].

One more important issue, which influences the increase of social standards level, is the presence of sufficient amount of current capital for effective activity of business entities. While the formation of the dependence function of the payroll budget from the social contributions it is necessary to mention the limitations of this function, namely rates of the tax burden, which have to be constant. Implementation of this condition allows the possibility to increase the obtained results authenticity and to decrease inaccuracy of calculations. Authors declare that the sharp increase of the minimum salary leads to the increase of the level of social contributions for the business sector, and as a result – stuff reduction and introduction of the shadow schemes of salary payment. Thus, there is the necessity to optimize tax burden in the context of the minimum salary increase in the business entities activity. Authors state that in the business administration it is necessary to offer organization-economic measures, oriented on the decrease of the tax burden. These organization-economic measures are the following [1]:

Fig.1. Payroll budget dependency diagram, accounting variations in the minimum salary changes and payroll taxes [1].
- decrease of the tax rates of the social contributions for the business entities, which can lead to unshadowing of the business and payment of legal salaries without shadow schemes;
- introduction of the tax holidays for the entrepreneurs, whose business is younger than one year, that gives an opportunity to build up the volume of turnover capital for the effective further administration;
- decrease of the loan rate for the business sector till 10% per year, with following decrease till 3% in the context of sustainable development. This measure can influence the investments in the business sector;
- introduction of business patterns with collateralized property, which will create the capital stock of the business organization for the case of loan debt. This method will lead to the decrease of risks of nonpayment for the material assets and other payments by the business entities;
- implementation of the state programs of the investor attraction to the business sector. They are aimed at creation of the new working places in the region and increase of the salary for the employees.

Accomplishment of the these organization-economic measures will solve existing for the present day administration problem in the social sphere for the business entities. For the further scientific researches on this topic authors offer not to be limited only by examination of the monetary policy, but to study this problem in complex with analysis of investment and financial provision of business organizations’ activity, building-up of organization-economic provision of employees motivation rewards in the work of business entities [1].

References:

As a result of reforms in the 1860–1870s in Ukraine, the activities of the elected local self-governance institutions – zemstvos began. At that time Ukraine was not independent and its considerable territory was a part of the Russian Empire, that is why “The Regulations about Zemstvo Institutions”, which determined the composition, structure, the way of their formation and the range of power, were also followed in Ukraine [1]. Zemstvos in Ukraine began functioning from 1865 in 9 provinces: Volyn, Katerynoslav, Kyiv, Podillia, Poltava, Tavria, Kharkiv, Kherson, and Chernihiv. Local people elected deputies on the level of provinces and povits (districts), who made decisions, and zemstvos implemented them. There was no clear government program of zemstvos’ development, and it enabled them to determine the problems, which required immediate solution, independently. With this purpose zemstvos employed doctors, teachers, agronomists, statisticians, economists, and other specialists. After a long time of hard work, the first considerable results of economic activities were received, and the gained experience and devotion to work is a topical example for modern state functionaries.

At present, self-governance bodies in Ukraine gain more authority supporting economic independence. For successful implementation of the reform as to
raising the authority of the local power bodies, not only the historical grounding is necessary, but also taking into account the typical mistakes, made by the previous generations of the reformers. Analyzing the latest research of modern economists (Soskin, 2014) [2], who see the future of Ukraine in developing national economic interests, based on business, the development of small and medium businesses – the experience, gained by zemstvos, only enforces the topicality of the given research. The measures of economic character, developed, planned, and introduced by zemstvos on the territory of Ukraine are the subject of the investigation. The object is the economic activity of zemstvos in Ukraine.

**Brief Literature Review.** The works by foreign authors are interesting from the viewpoint of evaluating the economic potential of local self governance bodies. The first group of research by H. Fischer (1958) [3], S. Harcave (1956) [4], and I. Timberlake (1972) [5] reflects the main idea, that zemstvos introduced new liberal ideas and views, which were not limited by government limitations, thus having the potential for implementing the bravest economic plans in the economic sphere. The second group of foreign authors: B. Sumner (1966) [6], X. Seton-Watson (1967), [7], R. Robbins (1987) [8], and T. Pearson (1989) [9] mostly evaluated the home policy of the authorities during the reformation period and considered that the control over the development of zemstvos’ economic activities by the state was admissible during the transition period.

National scholars created three groups of work, devoted to zemstvos: the first one describes the general vectors in the sphere of social-economic activities and is represented by the papers of T. Sharavara [10], O. Obmetko [11], T. Lobas [12], and others; the second group is devoted to the regional development – the economic achievements of zemstvos in separate provinces: A. Maskina [13], O. Petrov [14], and others; the third group analyzes in more detail the kinds of economic activities: M. Maslov [15], O. Zavalniuk [16], and others.

The purpose is the analysis of the economic program of self-government bodies’ actions in the second half of the XIXth – the beginning of the XXth centuries in Ukraine and the kinds of activities, initiated by them in the economic sphere in the context of gaining historical experience.

**Results.** At the beginning of the XXth century, specialists officially distinguished the directions aimed at improving social standards and activities in financing various sectors of the national economy, that is, they separated social activities from economic. It caused the appearance of that time classification of zemstvos’ economic activities and their kinds, such as agronomy, insurance and crediting the population, road construction and repairs, and cooperation [17].

Taking into account the fact, that the land reform did not envisage close information connection between provincial and district zemstvos, because the authorities tried to minimize the contacts between them with the aim of avoiding the formation of the opposition, the plans of economic activities in each zemstvo were made independently, trying to satisfy the demands and needs of their local
communities. All this caused the different level of success in developing the directions of economic work, increased regional peculiarities of zemstvos’ development, often being an obstacle to solving complex problems.

According to the Law dated 12.16.1900, the government envisaged the financial support of the zemstvos’ economic activities, but in fact the Law was not effective. The sum of 500 thousand rubles was allocated to the Minister of Internal Affairs; however, as V. Kuzmin-Karavaiev mentioned, the credit was not used, though there were a lot of problems. Judging by the 35 year experience the workers of zemstvos understood the attitude of the state: “if you cannot increase spending on the needs of the population – do not increase it” [18, 429], because addressing for financial assistance from the state would lead to blaming zemstvos in incompetence.

Having analyzed the researches of the second half of the XIXth century, we can conclude that during the first decade of zemstvos’ functioning no serious plans of their own economic activities were made.

The support of agricultural development became the following important direction of zemstvos’ activities. As it was mentioned in the «Brief Outline of Zemstvos’ Economic Measures in 23 Provinces of Russia» [19], agricultural activities were represented by three kinds of work: the organization of experimental fields, distribution of the new variety seeds, and supply of farm machinery. Later on, zemstvos were engaged in food supply [20] and organized the work very well.

After receiving the first results of their activities, zemstvos began publishing the reviews (reports) of their achievements in the field of agriculture [21], then they started publishing the literature of scientific-methodical content. First of all, they demonstrated the correct scientific-methodical approach, having invited to cooperation the specialists and scientists [22], [23], who prepared valuable material for publishing, which was accessible and clear to ordinary people. Zemstvo functionary D. Shorygin stated, that the consultations of the inhabitants in different places as to the right choice of seeds, rational cultivation and sowing the fields, pest control became a well organized process [24]. Such interaction lasted for several decades.

Considering the regional peculiarities of zemstvos’ economic activities, we should like to notice, that they were caused not only by the needs of the population, but the level of developing the material base of separate provinces, certain persuasions, and the vision of the situation by zemstvo functionaries themselves.

For example, Lubny and Zolotonosha county zemstvos of Poltava province began to provide material and financial assistance even to agricultural partnerships, and later on, to invest money in the construction of permanent buildings for lectures, libraries, and reading halls. Thus, besides spreading special literature for educational purposes, the organization of lectures became the following correctly chosen method of their activities [10].

At the end of the XIXth – beginning of the XXth centuries, zemstvo functionaries
of Poltava province analyzed the results of their economic activities and noted, that the best tendencies of development were registered in tobacco growing, horse-breeding, and forestry [25]. The essential obstacles to the further development were the poverty of peasants and the lack of land owned by them.

Kharkiv provincial zemstvo was the first to allocate money for agronomic assistance to the rural population having formed its budget in such a way as to assist the peasants in buying seeds of good varieties, machinery, and seeding machines. Such approach was caused by the Ministry’s draft of the food reform of 1909. It was the fight against crop failures that urged the government to cooperate with zemstvos more closely. The result of such cooperation was the formation of reserve funds, and it was the right following step in the work of zemstvos to support the population [26].

Katerynoslav provincial zemstvo chose the different direction and became the active lender of peasants and initiator of arranging elevators. The zemstvo actively promoted its methods of management and urged others to follow their experience. According to the economic estimates of 1916, the zemstvo was the richest in the whole Russian Empire, because its economic expenditures amounted to 5,172,345 roubles [27].

The economic specialization of Chernihiv provincial zemstvo concerned horticulture, apiculture, and sericulture. Most counties of Chernihiv province had such agricultural specializations. At the same time, the zemstvo was actively engaged in swamp drainage, which was connected with the natural conditions of the region.

It should be stressed, that besides solving the problems of the population and the chosen directions of economic development peculiar for various regions, zemstvos also realized the decisions of the government. Besides the regulations, which obliged zemstvos to solve food problems, the government spread the Provision about economic responsibility of zemstvos for motor roads. According to the Decisions of the State Council of April 5, 1883, the Provision contained 38 items. Though being in charge of the roads, according to the decision of the government, zemstvos did not cope with the task successfully.

The bodies of the local self governance in Kyiv province had the status, similar to other zemstvos, but they also had the uniting function, organizing various zemstvo congresses. For example, on January 27, 1914 the congress of the representatives of the southern-western zemstvos took place in Kyiv. The congress was organized by the partnership engaged in buying farm machinery and implements on the initiative of Kyiv provincial zemstvo [10].

The support of cooperation became a separate direction of economic activities of the self governance bodies. The most active organizers of cooperatives in the 1864-1917 were: Poltava, Katerynoslav, Kyiv, Chernihiv, Kherson, Podillia, and Volyn zemstvos. Despite the peculiarities of regional development of the territories, economic specialization, the representatives of the zemstvo elite, highly
skilled specialists always gave recommendations concerning the organization of cooperatives. Among the most well known such works should be mentioned: by V. Khyzhniakov «Cooperation and Zemstvo» [29], I. Podolskyi «The tasks of Zemstvo and Cooperative Institutions…» [30], P. Sokolovskyi «The Activities of Zemstvos in Organizing Credit Loan-Saving Partnerships» [31], and others. First of all, zemstvos began organizing courses in credit cooperatives and education of the population. The most active were Chernihiv zemstvo, later on, Volyn, Podillya, and Kyiv provincial zemstvos. Agricultural cooperatives were first created in Poltava and Kherson zemstvos, then in Kyiv zemstvo. After giving consultations and providing instructions, the following step was the creation of financial funds giving loans to cooperatives on various activities, and the formation of loan partnerships. These economic steps considerably improved the material well-being of the population and justified themselves.

The organization of zemstvo statistics was also considered a successful sphere of economic activities. The development of statistics at that time was called to life by considerable social and economic changes in the country. The creation of zemstvos caused the problem of the population taxation, and studying its material opportunities had to be started. It was also necessary to analyze economic and quantitative indices of zemstvos’ activities. The development of statistics resulted in the creation of scientific theoretical and practical fundamental research. This sphere of activities was outside the circle of duties, stated in the «Regulations about Zemstvo Institutions». Zemstvo statisticians worked out clear and exact system of collecting information. The work by A. Kaufman [32] can be mentioned as one of the examples of scientific-methodical developments and instructions in conducting statistical analysis.

In the late 1880s – early 1890s, certain directions of statistical work were established. As a result, sanitary, veterinary, and agricultural statistics, etc. appeared. It should be noted that the development of statistics began in the areas requiring operational interference and the quickest assistance.

The culmination of zemstvo activities became full regulation of zemstvo land cadastre [33]. Beginning from the 70s of the XIXth century, zemstos started a difficult land estimation work all over the Empire. Zemstvos in Ukraine acted more actively, taking into account higher soil fertility and urgent needs to give the true evaluation of land cost. Such work caused the appearing of new statistical methods of research. For a long time, under-evaluation of the existing lands’ quantitative registration was a considerable drawback of zemstvos’ activities. As the land registration was conducted on the basis of outdated existing plan materials of the general and special boundary making, it influenced the accuracy of the conclusions. Despite that criticism, the zemstvo land cadastre had many advantages over some Western European land cadastres (the most accurate was the Austro-Hungarian cadastre). In particular, it was characterized by a high quality of land-estimation
work. Zemstvo specialists provided not only the correct description of lands, but they suggested their own classification, which later on gave the impetus to scientific theoretical soil science, the development of soil geography. Zemstvos conducted land-estimation work using the principles of Prof. V. Dokuchaev, a well-known founder of the methods of soil quality evaluation. V. Dokuchaev suggested that the soils are to be evaluated according to their natural properties, taking into account crop yield. He became the author of the natural-historic method of soil rating, which consists in soil classification according to chemical, geological, and physical properties.

The development of such kind of economic activities, as insurance of the local population, including that against fires, was the most difficult. In our opinion, the reason was the following: zemstvos in all the provinces got the permission of insuring against fires at different time, which prevented them from uniting their efforts and sharing experience. For example, according to the Law dated January 31, 1906 the Regulations on zemstvo insurance was extended to Kyiv province. Only in 1907 zemstvos began to register agricultural buildings and developed the plan of reforms to improve the fire-prevention measures. The number of fires was considerably reduced in 1910, and by 1916, it could be stated, that such work was useful for the state [34].

It should be noted that the economic activities of self governance bodies took place during different historical periods, in particular, the Counter-reforms period in the 1870–1890s, the revolutionary events of the 1905–1907s, the Stolypin agrarian reforms of the 1909–1911s, the First World War of the 1914-1918s.

During the time the Prime Minister P. A. Stolypin, the system of isolated farmsteads (khutirs), was initiated, which is considered the proto-type of modern farms. He also initiated mass migration to Siberia of smallholders and landless peasants. Zemstvos were also involved in this process by the government. Chernihiv provincial zemstvo publicly emphasized that the authorities obliged, but the funds for migrants were not allocated. In 1909 Stolypin circular «On the assistance to the small isolated farmsteads» was brought to the attention of the provincial zemstvos. They also participated in working out the projects of organizing economic assistance to khutir farms, although zemstvo themselves could not choose the form of assisting migrants. Zemstvos created the centers organizing public lectures to peasants, distributed agricultural literature, organized model khutir farms for those who wanted to see the advantages of leaving the community and becoming an independent farmer.

Conclusions. Thus, on the grounds of analyzing various kinds of economic activities of provincial zemstvos in Ukraine and their regional specialization, it is possible to make the conclusions about their work. Active formation of economic activities lasted to the middle of the 1870s. During this period, zemstvos founded local banks with the aim of overcoming the consequences of abolishing serfdom after the reform of 1861. Credit and loan-saving partnerships were actively founded.
The important work of creating land cadastre of the state began. To the middle of the 1890s, zemstvos organized small land credit, worked out the methods of providing statistics. At the end of the XIXth – beginning of the XXth centuries zemstvos invested considerable sums of money in agronomic congresses, organized the extension courses for agronomists, were engaged in selling farm products, initiated experimental fields and elevators, brought new varieties of seeds and modern farm machinery, made efforts in tobacco growing, horse breeding, horticulture, apiculture, and sericulture. In 1916, the economic department was opened in the All-Russian Zemstvo Union, with the aim of improving the functioning of the national economy, because the exhausting World War I of the 1914-1918s lasted. Zemstvos functioned on the basis of the innovative methods in economics, which present local bodies of self governance can adopt. In particular, zemstvos organized lectures (about pest control, new methods of field cultivation, the latest machinery and technologies), both for the professionals in different branches, and the local population; they actively spread scientific literature; gave recommendations to those who wanted to organize cooperatives; formed reserve funds for agronomic assistance to the population; organized public zemstvo congresses to discuss the most problematic issues of economic activities, coordinated actions between different zemstvos, and shared the experience. The creation of a new land cadastre became a considerable assistance to the state. It is well known, that this problem is actual for Ukraine at present and requires uniting efforts of various bodies of power and specialists. Thus, taking into account the drawbacks, made by zemstvos at the first stages of their activities, caused by the absence of the necessary experience, clear economic plans and programs of work, the impossibility to unite the efforts because of the government prohibitions, modern state functionaries have to take into account their experience and achievements: they can organize broad discussion of the existing economic problems at the local level, uniting local communities for their solving, attract the most experienced specialists to their activities, make promising plans of economic development on their territories.

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REALIZATION OF THE SYNERGY BASIS
ON ESTIMATION OF INNOVATIONAL POTENTIAL
OF REGIONAL SOCIO-ECONOMIC SYSTEMS

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Current state and prospects for the development of regional socioeconomic systems (RSES), which form the basis of any economic system nationwide. Implementation of administrative reform in Ukraine and the development of decentralization processes, first and foremost, require from the scientists and practitioners of managing the transition to fundamentally new technologies and mechanisms for the formation and management of the potential of the RSES, as evidenced by the research, the results of which are reflected in the monographs [3;
The unstable behavior of various economic dynamic systems is characteristic of economic evolutionary processes. Linearity and stability are not universal, but very limited due to certain circumstances, the nature of which is emphasized by leading both foreign and domestic scientists V.B. Zang, V.S. Ponomarenko, M.O. Kizim, O.M. Tridid, G. Hacken [2; 9; 11].

Such placement of emphases is different from those on which the traditional economy is being built. For example, P.A. Samuelson in economic phenomena tried to identify exactly the linearity and stability as the basic properties, because using the traditional static analysis and the principle of conformity can only deal with those systems in which small changes in parameters lead to small changes in characteristics, which analyzes and proves the author of the monograph [10].

The synergetic approach, in contrast to the traditional dynamics, reveals those properties of dissipative systems, for which small changes in parameters cause qualitative changes in dynamic behavior [2; 11]. When a system becomes dynamically unstable, for example, because of the “perturbation” of the parameters, the nonlinear members become very important for determining the nature of its behavior. In this regard, “the presence of analogies in the main provisions of various theories means that there should be a more general theory that combines particles and unifies them with respect to these common properties” [2].

V.S. Ponomarenko, M.O. Kizim, O.M. Tridid in this regard point to the inability of the traditional economic theory “to get close to the empirical reality. The scientific value of abstract concepts and formal theoretical constructions is respected. They rely in their studies on equilibrium analysis, leaving science blind to phenomena associated with historical changes. And this leads to the wrong assumption that it is possible to anticipate all possible cases and assess their consequences” [9, p.74].

The synergetic economy refers to the field of economic theory, which has the great practical importance for sectoral and specific economic activity. It concerns the temporal and spatial processes of economic evolution [2; 11]. In particular, the synergetic economy deals with unstable nonlinear systems and focuses on nonlinear phenomena in economic evolution, such as structural changes, bifurcations, and chaos.

Consideration of the importance of using the synergistic approach for solving the task of managing the development of the RSES is due to the definition of the relationship between synergetic and traditional economics [8, 10]. Since the synergetic economy deals with economic evolution, it is part of the theory of economic dynamics. Under this concept there are many theories (theory of business cycles, the theory of economic growth) and analytical methods, such as the principle of conformity.

All these theories and methods form the content of the traditional theory of economic dynamics. The synergetic economy is an extension of the traditional theory of economic dynamics, due to the fact that the results of the latter can be
explained within this new theory, in addition, it seeks to explain other economic phenomena that the traditional theory ignores [11]. From the standpoint of the synergetic economy, the approaches that make the traditional theory of economic dynamics are not universal, but only in individual cases. Although it can’t be argued that the synergetic economy solves all problems of economic evolution, we can conclude that this new theory allows a dynamic economy to explain and even predict some dynamic economic processes that can’t be explained by traditional theories and methods.

The synergetic economy offers a new direction in explaining complex economic phenomena, including the management of the potential of the RSES in an unstable market environment [10].

The fundamental difference between the synergetic economy is that it attaches particular importance to nonlinear forms of economic evolutionary process, instability and structural change. The synergetic economy treats nonlinearity and instability as a source of diversity and the complexity of economic dynamics in management. And since the potential of the RSES is a dynamic and open system, the application of the principles and methods of the synergetic economy is considered scientifically expedient and lawful.

The proposed scientific concept is based on the special importance and necessity of integrating the potential of the RSES into a complex systemic set that provides sustainable development.

Optimization of interrelations and dependencies of numerous and diverse resources, opportunities and benefits of the enterprise qualitatively transform and enhance the potential of the socio-economic system as claimed by scientists [1; 7].

The RSES potential should take into account a complex of already established relationships and relationships that reflect the past and present process of functioning and development of the RSES in the form of a real level of resource potential, as well as a detailed, differentiated analysis of strategic ties and relations with long-term projections of opportunities and resources, taking into account their optimal use through the normative level of potential.

Such a complex potential of the RSES was considered by us as a strategic potential of the socio-economic system. Thus, strategic potential should be analyzed in the form of a system of functional relations that has developed between the constituent subsystems of the real level of potential and the normative level of capacity development.

Reflecting the specific conditions of the industrial activity of the enterprise, normative potential (standard) is defined as the level of available capacity, taking into account stimulants and anti-stimulants.

Indicators that have a positive stimulatory effect on the RSES potential are stimulants, and signs with opposite properties - anti-stimulants. The normative level of potential - the reference level is the level with the maximum values of the indicators of stimulants and the minimum - anti-stimulants [10].
Estimates on these indicators allow obtaining sufficient information on volume and objective content to manage the potential of the socio-economic system.

The ratio of real and normative potentials reflects the dialectical relationship of resources available and strategic, demand and supply. Normative potential over time is ahead of real. The strategic potential of the RSES is used for comprehensive potential assessment [10]. The criterion of the strategic potential of the socio-economic system (Yc) is a function of assessments of all its components:

\[ Y_c = f(Y_p, Y_i) \]

where \( Y_p \) - indicator of the real potential of the RSES;
\[ Y_i \] - indicator of the normative potential of the RSES.

The system of forming the real potential of the RSES can be represented in the form of a hierarchical set of certain characteristics (Fig. 1.1).

As can be seen from the diagram of fig.1.1, a generalizing indicator characterizing the real level of the potential of the RSES in general is presented at the second level and is a set of integrated indicators of the first level.

![Fig.1.1. Real capacity managements of the RSES](image)

In accordance with the law of synergy, the potential of the RSES is not measured
by a simple sum of potentials in relation to various resource sources [2, 10]. In turn, the subsystems of the system under consideration are the system of potential of RSES for each resource source.

The comprehensive potential indicator for resource sources is proposed to define as follows:

\[
X_{p_i} = \beta_i \times X_{ki} \times X_{\kappa i}
\]

where

- \(X_{ki}\) - quantitative level of potential for the i-th resource source of the RSES;
- \(X_{\kappa i}\) - a qualitative level of potential for the i-th resource source of the RSES;
- \(\beta_i\) - the coefficient of synergy of the RSES by the i-th resource source.

The peculiarity of the calculation of potential is its definition, taking into account qualitative and quantitative indicators and coefficients of synergy, which will allow a comprehensive assessment of the level of potential.

A qualitative level of potential is proposed to be calculated as the arithmetic average weighted:

\[
X_{\kappa} = \frac{\sum_{i=1}^{n} K_i \cdot \upsilon_i}{\sum_{i=1}^{n} \upsilon_i}
\]

where

- \(K_i\) - coefficient characterizing changes in the qualitative level of the potential for the i-th indicator;
- \(\upsilon_i\) - a significant coefficient of significance of the i-th change in the qualitative level of the potential of socio-economic systems in the current period;
- \(n\) – the number of indicators for which the change in the qualitative level of potential of the socio-economic system is estimated.

The determination of the weighting coefficients was made on the basis of peer review by ranking the indicators of potential measurement at the relevant levels of significance (for the potential of fixed assets, for example, from 1 – very significant to 8 – insignificant). Expert evaluation is generalized, based on a survey conducted among managers of different levels of machine-building enterprises.

To determine the qualitative level of potential of fixed assets on the basis of research [3; 4; 8; 10], the following main indicators were identified:

- the coefficient of updating \((X_1)\);
- rate of outflow \((X_2)\);
- share of machinery and equipment in the total value of fixed assets \((X_3), \%\);
- coefficient of wear \( X_4 \);
- labor productivity \( X_5 \), thousand UAH / person;
- fixed-asset turnover \( X_6 \);
- funds capacity \( X_7 \).

As a result of the generalization of expert assessments by summing the ranks, the values of the weighting coefficients were obtained. In one group of coefficients, the share of machinery and equipment in the total value of fixed assets, fixed-asset turnover, funds capacity - they vary from 0.15 to 0.27. The weight of other coefficients was within the range of 0.08-0.12.

Some respondents identified other factors, among which: the level of productivity of fixed assets, the payback period of fixed assets, etc., the value of the weight coefficient on them is 0.03.

The calculation of the qualitative level of innovation potential of the socio-economic system of the enterprise is presented in table 1.1.

### Calculation of qualitative level of potential of fixed assets

<table>
<thead>
<tr>
<th>Indexes</th>
<th>Significant factor</th>
<th>Index of increment of the indicator level</th>
<th>Sign of the impact of the indicator on the level of potential</th>
<th>Fraction</th>
<th>Indicator level corrected for a significant coefficient ((6)=<a href="2">1+(5)*(4)</a>)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The coefficient of updating</td>
<td>0.12</td>
<td>1.6632</td>
<td>+</td>
<td>0.14</td>
<td>0.1364</td>
</tr>
<tr>
<td>Rate of outflow</td>
<td>0.08</td>
<td>3.1529</td>
<td>-</td>
<td>0.26</td>
<td>0.0593</td>
</tr>
<tr>
<td>Share of machinery and equipment</td>
<td>0.27</td>
<td>0.5059</td>
<td>+</td>
<td>0.04</td>
<td>0.2812</td>
</tr>
<tr>
<td>Coefficient of wear</td>
<td>0.07</td>
<td>1.4158</td>
<td>-</td>
<td>0.12</td>
<td>0.0619</td>
</tr>
<tr>
<td>Labor productivity</td>
<td>0.11</td>
<td>2.4311</td>
<td>+</td>
<td>0.20</td>
<td>0.1320</td>
</tr>
<tr>
<td>Fixed-asset turnover</td>
<td>0.17</td>
<td>1.0230</td>
<td>+</td>
<td>0.08</td>
<td>0.1843</td>
</tr>
<tr>
<td>Funds capacity</td>
<td>0.15</td>
<td>0.9775</td>
<td>+</td>
<td>0.08</td>
<td>0.1620</td>
</tr>
<tr>
<td>Unaccounted factors</td>
<td>0.03</td>
<td>1.0000</td>
<td></td>
<td>0.08</td>
<td>0.0025</td>
</tr>
</tbody>
</table>

According to table 1.1 the enterprise has a qualitative level of potential of fixed assets - 1.0171, which was the result of the influence of a number of investigated factors.

In order to calculate the potential, it is recommended to determine the synergy
coefficients, which will result in a level of potential not equal to the amount of resources [8], but will reflect the possibilities of their use.

The calculation of the synergy coefficients carried out as follows:

$$\beta_i = \frac{Xp_i - XH_i}{XH_i} + 1$$

where

- $Xp_i$ - the real potential of the socio-economic system for the i-th source of resources, monetary units;
- $XH_i$ - normative potential of the socio-economic system on the i-th resource source, monetary units;

For standard accepted the best level of potential of socio-economic system for a certain period of time. On the basis of the calculated coefficient of synergy, the RSES monitors capacity development for the purpose to responding promptly to negative trends. The value of the synergy is within range $0 < K_s < 1$. If the calculated level of synergy is greater than 1, then the RSES for some time has become more effective in managing its potential and more rational use the productive resources.

The level of synergy is less than 1, but greater than 0.8 indicates the need for resource conservation measures. The level of synergy less than 0.79 indicates the beginning of the process of degrading the potential of the socio-economic system, requiring rigorous measures regarding the efficiency of the functioning of the RSES in general.

The calculation of the coefficient of synergy of the socio-economic system should be made monthly to adjust the plans for the development of the socio-economic system.

The real potential of the RSES will be determined by the formula:

$$Y_p = \sum_{i=1}^{n} \alpha \beta_i Xp_i$$

where

- $Xp_i$ - the real potential of the RSES for an i-th resource source;
- $\alpha$ - coefficient of synergy of the 2nd order;
- $n$ - the number of resource sources.

For example, we present an enlarged calculation of the value of real potential using an indicator that characterizes one of the most important resource sources - the potential of fixed assets. Calculation of the index of potential of fixed assets is given in table 1.2.
### Table 1.2

#### Calculation of the potential of fixed assets

<table>
<thead>
<tr>
<th>№</th>
<th>Indexes</th>
<th>1 year</th>
<th>2 year</th>
<th>3 year</th>
<th>4 year</th>
<th>5 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quantitative level of potential of fixed assets,</td>
<td>25791</td>
<td>26154</td>
<td>25674</td>
<td>25630</td>
<td>38996</td>
</tr>
<tr>
<td></td>
<td>thousand UAH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Qualitative level of potential of fixed assets</td>
<td>1,0601</td>
<td>1,0248</td>
<td>1,0639</td>
<td>1,0067</td>
<td>1,0171</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Integral capacity indicator of fixed assets,</td>
<td>27341,3</td>
<td>26802,3</td>
<td>27314,6</td>
<td>25801</td>
<td>39661,5</td>
</tr>
<tr>
<td></td>
<td>thousand UAH (3)=(1)*(2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Limits of fluctuations of a qualitative level of</td>
<td>±0,0039</td>
<td>±0,0018</td>
<td>±0,0042</td>
<td>±0,0006</td>
<td>±0,0025</td>
</tr>
<tr>
<td></td>
<td>potential of fixed assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Limits of potential fluctuations of fixed assets</td>
<td>±100,2</td>
<td>±46,9</td>
<td>±106,8</td>
<td>±14,8</td>
<td>±96,1</td>
</tr>
<tr>
<td></td>
<td>thousand UAH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Coefficient of synergy (β2)</td>
<td>0,9803</td>
<td>0,9990</td>
<td>0,9437</td>
<td></td>
<td>1,4506</td>
</tr>
<tr>
<td>7</td>
<td>Potential of fixed assets, thousand UAH</td>
<td>26274,0±</td>
<td>27287,9±</td>
<td>24347,8±</td>
<td>57533,4±</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7)=(3)*(6)</td>
<td>±45,98</td>
<td>±106,69</td>
<td>±13,97</td>
<td>±139,4</td>
<td></td>
</tr>
</tbody>
</table>

According to the data of Table 1.2, the qualitative level of potential of fixed assets, determined by the given method, decreased by 5%, the magnitude of which the factors taken into account have both positive and negative effects.

In accordance with the above methodology, the complex indicator of the potential of fixed assets amounted to 57.53 million UAH in 2017 (39661.5 * 1.45). Similarly, levels of labor potential and material resources potential are determined.

On the basis of the proposed method of measuring the potential we can determine the limits of its variation and model its development.

In the process of managing the potential of the RSES it should be emphasized that there is a close relationship between its real (Yp) and normative level (Yн). The leading role in the functioning of the RSES belongs to the normative level of potential, therefore the connection between Yp and Yн can be determined by the statement. However, there is no doubt and the reciprocal effect of the real potential on Yн, which is characterized by corrective communication. The strategic potential of the RSES stands at the same level as these two potentials of all resources, here are some variants of their interaction (Figure 1.2).
In the case of complete correspondence of the real and normative levels of the RSES potential, they are unidirectional and the strategic potential of the socio-economic system has the maximum value (option a), that is, managerial decisions regarding the effectiveness of its use can be considered qualitative and reasonable.

However, at a certain stage of the development of the RSES, the vector of the real level of potential $Y_p$ “relies” on the limit, due to the possibilities of its development (option b). In this situation, the level of real potential is equal to its normative meaning, that is, management decisions should be more specific, which will allow “to reanimate” the current management system and increase the level of strategic potential.

The last variant of the interaction, when the equalizing of potentials decreases, and as a result comes the situation when the vector $Y_p$ is located along the boundary, which means that the full exhaustiveness of the possibilities of its progressive development comes to pass (option d). This is due to the inability of the management system to respond to changes in indicators and the need to develop a more flexible management system. Thus, the proposed methods for measuring the strategic potential of the RSES are based on the use of the principle of combining the assessment of the real level of use of the total potential and the need to achieve the main macroeconomic indicative indicators that enhance the balance of the development of the RSES in the long-term perspective.

Denote the size of the potential through $y(t)$, and its normative level through $h(t)$. Assuming that the potential growth depends on $y$ and generally described by the function $F(y)$, then:
\[
\frac{dy}{dt} = F(y) - h(t)
\]

Suppose that \( E \) – the norm for the use of the RSES potential, then the normative level can be written as:

\[
h = Ey
\]

This means that the consumption rate of potential is linearly proportional both to the size of the cost and to the size of the potential. Denote the equilibrium point of the equation (1.7) by \( y^* \). Then the supported consumption rate of potential given by the expression:

\[
Z = Ey^*
\]

Consider the case when \( F(y) \) the curve of potential reproduction, and the function \( y \) grows in the range \( 0 < y < K^* \). For small ones \( F(y) \) when \( y \) in the range \( 0 < y < K^0 < K^* \), it has a critical (negative) reproduction. Size \( K^0 \) called the minimum level of ability the potential to reproduce. Because the behavior of systems in the case of critical and noncritical reproduction is very close in content, consider only systems with noncritical reproduction function. The basic diagrams for this case are shown in Fig. 1.3.

There are three equilibrium positions. It can be shown that the zero point is stable, if

\[
E > E^+ (= F'(0))
\]

Then suppose that \( E > F'(0) \). The value of \( y^+ \) is always unstable and corresponds to the unstable use of the potential represented by the dotted area on the “use of potential-cost” curve (Fig. 1.4). If \( E \) begins to grow from the lower level, then there is a point of equilibrium and its corresponding value for the use of the potential \( Ey^* (= E^*) \). This value is achieved, for example, with \( E^M \).

Let’s analyze what will happen if you continuously increase the normative level of potential. When the value \( E^M \) passed, small changes in an independent variable
result lead to only small changes in function. However, if \( E \) the passed value of \( E^* \), the size of the potential suddenly drops to zero.

Fig. 1.3. Case of uncritical reproduction of the RSES potential

Fig. 1.4. Hysteresis for the function of the dependence of the size of the use of potential from the normative level of potential

Now \( E \) decreases, since at \( E^M > E^* \) the origin of the coordinates is the point of a stable equilibrium, this situation can not be restored by such reduction. When \( E \) decreases to the level less than \( E^* \), the zero equilibrium will become unstable, and it will be possible to slowly increase \( E \) to \( E^M \) again. So, there is a hysteresis, as shown in Fig. 1.4.

Thus, we have used the main provisions of the synergetic economy regarding the management of the potential of the RSES, the basis of which is the methodology for
determining the level of potential using qualitative and quantitative characteristics and synergy coefficients, which enables to effectively manage the sustainable development of socio-economic systems of different levels in the strategic perspective.

References:

THE WAYS OF IMPROVING PERSONNEL POLICY AND PUBLICITY IN LOCAL SELF-GOVERNMENT BODIES

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The main directions to increase the level of professional competence of employees of local government bodies represent a combination of legally regulated measures for the training, retraining, selection, placement and education of personnel in accordance with the requirements of the current national personnel strategy and corporate strategy of a certain organization.

In general, the work with personnel should include: career guidance, professional selection, training, professional retraining; placement and consolidation of personnel; improvement of the motivational mechanism of their activities; improvement of conditions and the attractiveness of labor; professional certification, promotion of professional growth; work with the reserve of personnel; control over the personnel activities; the system of informing the personnel about the tasks of labor collectives; and education of personnel. Nowadays the personnel policy in Ukraine does not meet modern requirements. Managers at different levels of the hierarchy do not have action programs for personnel, and the process of personnel management is reduced to eliminating negative consequences. For such an organization, the lack of means for diagnosing the personnel situation, the assessment of labor and personnel and the forecast of staffing needs are the characteristic features.

Personnel programs should contain the tasks of personnel development, which include: measures to adapt the available labor potential to new requirements, which are provided by the new organization strategy; the new, adequate strategy, the concept of creating jobs and a system of measures to implement it; as well as measures to outstrip those changes that are envisaged by the strategies of the enterprise (organization). Personnel work and processes should acquire a certain system that provides for the existence, interconnection and interdependence of all the significant aspects of personnel management and its continuity.

In order to increase the efficiency of work in a certain direction, it is expedient to ensure the following activities:

1. It is advisable to avoid purely technical, resource approach to personnel as an important factor of production, but to be treated as a social component of the organization’s activities, since the full formation and restoration of labor potential depends on the social environment, and this in turn is a function of the effectiveness of economic activity.

2. By carrying out strategic planning of personnel work, it is important:
to determine the real need for personnel in the stages of the strategic period; to establish the availability of personnel in terms of quality parameters and possible projected changes in the strategic period; to identify the lack of personnel in the aspect of their qualitative parameters for the stages of the strategic period, by taking into account the need for new specialists in accordance with the proposed strategic changes in the enterprise; to determine the sources of deficit coverage for personnel over the years of the strategic period and in terms of qualitatively qualifying groups.

3. Based on the results of the evaluation of the staff deficit in terms of categories by years of the strategic period, it is possible to draw up a plan for providing them and not only to conduct their training and retraining in educational institutions, but also to carry out targeted career guidance in educational institutions, among residents, and to organize training and retraining of some categories of personnel.

4. It is necessary to pay attention to the radical restructuring of the work of personnel services in accordance with the requirements of a market economy and a specific personnel strategy. Personnel service employees should be selected in accordance with the established criteria for the availability of satisfactory knowledge, at least in such disciplines as personnel management, economics and production organization, psychology, sociology, law, pedagogy, skills in testing, computer work, etc.

5. The selection, placement and education of managers and specialists should be carried out with the obligatory observance of the following principles: to select personnel for business qualities (competence, professionalism, organizational abilities), moral and psychological and political qualities, on a democratic basis, with a combination of the experienced and the young workers, systematically to update and strengthen the cadres, to work with the personnel reserve.

6. It is necessary to radically change the existing career guidance work in the following areas: adaptation of traditional approaches to modern requirements and requirements of the new strategy; introduction of new and adequate and justified strategies, forms and methods of career guidance work; coordination of efforts of all possible subjects of professional orientation.

7. Improvement of the system of training and retraining of personnel, which should be based on the strategic needs of the organization, selecting applicants with the necessary qualifications, continuity and systematic skills. Today, there is a need to introduce an independent assessment (certification) of knowledge, practical skills and abilities of graduates of educational institutions, as well as workers who received them in the working process and require appropriate confirmation from independent certification services. In general, the system of vocational education and training should be open-minded and be capable of self-development on the basis of new principles oriented to the labor market, decentralization and social partnership.

8. Improvement of approaches, forms and methods of selection, placement and promotion of personnel in organization. Patriotism, professionalism, decency – in
such a sequence of principles, personnel selection should be carried out taking into account the requirements and conditions, including the consistent implementation of the research, organizational, managerial, political and legislative actions.

9. It is necessary to move on to career planning. The main criteria for this should be as follows: the length of employment, productive work in a certain position and positive results of attestations. It is necessary to create a new but not formal system of personnel certification. It is especially important to objectively evaluate the employee’s performance and to make a decision based on the results of certification with moral and material encouragement of the best employees and the application of subsequent moral and material penalties for failure, or even the dismissal, to those individuals who do not meet the established requirements.

10. It is necessary to work out the appropriate system of work with the personnel reserve in accordance with the requirements of the enterprise strategy.

11. The HR strategy assumes more efficient placement of employees in the right positions within the organization and providing them with the opportunity to obtain higher earnings and to obtain shares, property or anything else of monetary value. This strategy is also related to the development of social infrastructure, the creation of comfortable working conditions and the healthy microclimate in organization, as well as the benevolent leadership style providing.

In particular, it is necessary to develop and implement a program for the decentralization of public-management relations in the following areas: “state and civil society”, “government bodies and people”, “state executive power and local government bodies”, “the management representatives and the structural units of the company”, “leader and subordinates” [1].

So, summing up the above, we can conclude that the personnel policy is imperfect and requires significant changes. This is certainly explained by the fact that in Ukraine the service in the local self-government bodies does not have the relevant experience and qualitative legislative framework. The mentality of our society, especially the representatives of the authorities, also requires significant changes, since in the state in which it exists now, it is impossible to be equal in this aspect to European countries. This mainly applies to corruption and the misuse of funds, which should be directed at the realization of the needs of citizens. Therefore, it is important to strengthen state control over the targeted use of state and local budget funds, as well as on the quality of services provided by local governments, realizing the interests of citizens of the region.

Due to the desire of qualified personnel to develop professionally, the development of the municipal representative bodies takes place. However, sometimes there are cases of use of their position by employees of representative bodies, which directly affects the inadequate and untimely performance of their immediate duties related to the needs of citizens of the region. Therefore, the following directions for the implementation of the state personnel policy in public administration should become priority (See Figure 1).
Consequently, raising the level of professionalism and stimulating officials of local governments is one of the most pressing issues that need to be addressed for the development of the state as a whole [2].

Creation of an effective personnel reserve for the purpose of staff renewal and adherence to the principle of continuity in all state administration bodies due to the internal and external sources of staff replenishment

The creation of legal, social, organizational prerequisites for the successful implementation of the professional potential of civil servants and local government officials, promoting the growth of the creative component in their work to enhance the social and legal support of personnel management

Ensuring the professionalization of public administration and local self-government, as well as the recruitment of public authorities and local self-government bodies by qualified specialists

Formation of an administrative link on the basis of professional values; implementation of a systematic work with the young leaders (on a program basis)

The development of the legislative framework, which should clearly define the main principles of state policy and practical work in the field of staffing of various government bodies and local self-government bodies

Forecasting and planning of the demand for personnel at various managerial levels, developing approaches and methods for analyzing personnel needs, taking into account the professional and human resources structure of public administration and the labor market

Introduction of an effective system of motivating the work of civil servants and local government officials, their evaluation, promotion and relocation

Development of criteria and development of innovative technologies and methodologies for monitoring the effectiveness and effectiveness of managerial work, strengthening control in the area of managerial activity, ensuring transparency of the personnel policy in the sphere of public administration

Improvement of the national system of training, retraining and advanced training of local government officials, the introduction of a special order system for training specialists

Introduction of mechanisms for coordination of activities of the institutions and organizations related to the implementation of the state personnel policy in the sphere of public administration and local self-government

Fig. 1. Priority directions for the implementation of the state personnel policy in public administration [developed by author]

The solution of the problem of openness or publicity of the authorities is one of the key directions in the process of further adoption of democratic principles of state activity in Ukraine. Considering the question of possible directions for increasing the publicity of local government bodies, it is considered appropriate
to draw attention to the fact that access to information is a prerequisite for public control and the main element in the development of openness of the authorities.

The quality of the regulatory framework and free access of citizens to the information on the activities of public authorities are the main factors of their openness. Important factors of citizens’ trust in public authorities and their cooperation are: openness of the activities of these bodies and direct communication of officials with different social groups of residents; not only informing the public about the results of their work, but also explaining, justifying and involving the public in discussing the activities of government bodies and solving public problems; efficiency, reliability of information and so on.

The ineffective interaction of local public authorities and the unwillingness to reach a compromise is due, first of all, to a conflict of personal interests. All this undermines the image of public authorities in the eyes of the public and the world. The public authorities, in our opinion, should cooperate and act in the legal field and find compromise solutions on all issues without exception, to achieve the well-being of the territorial community, which they administer.

The results of the analysis of the openness of the activities of the local governments, conducted by us in the framework of this study, indicate the need to develop a comprehensive program of actions and activities (See Figure 2).

Consequently, the solution of the problems of public authority in the information sphere will lead to such important consequences as:

- reducing the number of illegal decisions taken by the authorities through the promulgation of plans for the implementation of current tasks and general reports on the activities of public authorities;
- prevention of illegality and manifestations of corruption in the actions or inaction of officials of state authorities and local self-government bodies;
- increase the sense of justice of both representatives of government bodies and local self-government bodies, and the public as a whole by creating public and expert councils, commissions and other public entities;
- simplification of the availability of public information for ordinary citizens through the access to the Internet, namely to the created websites with systematically presented public information on the activities of government and local self-government bodies.

The openness of the authorities is a prerequisite for the development and strengthening of democracy, which will enhance mutual understanding and interaction between the authorities and the public, ensure the rights and freedoms of the individual and citizen, the development of society and the state, and integrate Ukraine into the global information space [3].

The strategy of the state personnel policy of Ukraine determines the main directions of personnel reforms in all spheres of public life, an important place among which is assigned to the sphere of state administration and local self-government bodies, since the competitiveness of the state and sustainable social
Comprehensive program of actions and activities of local self-government bodies

The need to use the experience of foreign countries in Ukraine, taking into account national peculiarities, to promote the establishment of new standards of relations between the authorities and society

Improvement of the legal and regulatory framework for informing citizens about the work of public authorities with a clear definition of the nature of open information, as well as the adoption of a unified list of provision of public services by local government bodies

Taking into account not only the need for harmonization of the entire layer of general and special legal acts in this sphere, but also the lack of a transparent mechanism for communicating information to the public by state authorities and local self-government, despite attempts to introduce feedback mechanisms between the authorities and citizens

Creation of social technology of information support of strategic planning on the basis of sociological research of public opinion and obligatory registration of results of researches in activity of authorities

Ensuring the implementation by the public authorities of the laws of Ukraine regarding the openness, publicity of the activities of public authorities and the creation of real incriminating and punitive bodies for non-compliance or failure to comply with the relevant laws

The heads of territorial communities should take into account the foreign experience and requirements of the present time when forming the personnel policy of the authority

Fig. 2. The proposed comprehensive program of actions and activities of local self-government bodies [developed by author]

Thus, the openness of power, in particular its information aspect, is an important factor in the development of the processes of democratization of the state and society, the formation of civil society, and the guarantee of the establishment in Ukraine of democratic norms and rules of relations between citizens, their associations and state authorities. Transformation of the power system in Ukraine from the Soviet one to an independent sovereign and law-based state requires the introduction of new standards, the emergence of a new culture of relations between power and society. At the same time, it is extremely important to move from a system of power with a very high degree of closeness to the power, open to everyone. The openness of the state power, its ability and readiness for the dialogue with various social forces largely determine the domestic political situation in the country and strongly
In the course of this study, we identified the main trends in the introduction of e-government in the joint territorial communities. As a result, it was revealed that a significant number of websites of local government bodies do not have any electronic service at all. Moreover, 40% of the websites of the united territorial communities do not have the electronic petitions service, which violate the legislation of Ukraine. In particular, there is a tendency of disinterestedness of newly formed bodies of local self-government to introduce e-technologies. The vast majority of web-sites are the same type and do not contain comprehensive information for the residents of joint territorial communities.

Since the Cabinet of Ministers of Ukraine approved the “Concept of development of the e-governance in Ukraine”, the implementation of which is envisaged until 2020, local governments and public administration bodies should implement it in two years. However, there are no mechanisms for monitoring the joint territorial communities to implement e-government today. Therefore, its further introduction depends entirely on the staff potential of local councils and the needs of residents in obtaining services of this type.

References:


Energy companies are the basis for the development of the economy; therefore, the growth of generating capacity is a condition for the stability of the industry. In general, macro- and mezzanine factors influence the activity of energy companies. Most Ukrainian industry enterprises perceive macro-level factors as indirect effects on activities that are impossible to manage. Energy companies, unlike others, are active participants in macroeconomic processes. Taking into account that Ukraine provides various types of energy services in the European direction, any changes in these markets will have a direct impact on Ukrainian energy companies.

The global energy market is characterized by an increase in uncertainty: instability of energy prices, geopolitical conflicts in major countries, energy exporters and transisters require revision of energy strategies for most energy consumers of the world market. Priority issues in the global energy market are: energy efficiency, renewable energy, energy subsidies, the growth economies of China and India and imports decline Europe and the United States. Growth in demand for coal and natural gas will continue to affect the energy market. The energy systems of different geographical areas are becoming more interconnected, automated, modernized and are characterized by the availability of information about possible new risks that will occur in the future [1; 2; 3; 5].
Indicators of the mezzanine of the external environment of influence – that is, industry specificity – are the resource indicators for the energy companies (extraction, import, export, consumption) and expenditures of the state budget (by types of classification, Table 1). Hypothesis formed us about the impact of the meso level indicators on the activities of energy companies is as follows: lack of predictability basic industrial parameters indicates the absence of coordination mechanisms between government and energy companies, to which in turn indicates high energy intensity of GDP.

<table>
<thead>
<tr>
<th>Type of energy resource</th>
<th>Measurement by meso level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imports 1991-2015</td>
</tr>
<tr>
<td></td>
<td>Energy intensity of GDP</td>
</tr>
<tr>
<td>Coal</td>
<td>$y = -756064x + 5E+07; R^2 = 0.0764$</td>
</tr>
<tr>
<td>Oil</td>
<td>$y = -547877x + 3E+07; R^2 = 0.0565$</td>
</tr>
<tr>
<td>Gas</td>
<td>$y = -2E+06x + 1E+08; R^2 = 0.782$</td>
</tr>
<tr>
<td>Uran</td>
<td>$y = 34,839x + 3521.9; R^2 = 0.1733$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of energy resource</th>
<th>Measurement by meso level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Production:</td>
</tr>
<tr>
<td></td>
<td>Consumption:</td>
</tr>
<tr>
<td>Coal</td>
<td>$y = -1E+06x + 9E+07; R^2 = 0.4283$</td>
</tr>
<tr>
<td>Oil</td>
<td>$y = -83748x + 6E+06; R^2 = 0.3383$</td>
</tr>
<tr>
<td>Gas</td>
<td>$y = 214518x + 2E+07; R^2 = 0.3801$</td>
</tr>
<tr>
<td>Uran</td>
<td>$y = 13,371x + 965.56; R^2 = 0.4464$</td>
</tr>
</tbody>
</table>

Source: calculated by the author based on data [5]

Thus, indicators for the production of energy resources are unpredictable, which identifies the financial and production crisis of extractive enterprises and the instability of the energy system – the dependence on the import of energy resources. Indicators of import of energy resources are unpredictable, except for gas whose consumption is predicted. The average level of instability, in our opinion, is inherent in the export of electricity: the author analyzed the statistical data from 2008-2016, the determination coefficient $R^2=0.4913$. The peculiarity of Ukrainian non-state energy companies is precisely the realization of generation and sale of electricity to the final consumer, including abroad. Identification of the indicator as a predictable one influences the formation of energy business development strategies and requires the use of fuzzy logic methods that will enable the formation of strategic initiatives based on stochastic scenarios.

The energy intensity of GDP is an effective indicator, since determining the level of predictability of this indicator once again confirms the hypothesis that there is no targeted energy sector development program, which in turn causes imbalances
in enterprises, because, based on international experience of strategic management, energy companies have to shape their development programs in accordance with the overall energy strategy of the country and the implementation of certain stages in the relevant report energy agencies.

The analysis of environmental factors influencing the meso of the level of resource direction made it possible to detect significant differentiation on the objects of analysis. The dynamics of most indicators is unpredictable, which makes the energy sector investment-friendly to international investors and is a critical factor in meeting international energy obligations.

The next group of meso-level indicators is energy sector spending, which accounts for 6.2% of total expenditures in 2015. Hypothesis: Expenditures for energy companies are a tool to support their development; reducing funding for this form of the economic crisis in the country lead to update the current development strategy based on the modification of existing methods of strategic management.

The share of expenditures for the energy sector in total expenditures is an unstable factor of the meso level \( y = -0.0029x + 0.105; \) \( R^2 = 0.3125 \) [6; 7].

Expense items: coal sector and Naftogaz. Total support for the coal sector from 2009-2015 amounted to UAH 62 billion, while direct payments to Naftogaz and subventions to local budgets amounted to UAH 45.6 billion. At the same time, the issue of domestic government bonds (T-bills) totaling UAH 136.3 billion. over the past six years, Naftogaz’s deficit has affected the volume of external debt.

Subsidization of communal services is a predicted indicator, expenditures since 2009 – UAH 18.0 billion. increased to 43.0 billion UAH. in 2016, which is 1.5% of GDP, is a negative factor of influence, since it does not stimulate preferential categories for the introduction of energy saving technologies and reduces the competitiveness of the economy due to increased funding. Also, the indicator indicates reserves for additional funds as compensation for the difference in price.

Since public spending in the energy sector are carried out in such forms as subsidies, tax exemptions, government guarantees and debt relief and penalties appropriate to consider every form of more (Table. 2).

Expenditures for energy companies are provided from the state budget, and they are factors of predicted influence.

However, given the persistent budget deficit and the attraction of funding from the International Monetary Fund, it is advisable to formulate several development scenarios in strategic management in order to diversify the risks of public financing.

In general, 90% of all compensations are compensation for the distribution of electricity to the population. In the new version of the Energy Strategy, the abolition of cross-subsidization is planned in 2019.

Thus, the implementation of energy subsidy reform is an important part of the Energy Strategy. However, reducing spending on the energy sector does not mean a successful reform.
### Table 2

Factors affecting the meso level: reimbursement to energy companies in 2009-2015

<table>
<thead>
<tr>
<th>Compensation for losses</th>
<th>2009–2015 years</th>
<th>(y = 4 \times 10^6 x + 1 \times 10^7, R^2 = 0.9836)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of compensation for losses from delivery to e / e population and settlements</td>
<td>(y = 122809x + 1 \times 10^6, R^2 = 0.4441)</td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of e / e to consumers, which is</td>
<td>(y = 11922x + 3114.7, R^2 = 0.9425)</td>
<td></td>
</tr>
<tr>
<td>calculated for the differential. tariffs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of e / e to domestic consumers,</td>
<td>(y = 45083x + 107834, R^2 = 0.9755)</td>
<td></td>
</tr>
<tr>
<td>which are calculated for dif. tariffs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of e / e, which is used for the</td>
<td>(y = 71953x + 302667, R^2 = 0.977)</td>
<td></td>
</tr>
<tr>
<td>external illumination of settlements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of electric e-city electric</td>
<td>(y = -82352x + 686217, R^2 = 0.705)</td>
<td></td>
</tr>
<tr>
<td>transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of e / e coal-mining enterprises</td>
<td>(y = -124760x + 711978, R^2 = 0.4831)</td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the supply of electric and electronic</td>
<td>(y = -289.71x + 21096, R^2 = 0.0004)</td>
<td></td>
</tr>
<tr>
<td>equipment to mining, metallurgical and chemical enterprises</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the implementation of the supply of e / e</td>
<td>(y = 17.714x - 29.714, R^2 = 0.2324)</td>
<td></td>
</tr>
<tr>
<td>for economic entities that implement innovative projects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The amount of compensation for losses from the implementation of electricity supply</td>
<td>(y = 4 \times 10^6 x + 1 \times 10^7, R^2 = 0.9826)</td>
<td></td>
</tr>
<tr>
<td>to the citizens of Svitlodarsk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Calculated by the author based on data [8; 9]

Tax privileges for energy companies are among the largest in the industry as a whole. The benefits relate to corporate income tax, energy companies account for a significant share of tax incentives – 2% in aggregate, although there is a tendency to decrease volumes in 2013; yes, in 2014 the size of the benefits was 45 thousand dollars. Tax Code provides for the elimination of benefits for income tax until 2019, so businesses need to change the existing industry development strategy to compete and optimize sources of the income.

Impact factors - tax breaks by species - are unpredictable indicators. The reason for allocating them as a factor for the influence of the meso level was to consider the policy of governments, which is changing every 5 years, and to ensure the adoption of appropriate legislative acts in order to lobby for its own interests (Table 3).
The identification of the factors of the influence of the meso level gives an opportunity to form the tendencies of development of enterprises of the energy sector in the context of development opportunities. Possibilities of influence of factors of meso level:

1. Participation in the Extractive Industries Transparency Initiative (EITI) in order to increase investment attractiveness.
2. Modernization of gas and electricity networks as a profit segment of the market.
3. Introduction of the Smart Grid to diversify the markets for the ENTSO-E market.
4. Priority of atomic generation: scientific and technological potential, energy security.
5. Additional factor of investment attractiveness of power enterprises – state guarantees.
6. Economic security of energy enterprises at the expense of subsidies, tax breaks, debt write-offs and penalties.
7. Investment attractiveness of renewable energy through the renewal of the «green tariff» (September 2016).
8. Integration of stock procurement mechanisms in energy based on Uptime Institute Data Center Site Infrastructure Standard by TIER III.
9. Creation of bank crediting programs for energy projects of industrial and household character: «Ukragazbank», «Oschadbank».
10. Completion of the implementation of the provisions of the «third energy package» of the EU Directives in the practice of functioning of the energy markets in 2016.

As a result of the study, it was established that Ukraine’s energy sector requires the development of a European development strategy that would respond to changes in the globalized world and promote the updating of internal mechanisms of functioning.
The main prerequisites for the formation of the target model of energy development:
- determination of the justified socio-economic and environmental priorities of meeting the energy needs of Ukraine;
- development of the target forecasting energy balance and its constant updating on the basis of changes in international priorities in the energy sector and in the country as a whole. It should be institutionalized as a methodology for strategic management of economic development in Ukraine and the energy sector in general;
- preliminary or current definition of strategic guidelines on the basis of ecologization of the economy for forming a consolidated scientifically-based vision on the long-term energy, ecological and economic future of Ukraine [11; 12].

In general, the evaluation results indicate the stochastic instability of the meso environment: the determination coefficient is within the range of 0.0004-0.4831 (Table 4). Instability environment requires managers use fundamental methodological support new strategic management that builds on the theory of fuzzy logic.

Adaptation of the appropriate methodological support for the management of the development of energy holdings will allow differentiating the level of risk by optimizing the financial and industrial components of holdings.

The instability of the mise environments indicates the lack of a comprehensive energy development strategy, imbalances in harmonizing the interests of stakeholders, unpredictability of tax rates, justification of market prices for energy products / services, extensive industry development, and ineffective state policies to stimulate and support energy companies and the public.

Task state power must meet the following conditions as the existing structure impact energy as sectors of the economy to other sectors of the economy, macroeconomic and financial performance; the impact of energy sector facilities on the ecological state; impact reliability and availability of energy resources in society in general.

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Table 4

Estimation of the external environment of influence for energy companies

<table>
<thead>
<tr>
<th>Type of energy resource</th>
<th>Consumption</th>
<th>Production</th>
<th>Imports</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>$R^2 = 0.0764$</td>
<td>$R^2 = 0.4283$</td>
<td>$R^2 = 0.076$</td>
<td></td>
</tr>
<tr>
<td>Oil</td>
<td>$R^2 = 0.0565$</td>
<td>$R^2 = 0.3383$</td>
<td>$R^2 = 0.056$</td>
<td></td>
</tr>
<tr>
<td>Gas</td>
<td>$R^2 = 0.782$</td>
<td>$R^2 = 0.3801$</td>
<td>$R^2 = 0.782$</td>
<td></td>
</tr>
<tr>
<td>Others: nuclear</td>
<td>$R^2 = 0.1733$</td>
<td>$R^2 = 0.4464$</td>
<td>$R^2 = 0.1733$</td>
<td>$R^2 = 0.4913$</td>
</tr>
</tbody>
</table>

**Expenditures**

- Coal sector: $R^2 = 0.0076$
- Coverage of Naftogaz’s deficit: $R^2 = 0.0243$
- Nuclear power engineering: $R^2 = 0.0687$
- Social protection of Chernobyl: $R^2 = 0.0486$
- Subsidization of utilities: $R^2 = 0.5325$
- Special education and science: $R^2 = 0.0469$
- Renewable energy sources and energy efficiency: $R^2 = 0.2095$
- Other: $R^2 = 0.4102$

*The amount of compensation for losses from the supply of e / e*

- population and settlements: $R^2 = 0.9836$
- for consumers who are calculated for diff. tariffs: $R^2 = 0.4441$
- for household consumers, for diff. tariffs: $R^2 = 0.9425$
- which is used for outdoor lighting of settlements: $R^2 = 0.9755$
- urban electric transport: $R^2 = 0.977$
- coal mining enterprises: $R^2 = 0.705$
- mining and metallurgical and chemical enterprises: $R^2 = 0.4831$
- for business entities: on innovations: $R^2 = 0.0004$
- the population of Svetlodarsk: $R^2 = 0.2324$
- Total Compensation Energy Sector: $R^2 = 0.9826$

**Tax privileges**

- Income tax: $R^2 = 0.4282$
- VAT: $R^2 = 0.3797$
- Excise tax: $R^2 = 0.6847$
- Total for the fuel and energy sector with PPP, mln.UAH: $R^2 = 0.2256$
- Total privileges in the country, mln.UAH: $R^2 = 0.3163$

*Source: compiled by the author based on the results of the analytical study*
However, the achievement of such a level of development of the energy system in the conditions of systematic failure to implement the previous Energy Strategies is impossible. Implementation of the Energy Strategies of Ukraine, adopted in 2006 and 2013, is characterized by a low level of implementation of its main points in the economic activity of the country and the lack of achievement of strategic goals. Failure to comply with the main points of the strategy is an indicator of the existence of a management model that lobbies the interests of individual groups of influence in the short run to allocate funds for the implementation of their own «priority» projects. Such neglect of the long-term priorities of the development of the energy system has led to a critical situation in the energy sector as a whole, but it has created a problematic field of issues that we defined in the previous stages of the study. Also, one of the reasons for the ineffectiveness of the strategy’s implementation is to focus on the stage of forecasting the development of the facility and the lack of forecasts for the implementation of their market actors. This situation indicates the lack of strategic approach in the development of the Energy Strategy and, in principle, an understanding of the delineation of the object and subject in general. Conflict of interest as a feature of market interaction is a feature and a key point in the formation of any strategy, in our case, the Energy. In our opinion, the main task of the state energy strategy should be the formation of a field of interaction that is attractive to all market participants, taking into account state interests, especially in the long-term perspective. In general, most of the environmental factors of the meso level are unstable, that is, taking into account their dynamics when drawing up long-term plans for energy companies based on classical strategic management tools is impossible. The priority is further research is the identification of indicators of power plants to improve approaches to the study of strategic alternatives given the instability of the environment.

References:


The current development stage of socio-demographic processes in Ukraine, the restoration of the lost research and scientific-and-technical potential requires adequate provision of management of the innovative component of the enterprise. Mentioned processes are accelerated also by the information revolution, which
leads to avalanche-like innovations and the complication of the very essence of the labor process.

At the same time, the current complicated situation in the field of innovation work in Ukraine causes the need for further development and deepening of research in this direction. The state of providing innovation activity and innovation work, the definition of its new context in modern conditions as whole entity in modern conditions requires a comprehensive system approach, which is still absent.

Different aspects of the interpretation of the essence and content of such categories as “organizational and economic provision”, “organizational and economic mechanism” and “system of organizational and economic provision”, taking into account their peculiarities and differences, are highlighted in the works of such foreign and Ukrainian scholars: Simenko I.V., Voloshchuk L.O., Kirsanova V.V., Filyppova S.V., Kvtunenko K.K., Trofymchuk V.O. [1-4]. Thus, the generalization of theoretical approaches to the definition of the essence of categories of such categories as “organizational and economic provision”, “organizational and economic mechanism” and “system of organizational and economic provision”, was carried out by Shevchenko V.A. in [5]. However, the author does not determine the differences between the essence of these categories. In [2] Voloshchuk L. O., Kirsanova V.V., Filyppova S.V. reasonably defined the content of the concepts of such categories as “organizational and economic provision”, “organizational and economic mechanism” and “system of organizational and economic provision”. In addition to the following interpretations of the definitions, the authors emphasize that these categories should have their own peculiarities and content. Trofymchuk V.O. also distinguishes “organizational and economic provision” and “organizational and economic mechanism” categories. But the author, unfortunately, leaves out such category as “system of organizational and economic provision” [4]. However, there is still no single point of view regarding the content of these economic categories.

At the same time, theoretical and practical questions concerning the definition of the essence of provision of management of the innovative component of the enterprise in modern conditions remain inadequately developed, which makes it impossible to develop the corresponding instruments.

Therefore, the goal of the study is to substantiate the conceptual provisions of providing innovative company management.

To achieve the goal of the study, the following scientific objectives were identified:

1) to substantiate the conceptual provisions of providing innovative company management on the basis of the modern management paradigm;

2) to generalize theoretical positions regarding the essence of the concepts of the innovative component of the enterprise and “organizational and economic provision”;

3) to substantiate the instrumentarium of organizational and economic provision of providing innovative company management.
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Key Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Svinarova H.B.</td>
<td>Its part is analytical support</td>
</tr>
<tr>
<td>2</td>
<td>Trofymchuk V.O.</td>
<td>The system of organizational, managerial, regulatory and methodical levers</td>
</tr>
<tr>
<td>3</td>
<td>Yakubenko Yu.L.</td>
<td>1. The main factors of production. 2. Measures</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Dubrivina L.I.</td>
<td>Sequence of cause and effect relationship</td>
</tr>
<tr>
<td>6</td>
<td>Matrosova L.M.</td>
<td>Principles, functions, tools, factors and instruments of management.</td>
</tr>
<tr>
<td>7</td>
<td>Voloshchuk L.O., Kirsanova V.V., Filyppova S.V.</td>
<td>1. System 2. Mechanism 3. The combination of management subsystems that perform the relevant functions and interact with each other ...</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Melnykova M.V.</td>
<td>1. The complex of dynamic procedures, forms, methods and instruments. 2. Formation of organizational structure and organization of activities. 3. Improvement of organizational structure of management. 4. Systematization of approaches to the determination of patterns and methods of formation. 5. The complex of dynamic procedures, forms, methods and instruments. 6. Functioning of subsystems to create organizational and economic conditions.</td>
</tr>
<tr>
<td>11</td>
<td></td>
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<td></td>
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<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>The Great Encyclopedia of Oil and Gas</td>
<td>1. Development of organizational structure and management system. 2. One of the main components of the system basis. 3. The complex of economic parameters of management, methods of production organization.</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Chernous Yu.O.</td>
<td>The complex of dynamic procedures, forms, methods and instruments of management.</td>
</tr>
<tr>
<td>22</td>
<td>Radionova N.Y.</td>
<td>Functioning of security subsystems to create organizational and economic conditions.</td>
</tr>
<tr>
<td>23</td>
<td>Shevchenko V.A.</td>
<td>A separate component of management, which is a process that involves the implementation of management functions in order to achieve the goals of enterprise development as a result of the use of its resources, and includes methodology, regulatory methods, goal-setting methods, resources and management procedures.</td>
</tr>
<tr>
<td>24</td>
<td>Shevchenko A.V.</td>
<td>Search and implementation of relevant levers, approaches and methods of modern organization of production at enterprises capable of increasing their innovative potential.</td>
</tr>
<tr>
<td>25</td>
<td>Simenko I.V.</td>
<td>1. The complex of organizational measures that ensure the functioning of subsystems. 2. Creation of all necessary conditions for efficient organization of analytical procedures.</td>
</tr>
<tr>
<td>26</td>
<td>Shkaraban S.I.</td>
<td>A system of measures aimed at obtaining information daily objective and sufficient for management.</td>
</tr>
</tbody>
</table>

* Compiled by the author based on [1-6]
As there is no clear definition in the economic literature [1-6] in determining the content of organizational and economic provision of management of the innovative component of the enterprise, the following conceptual provisions of providing innovative company management were formulated:

First, most authors agree that an innovative component of an enterprise involves innovation and innovation work. Therefore, in developing the definition of organizational and economic provision, we will rely on this point of view.

Secondly, on the basis of the study of foreign and domestic views, presented in publications, the following results were obtained, which are summarized in Table 1.

Therefore, the analysis of the above definitions allowed to state that there are quite different approaches to the interpretation of organizational and economic provision, but most authors consider it based on such keyword as “the complex”. In the Great Encyclopedia, organizational and economic provision is also interpreted as “complex” (but with word collocations like “management parameters” and “methods of organization”), “a complex of economic parameters of management, methods of organization of production and labor” [11]. Chernous Yu. O. and Melnykova M.V. in [10,12] also define the organizational and economic provision as “complex”. They suppose that this is “the complex of dynamic procedures, forms, methods, instruments”. In work [4] Trofymchuk V.O. presents the content of the concept as a system of organizational, managerial, regulatory – legal and methodological levers of implementation. The Great Encyclopedia also uses such keyword as “system”. Dubravina L.I. in [4] states that organizational and economic provision as “Sequence of cause and effect relationship”, and Matrosova L.M. in [9] “as the development of certain principles, functions, tools, factors and instruments of management”. The Great Encyclopedia gives rather substantiated definition of organizational and economic provision as a “systemic basis” (“one of the main components of the systemic basis that characterizes the degree of organization of the object of management” ... ) [11].

Melnikova M.V. in [10] considers the organizational and economic management from the four positions, as: 1. functioning of the subsystems to create organizational and economic conditions; 2. as a complex of dynamic procedures, forms, methods and instruments that allow to substantiate and make decisions; 3. improvement of organizational management structures; 4. systematization of approaches to the definition of patterns and methods of formation and development of organizational structures. It should be noted that the fourth position somewhat duplicates the third one. Radionova N.Y. and Melnykova M.V.[10,13], unlike other authors, interpret the function category as “the functioning of the security subsystem...”, and Voloshchuk L.O., Kirsanova V.V., Filyppova S.V. interpret as a combination of subsystems. Simenko I.V. also connects the category to the functioning of subsystems, but the author believes that this is “a complex of measures that ensure the functioning of subsystems.” Shevchenko V.A. [5] link organizational and economic provision to the process and emphasizes that this is a separate component of management.
According to the research carried out and the following definitions of the essence of “organizational and economic provision”, it should be noted that in practically all the above-mentioned explanations in various contexts, the keyword “methods” is also found.

Thus, Table 2 shows the comparison of keywords in defining the definition of “organizational and economic provision”.

On the basis of the analysis of the keywords of the definition of “organizational and economic provision” (Table 2), the following conclusions can be drawn: most often the researchers use the phrase (27% of the authors analyzed) “a complex of principles, forms, methods and instruments” and “system”. All other keywords are repeated almost in the same ratio.

Thirdly, on the basis of the above analysis of “organizational and economic provision” category we can note that: organizational provision involves the formation and improvement of organizational structures of management of innovative component of enterprises, and economic provision includes the development of norms, standards and incentives and other management instruments to achieve the set goal.

Fourthly, on the basis of our study of “organizational and economic provision of management of the innovative component of the enterprise” category, the definition was clarified. In general, the organizational and economic provision of management of the innovation component of the enterprise is a set of organizational and economic methods, processes and management instruments that are considered in the complex as a system for providing support and includes the development of functional subsystems for timely response to changes in the external and internal environment in order to increase efficiency of innovations management in accordance with the goals set.

Fifth, according to the analyzed approaches to the essence of “organizational and economic mechanism”, the following conclusions were made:

Since there is no clear definition in the category of “organizational and economic mechanism” in the economic literature [2,4,5,15 - 22], the approaches to the interpretation of organizational and economic mechanism were generalized. Initially, the concept of the mechanism was considered.

Fedorenko M.S., Fedulova L.I. [15] interpret the very mechanism of management as “a complex of techniques, methods, instruments of influence on the system”. According to the electronic resource, the management mechanism consists of “principles and tasks of management, methods, forms and instruments of management and organizational structure”.

Turylo A.A. [16] considers that the mechanism in general is “a tool that specifies, idealizes, objectively coordinates all elements and actions in the process of enterprise management.”

Shevchenko V.A. emphasizes that the mechanism is “a system, a complex of elements that interact with each other and form certain integrity” [5].
electronic resource it is believed that the management mechanism includes the following components: principles and tasks of management, methods, forms and instruments of management, the organizational structure of enterprise management and its personnel, information and methods of its processing [17].

Table 2

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>Trofymchuk V.O.</td>
<td>System (complex) of levers</td>
</tr>
<tr>
<td>2</td>
<td>Yakubenko Yu.L.</td>
<td>The main factors of production</td>
</tr>
<tr>
<td>3</td>
<td>Yakubenko Yu.L.</td>
<td>Measures</td>
</tr>
<tr>
<td>4</td>
<td>Dubravina L.I.</td>
<td>Sequence of cause and effect relationship</td>
</tr>
<tr>
<td>5</td>
<td>Matrosova L.M.</td>
<td>Principles, functions, tools, factors and management tools.</td>
</tr>
<tr>
<td>6</td>
<td>The Great Encyclopedia</td>
<td>Complex of economic factors</td>
</tr>
<tr>
<td>8</td>
<td>1. Melnykova M.V. 2.Radionova N.Y. 3.Voloshchuk L.O., Kirsanova V.V., Filyppova S.V.</td>
<td>Functioning of subsystems to create organizational and economic conditions (combination of subsystems)</td>
</tr>
<tr>
<td>9</td>
<td>Melnykova M.V.</td>
<td>Systematization of approaches to the determination of patterns and methods of formation</td>
</tr>
<tr>
<td>10</td>
<td>1. Melnykova M.V. 2. The Great Encyclopedia</td>
<td>Formation of organizational structure</td>
</tr>
<tr>
<td>11</td>
<td>1. Filyppova S.V. Kovtunenko K.K.</td>
<td>Combines virtual and physical organizational mechanisms.</td>
</tr>
<tr>
<td>12</td>
<td>1. Filyppova S.V. Kovtunenko K.K.</td>
<td>Innovation process in full: from development to commercialization.</td>
</tr>
<tr>
<td>13</td>
<td>The Great Encyclopedia</td>
<td>One of the main components of the system basis</td>
</tr>
<tr>
<td>15</td>
<td>Shevchenko V.A.</td>
<td>Component of the management, process</td>
</tr>
<tr>
<td>16</td>
<td>Voloshchuk L.O., Kirsanova V.V., Filyppova S.V.</td>
<td>Mechanism</td>
</tr>
<tr>
<td>17</td>
<td>Simenko I.V.</td>
<td>The complex of measures</td>
</tr>
<tr>
<td>18</td>
<td>Simenko I.V.</td>
<td>Creation of conditions</td>
</tr>
</tbody>
</table>

* Compiled by the author based on [1-6]
<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fedorenko M.S., Fedulova L.I.</td>
<td>1. The complex of techniques, methods, instruments of influence on the system (enterprise), 2. The complex of systemic relations 3. The comprehensive system, the effective functioning of which depends on the interconnectedness and coherence of all its subsystems, 4. Comprehensive system of general management of the enterprise as a set of actions, measures</td>
</tr>
<tr>
<td>2</td>
<td>Lysenko Yu.</td>
<td>System of forming goals and incentives</td>
</tr>
<tr>
<td>3</td>
<td>Astapova H.V.</td>
<td>System of elements of organizational and economic influence on the management process</td>
</tr>
<tr>
<td>4</td>
<td>Kozachenko A.V.</td>
<td>Principle approaches to organization of knowledge management in modern enterprises</td>
</tr>
<tr>
<td>5</td>
<td>Shevchenko V.A</td>
<td>1. System of organizational and economic measures aimed at increasing the efficiency of production 2. A complex of economic and organizational levers, methods, forms and instruments of management. 3. A complex of organizational and economic methods that influence on the management system</td>
</tr>
<tr>
<td>6</td>
<td>Ostashko T.O.</td>
<td>A complex of organizational forms that provide the formation, development and improvement of the production system</td>
</tr>
<tr>
<td>7</td>
<td>Chepurko V.V.</td>
<td>The result of the system of internal and external factors that affect the functioning and development of the enterprise</td>
</tr>
<tr>
<td>8</td>
<td>Holiev M.K.</td>
<td>1. The complex of economic factors (planning, monitoring, evaluation, activity stimulation, economic responsibility). 2. The complex of organizational, managerial and economic methods and levers of influence on the results.</td>
</tr>
<tr>
<td>9</td>
<td>Sukhorukova A.</td>
<td>1. A system consisting of a complex of interconnected items (elements of the system) subjected to the influence of external and internal factors. 2. Specific organizational, economic, technical and technological measures in their interconnection and interdependence.</td>
</tr>
<tr>
<td>10</td>
<td>Yermoshenko M.M., Hanushchak-Yefimenko L.M.</td>
<td>1. The mission, complex of principles, functions, methods, instruments, organizational structure. 2. The object and subject of influence, the goals, principles which should be laid in its basis, methods, functions, organizational structure and instruments.</td>
</tr>
<tr>
<td>11</td>
<td>Yokhna M.</td>
<td>“Structured entire” of elements and relationships</td>
</tr>
<tr>
<td>12</td>
<td>Electronic source</td>
<td>1. Complex of organizational and economic levers that affect the economic and organizational parameters of the enterprise management system 2. Complex system, consisting of systems of security, functional and target system, which contains a certain complex of organizational and economic levers.</td>
</tr>
</tbody>
</table>
Thus, the concept of “management mechanism” is defined by the authors as: a complex of technologies, methods, instruments; a complex of elements; as a tool; principles, tasks of management; system.

In contrast to the category of “organizational and economic provision”, most authors associate the definition of “organizational and economic mechanism” with such keyword as “system”.

For example, Holiev M.K. in [18] emphasizes that many scientists believe that the organizational and economic mechanism is “a complex of economic factors”. The author extends this definition as “a complex of organizational - managerial and economic methods and levers of influence on the result of the enterprise’s activities”.

Yermoshenko M.M., Hanushchak-Yefimenko L.M. in [19] interpret the function category as a set of principles, functions, methods, and instruments. Fedorenko M.S., Fedulova L.I. give a similar interpretation of this category. But the authors, besides the content of the identical definition of Yermoshenko M.M., Hanushchak-Yefimenko L.M., consider the concept also from the following positions: a complex of systemic relations; complex system; component of the system of general management of the enterprise.

Turylo A.A. [16] also gives some definitions of the category of “organizational and economic mechanism” as: 1) a tool; 2) a specific instrument; 3) a specific methodical and applied aspect.

In work [4] Trofymchuk V.O. represents the meaning of the concept as a system of organizational, managerial, regulatory – legal and methodological levers of the implementation. Such keyword as “system” is also used by other authors in works
(for example, Sukhorukova A., Briukhovetska I., Yermoshenko M.M., Hanushchak-Yefimenko L.M.). In addition, some authors in [19,20] relate the organizational and economic mechanism of provision with a strategic context (for example, Trydid A., Yermoshenko M.M., Hanushchak-Yefimenko L.M. include in the interpretation of this definition the “mission” keyword).

According to the research carried out and given definitions of the essence of “organizational and economic mechanism” it should be noted that in practically all the above-mentioned explanations in different contexts the word “methods” is also found, as in “organizational and economic provision” category.

Thus, the generalization of the performed morphological research of this category is given in the form of Table 3 and Table 4.

On the basis of the analysis of the keywords of the definition of “organizational and economic mechanism” (Table 4), the following conclusions can be drawn: most often researchers use the “system” keyword (47% of the reviewed authors). The second most frequent use of word combination is “a complex of principles, forms, methods, instruments” (28% of the reviewed authors). In the third place (19%) is such word combination as “system (complex) of levers”. Compared with the analysis of keywords in the category of “organizational and economic provision”, the “system” and such word combination as “a complex of principles, forms, methods and instruments” are in the first place in the frequency of use of this definition.

Sixth, as a result of the generalization of the morphological analysis of the keywords of “system of organizational and economic provision” definition (Table 5), the following conclusions were made:

According to Shevchenko V.A. [5] the system of organizational and economic provision is formulated with subsystems of resource, legal, normative and methodical, scientific, informational, technical provision of enterprise management. Voloshchuk L. O., Kirsanova V.V., Filypova S.V. consider [2, p.48] the system as “an independent integrated system, as a subsystem of management, or as a process”. Kireitsev H.H., Hudzynskyi O. D., Pakhomova T.M. combine the categories of “mechanism” and “system” [2]. Thus, the authors interpret this definition from different points of view.

Seventh, therefore, as a result of the generalization of current approaches to the definition of the essence of “organizational and economic provision” and “organizational and economic mechanism of provision” categories, we can conclude that there is lack of clarity in the formulation of these concepts in the economic literature and features and differences between them are not distinguished. Authors interpret these definitions almost as the same.
### Table 4

**Comparison of Keywords in “Organizational and Economic Mechanism” Category**

<table>
<thead>
<tr>
<th>No.</th>
<th>Keywords</th>
<th>Author</th>
</tr>
</thead>
</table>
| 1   | System (complex) of levers                                               | 1. Trofymchuk V.O.  
2. Holiev M.K.  
3. Electronic source  
4. Shevchenko V.A. |
| 2   | Measures                                                                 | 1. Sukhorukova A.                                                      |
| 3   | Complex of system relations                                               | 1. Fedorenko M.S., Fedulova L.I.                                       |
| 4   | Complex of economic factors                                               | 1. Holiev M.K.                                                        |
| 5   | Complex of forms, methods, instruments                                    | 1. Holiev M.K.  
2. Yermoshenko M.M.  
3. Hanushchak-Yefimenko L.M.  
4. Fedorenko M.S.  
5. Fedulova L.I.  
6. Shevchenko V.A.  
7. Trydid A.  
8. Electronic source. |
| 6   | General management system                                                | 1. Fedorenko M.S., Fedulova L.I.                                       |
| 7   | Principle approaches to management organization                           | 1. Kozachenko A.V.                                                    |
| 8   | Complex of organizational forms                                           | 1. Hrynko T.V.                                                       |
| 9   | Complex of organizational and economic methods                            | 1. Shevchenko V.A.                                                  |
| 10  | Effect of the system                                                     | 1. Chepurko V.V.                                                     |
| 11  | System                                                                    | 1. Briukhovetska I.,  
2. Sukhorukova A.  
3. Yokhna M.  
4. Hanushchak-Yefimenko L.M.  
5. Electronic source  
6. Fedorenko M.S.  
7. Fedulova L.I.  
8. Lysenko Yu.  
9. Shevchenko V.A.  
10. Astapova H.V.  
11. Voloshchuk L.O., Kirsanova V.V., Filyppova S.V. |
| 12  | Mission……..                                                              | 1. Trydid A.,  
2. Yermoshenko M.M., Hanushchak-Yefimenko L.M. |
| 13  | Component of management, process                                         | 1. Shevchenko V.A.                                                  |
| 14  | Compliance with legal regulations                                         | 1. Lenskyi E.                                                       |
| 15  | A tool                                                                    | 1. Turylo A.A.                                                       |
| 16  | Specific methodical and applied aspect                                    | 1. Turylo A.A.                                                       |
| 17  | Specific instrument                                                       | 1. Turylo A.A.                                                       |
| 18  | Management subsystem                                                      | 1. Voloshchuk L.O., Kirsanova V.V., Filyppova S.V.                   |
| 19  | Complex of functions                                                      | 1. Voloshchuk L.O., Kirsanova V.V., Filyppova S.V.                   |

*Compiled by the author based on [2,4,5,15 - 21]*
Table 5

Morphological Analysis of the Category of “System of Organizational and Economic Provision” in the Works of Modern Scientists*

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shevchenko V.A.</td>
<td>It is formed out of resource, legal, normative and methodical, scientific, information, technical provision of the enterprise management.</td>
</tr>
</tbody>
</table>
| 2   | Voloshchuk L.O., Kirsanova V.V., Filypova S.V. | 1. Individually integrated system, as a subsystem of management, or as a process.  
2. It shows the main purpose of functioning and the need for system interaction between the components of management subsystems. |
| 3   | Electronic source | It consists of subsystems of legal, resource, normative and methodical, scientific, technical, and information provision of the enterprise management. |
| 4   | Simenko I.V. | Organized (integrated) complex of elements and their relations, forming a united entire for the general goal of its existence. |
| 5   | Fedulova V.H., Bezus P.I. (p.42) | Certain organization of relations of innovation of elements that are in a state of inextricable unity with the environment and show their integrity, entering into the necessary relations with it. |
| 6   | Voloshchuk L.O., Kirsanova V.V., Filypova S.V. | The system is a mechanism. They combine two concepts: “system” and “mechanism”. |

Compiled by the author based on [1,2,5, 15,17]

Voloshchuk L.O., Kirsanova V.V., Filypova S.V. [2] emphasize that the provision, system and mechanism are “ensuring the management system for the adoption of sound and effective managerial decisions. In their view, all three categories of “have synonymous content”. Summarizing the morphological analysis of the definitions of “organizational and economic provision, “organizational and economic mechanism” and “system of organizational and economic provision” as a result of comparison of their keywords, it should be emphasized that these categories have practically the same keywords.

Voloshchuk L.O., Kirsanova V.V., Filypova S.V. suppose that these terms should have their own peculiarities and different essence and content. The authors emphasize that any type of provision has “signs of the system: object, subject, elements, connections, in particular, reverse, boundaries and the environment” [2, p.48].

Therefore, differences of organizational and economic provision from the organizational and economic mechanism and the system of organizational and economic provision were defined. First, the concept of “organizational and economic provision” is much broader than “organizational and economic mechanism”. There is a mechanism inside the provision. Secondly, in terms of the system: the system approach is wider than the mechanism itself. Provision is wider than system and mechanism.

Conclusions. The proposed conceptual ideas for the management provision of
the innovative component of the enterprise contain the following scientific results: 1) the conceptual principles of construction of the organizational and economic mechanism are substantiated; 2) the theoretical positions regarding the categorical apparatus of the organizational and economic mechanism are agreed; 3) the components of organizational and economic provision and their interconnections in the system of the mechanism are substantiated; 4) a set of instruments for organizational and economic provision of management of the innovative component of the enterprise is defined.

References:


10. Melnykova, M.V. (2013). On organizational and economic provision of


MARKETING MANAGEMENT OF BUILDING ENTERPRISES

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Kiev National University of Construction and Architecture, Kiev, Ukraine,
Nataliia Lialina,
Doctor of technical sciences, Ph.D., professor,
Kiev National University of Construction and Architecture Kiev, Ukraine,
Olha Yudicheva,
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Kiev National University of Construction and Architecture, Kiev, Ukraine,
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Candidate of economic sciences, Associate Professor,
Kiev National University of trade and economics, Kiev, Ukraine,

Market interactions are generalizing, extending to all economic spheres and regions of the country; penetrate into all parts of the industrial-economic system of the state. Enterprise - a complex social-economic production system is the primary element of the country’s production system. One of the significant characteristics of the enterprise as a production system, the binding condition for its functioning is the interrelation with the nearest market subject. Interaction between market subjects in the theory of marketing management consists of two parts: rivalry and cooperation, in line with two competing marketing paradigms - the conflict and the paradigm of relationships, reflected in the concept of modern marketing management, focused on the partnership approach.

Marketing is a management function that seeks to increase a target market, to build long-term relationships, to satisfy clients, to ensure the desired profitability, and to strengthen competitive advantage [Arditi, Polat and Makinde, 2008]. Although marketing in the industrial and service sector is a well-known discipline, in the construction industry it is still misunderstood. This is reflected by the little scientific research and literature produced on this topic [Yisa, Ndekugri, and Ambrose, 1995]. It is difficult to define the “product” in the construction industry; it is even more difficult to define its marketing [Preece, Moodley, Smith and Collar, 2003].

The paradigm of relations is reflected in the modern concept of marketing management, focused on the partnership approach. Most scientists believe that the concept of affiliate marketing management does not deny the concept of traditional management. The progressiveness of affiliate marketing management is asserted by the fact that products increasingly become standardized, and services are unified, leading to duplicate marketing decisions. Therefore, the only way to keep a consumer is to individualize relationships with him, which is possible on the basis of the development of long-term partner interaction. With the development of computer technologies that allow to personify a large number of consumers, it
became possible to apply a partnership approach for companies operating on the consumer market. In spite of the differences in these markets, there is a common thing, which unites them - relations between people arising from the exchange of values.

The association of market subjects in the process of modern management, scientists call differently: F. Kotler gives the name «marketing system of interaction» [Kotler, 1999], T. Krem introduces the term «union of mutual perfection» [Krem, 2003]. J. Gordon uses the concept of «chain of partnership relations» [Gordon, 2001]. T. Krem although uses the term «union of mutual perfection», but for its characteristics comes from the term «system». The scientist wrote: «The company is the object of the system, and the system is the environment for work and the platform for building relations» [Krem, 2003]. The phrase «chain of partnership relations» introduced by J. Gordon can be used to demonstrate the order of communication between market subjects. But this approach is more suitable for illustrating logistical connections. Within the framework of management, all construction industry enterprises are involved in the process of creating value, acting simultaneously and jointly as a single system of management of construction industry enterprises. The most successful is the concept of «marketing system of interaction,» used by F. Kotler. However, marketing is an integral part of modern management (marketing management), which determines the expediency of using the laconic concept of «management system».

The system of management of the enterprises of the building industry (SM) is an integral entity, representing the unity of naturally located elements that are in mutual communication. This definition can serve to understand the general nature of the management system of the construction industry. R. Acoff asserts that the management system satisfies three conditions: «... 1) the behavior of each element affects the behavior of the whole; 2) behavior of elements and their influence on the whole interdependent; 3) the elements of the system are connected in such a way that the formation of independent subgroups is impossible «[Acoff, 2001]. «Significant properties of the system as a whole arise from interaction, and not from their actions separately from each other» [Acoff, 2001]. This opinion is reinforced by T. Krem, who points out that «without active support of each part of the system, customers will be at risk and they may feel uncertainty that can put relations under attack» [Acoff, 2002]. Tourist service is the result of the activity of several construction industry enterprises, which is embodied in a concrete total value for the client. This leads to a large degree of interdependence between the enterprises in the construction industry, the need for consistency of market behavior and the formation of the process and structure of inter-organizational management. Formation of SM of construction industry enterprises involves the initiation of this process by the enterprise integrator, regardless of its place in the chain of creation of the value of the tourist service.

Every enterprise in the chain of creating the value of tourism services creates
some influence on the process of forming a management system, characterized by the degree of interest in cooperation. The analysis of the links between the elements of the SM gives a complete picture of the system and its properties. Not knowing the links between the elements, the positive ones, or the negative ones, and, finally, how strong these connections are, we do not actually know anything about the system as a whole. In addition to the indicators of direct and reverse impact (one-way indicators), it is possible to separate the two-way indicators, that is, the indicators of mutual relations that characterize the level of the partnership approach of both parties, characterized by mutual interest in cooperation and mutual support. Calculation of the indicator of mutual interest in the formation of SM construction industry companies is proposed to implement the formula 1:

\[
L_{mi} = q_1 \cdot L_{mim} + q_2 \cdot L_{mic} + q_3 \cdot L_{mip} + q_4 \cdot L_{mico}
\]

where \( L_{mi} \) is an indicator of mutual interest

\( L_{mim} \) - an indicator of mutual interest in cooperation in the interaction between the integrator and intermediaries;

\( L_{mic} \) - an indicator of mutual interest in cooperation in the system of interaction of integrator with consumers;

\( L_{mip} \) - an indicator of mutual interest in cooperation in the system of interaction between the integrator and suppliers;

\( L_{mico} \) - an indicator of mutual interest in cooperation in the system of interaction between the integrator and competitors;

\( q_1, q_2, q_3, q_4 \) - indicators of the significance of the corresponding systems.

According to a similar approach, the indicator of mutual support of SM of construction industry enterprises is calculated. Indicators of mutual interest and mutual support are single indicators of a complex indicator (indicator of partnership relations). The indicator of partner relations is proposed to calculate as the average arithmetic indicators of mutual interest in cooperation and mutual support of market actors (formula 2):

\[
C_{lpr} = \frac{L_{mi} + L_{ms}}{2}
\]

where \( C_{lpr} \) – complex indicator of partnership relations in the micro-enterprise SM-enterprise;

\( L_{mi} \) – Indicator of mutual interest in cooperation of market actors;

\( L_{ms} \) – an indicator of mutual support between subjects of the micro-environment.

In addition to the external microenvironment, the process of SM formation is also influenced by the internal environment, which is a subsystem of SM of construction industry enterprises. The internal environment of enterprises, as well as the external is characterized by competition, which in case of certain efforts can
be transformed into co-operation. Ukrainian scientist J. Poplavskaya writes: “If the divisions of a certain enterprise do not co-operate with each other ... then in each of them the determination to succeed is its own substructure. As a result, mental encapsulation (separation) from other organizational groups of the enterprise very quickly arises, and a certain «selfish zone» is formed [Poplavskaya, 2001]. In the process of formation of SM of construction industry enterprises, the horizontal integration of functional services of enterprises - entities of SM, that is, inter-firm marketing management, becomes of particular importance.

Complex indicators of the influence of the internal environment of enterprises on the process of forming SM enterprises in the construction industry are calculated by the formula 3:

$$CL_{iej} = \sum_{i=1}^{n} m_i \cdot k_{ij}$$

where $CL_{iej}$ – a complex indicator of the influence of the internal environment of the j-th enterprise on the formation of SM construction industry enterprises;

$m_i$ – coefficient of weight of each of the structural divisions of the enterprise for the formation of SM of construction industry enterprises;

$k_{ij}$ – an estimation of the one-off indicator characterizing the influence of a certain structural unit of the j-th enterprise on the process of formation of SM of enterprises of the building industry;

$n$ - the number of structural subdivisions of the enterprise being evaluated.

The calculation of the integral indicator of the influence of enterprises on the process of forming a system of management of enterprises in the construction industry is carried out according to the formula 4:

$$IL_{vs} = m \cdot CL_{iej}$$

where $IL_{vs}$ – an integral indicator of the impact of enterprises on the formation of SM;

$CL_{iej}$ – a complex indicator of the influence of the j-th enterprise on the formation of SM construction industry enterprises;

$m$ – the importance of each of the enterprises in the process of SM formation in the construction industry;

$n$ – the number of enterprises participating in the process of forming SM of construction industry enterprises.

PEST-factors play an important role in the process of forming SM companies in the construction industry. If an enterprise-integrator seeks to optimally combine SM elements, then the scope of management control can be expanded, making the company take a more advantageous place in the market environment. Acting on the market, as a single system, representing a more significant market power
than the capabilities of a single enterprise, SM industry actors can more or less resist, and in some cases even affect some PEST factors. In order to characterize the general influence of PEST - factors on the process of forming SM companies in the construction industry, it is necessary to calculate the complex indicator of KP PEST:

$$ CL \text{PEST} = \sum m_i \cdot P_i $$

where CL PEST is a complex indicator of PEST influence – factors on the process of SM formation in the construction industry;

$m_i$ – coefficient of significance of the factor of the macro environment for the process of formation SM of construction industry enterprises;

$P_i$ is an indicator of the influence of the i-th factor of the macro-environment for the formation of SM enterprises in the construction industry.

Determination of the proposed indicators allows us to make a conclusion about the impact of the environment on the process of formation of SM construction industry enterprises.

P. Cheverton uses the concept of a «strategic supplier,» and writes: «... the definition of a strategic supplier ... means such a supplier who has been able to exert a positive influence on the very essence of the business of his client» [Cheverton, 2004]. Ukrainian scientist Y. Deineka writes that the essence of modern restructuring «... consists not only in the change of internal organizational processes, but in changing the interaction with suppliers, consumers, intermediaries, etc.» [Deineka, 2005]. The restructuring of the existing system of relationships is realized through an optimal combination of outsourcing and outsourcing strategies. J. Haywood considers outsourcing as an action «to transfer the internal unit or units of the enterprise and all its associated assets into the organization of the supplier ...» [Haywood, 2002].

The market for construction goods is expedient to consider as a network of entrepreneurs of the construction industry, which relate to various sectors of the economy. These enterprises work closely together and create sustainable systems. The partnership approach fully corresponds to the specifics of the functioning of the construction industry and is an effective basis for the innovative component embodied in the process of forming an interorganizational management system. Factors influencing the process of forming a system of management of enterprises in the construction industry system from the structuring of the environment of the enterprise integrator of the management system of enterprises of the tourism industry. The proposed indicators of the environmental impact on the process of forming a management system are effective tools for innovation activities of construction industry enterprises, oriented to the inter-organizational concept of partnership relationships.

In the future, the development of diagnostics and identification of risks in the process of formation of the management system of enterprises of the building
industry, taking into account the orientation towards the conceptual principles of the partnership approach, is planned.

References:


POTENTIAL IN EXTENDING VERTICAL NETWORK IN CHINESE MUSHROOM VERTICUM

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Sandor Gaspar,
Fanni Ildiko Fodor,
Bernadett Almadi, Assistant Lecturer,
Szent István University, Hungary

supported through the new national excellence program of the ministry of human capacities

Literature review. Recently, as the development of economics, people pay more and more attention on their life quality. Mushroom, treated as one of the healthy food in the world, plays a key role in people’s daily life, especially in China. China
has a long history of mushroom, and has the richest types of mushrooms. As the technology develops, China is the most important role in the world mushroom market.

A mushroom, or toadstool, is the fleshy, spore-bearing fruiting body of a fungus, typically produced above ground on soil or on its food source. Mushrooms are the highest dietary source for the unique sulfur-containing antioxidant ergothioneine (KALARAS, et al. 2017). There are many methods to storage mushrooms, however, drying is a common method of extending mushroom stem storage (Li-na, et al. 2017). There are also other methods to storage mushrooms, such as canned mushrooms, frozen mushrooms, etc. Unlike plants, mushrooms cannot synthesize their own food from the sun’s energy, mushrooms therefore had to develop special methods of living: symbiosis, saprophytism and parasitism. China has a very long history of mushroom, however, the artificial cultivation of mushroom started from 1970s with a history of more than 40 years. Now the output of Chinese mushrooms, which is almost 70% of the world total outputs, is the largest in the world. China is also one of the largest countries exporting mushrooms. However, there are still some problems which affect Chinese mushroom export. This paper wants to research on the problems of Chinese mushroom export and to give solutions to these problems.

<table>
<thead>
<tr>
<th>Research methodology in this paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research purpose</td>
</tr>
<tr>
<td>Data collection</td>
</tr>
<tr>
<td>Data processing</td>
</tr>
<tr>
<td>Problem solving</td>
</tr>
</tbody>
</table>

Material and methods. Research methodology is essential to a research project or paper. Methodology is the systematic, theoretical analysis of the methods applied to a field of study.

Secondary data is relatively easy to get and to use, so it is important for researcher especially for the beginners. The use of secondary data, data that has been gathered for another purpose but may be suitable for research, is growing in relevance and importance in purchasing and supply management research. Ellram (2016) Though secondary data analyses of large data sets may reduce logistical and financial barriers required to perform significant and innovative work, such research requires specialized skills in data handling and statistical techniques as well as thorough and detailed knowledge of the data sources being used. Cole et. al. (2017) In order to research on the problems that Chinese mushroom sectors face when they are doing export, this paper uses a lot of secondary data.

Descriptive analysis is the best way to describe the changing tendency of data, and you can also use descriptive analysis to make some predictions. And a purely
descriptive approach is an evasion of social and political problems (Gee 2014). When describing the real situations of Chinese mushroom sector export, this paper uses descriptive analysis several times.

Gravity model is widely used in the international trade market, and this paper uses gravity model to solve the problems that Chinese mushroom sectors face. In order make sure that the problems can be solved, this paper gives a “RAIS” policy to guarantee.

The current situation of Chinese mushroom export. Mushroom export is decreasing.

Table 2

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity (ton)</th>
<th>Amount (Thousand dollars)</th>
<th>Quantity YOY (%)</th>
<th>Amount YOY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20094</td>
<td>30,132</td>
<td>-6.6</td>
<td>-20.1</td>
</tr>
<tr>
<td>2</td>
<td>17238</td>
<td>26,097</td>
<td>10.5</td>
<td>8.9</td>
</tr>
<tr>
<td>3</td>
<td>25787</td>
<td>38,826</td>
<td>2.2</td>
<td>-5.8</td>
</tr>
<tr>
<td>4</td>
<td>19936</td>
<td>31,638</td>
<td>-6.9</td>
<td>-13.3</td>
</tr>
<tr>
<td>5</td>
<td>18248</td>
<td>30,992</td>
<td>-14.7</td>
<td>-23.7</td>
</tr>
<tr>
<td>6</td>
<td>18046</td>
<td>29,676</td>
<td>-2.2</td>
<td>-13.1</td>
</tr>
</tbody>
</table>

Source: authors’ own compilation

From table 3, we can see very clearly that it does not matter the quantity or the amount, mushroom export is decreasing compared with the same period last year. For instance, the quantity of January this year decreased 6.6% which 20094 tons compared with January last year. And the amount is decreasing even more because of the decreasing of export prices. For example, the amount of mushroom export in May this year is 30992 thousand us dollars, which is decreasing by 23.7% compared with May last year.

Mushroom price is decreasing. Figure 1 is telling us the tendency of mushroom price in recent month. The whole tendency of mushroom price is downward. From this we can make a prediction that the price of mushroom will be toward downside. Almost one month ago, mushroom price is still more than 10 yuan, but now mushroom price is around 7 yuan, which means that almost 30% of price has been reduced. This is really a big problem in Chinese mushroom market and this also effect Chinese mushroom export.

The reasons for current Chinese mushroom export situations. The figures in table 4 tell us a truth that the quantity of mushroom in the past 15 years has been increased double from 4.21 million tons to almost 10 million tons. As people realize the importance of mushroom in daily life, more and more mushroom research institutions and companies are set up in the world across all the countries. Although the demand for mushroom is increasing, but the supply of mushroom globally is increasing even faster than demand. That is recently, the price of Chinese mushroom
is decreasing and the export quantity and amount is also decreasing.

![Fig. 1. Recent mushroom price (Chinese Yuan)](source)

*Source: authors’ own compilation*

**Table 4**

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity (million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>4.21</td>
</tr>
<tr>
<td>2001</td>
<td>4.53</td>
</tr>
<tr>
<td>2002</td>
<td>4.73</td>
</tr>
<tr>
<td>2003</td>
<td>4.91</td>
</tr>
<tr>
<td>2004</td>
<td>5.28</td>
</tr>
<tr>
<td>2005</td>
<td>5.29</td>
</tr>
<tr>
<td>2006</td>
<td>5.55</td>
</tr>
<tr>
<td>2007</td>
<td>5.99</td>
</tr>
<tr>
<td>2008</td>
<td>6.82</td>
</tr>
<tr>
<td>2009</td>
<td>7.21</td>
</tr>
<tr>
<td>2010</td>
<td>7.39</td>
</tr>
<tr>
<td>2011</td>
<td>8.43</td>
</tr>
<tr>
<td>2012</td>
<td>9.59</td>
</tr>
<tr>
<td>2013</td>
<td>9.93</td>
</tr>
<tr>
<td>2014</td>
<td>9.99</td>
</tr>
</tbody>
</table>

*Source: authors’ own compilation*
Gravity model of Chinese mushroom export. In the global market, gravity model is very famous. The gravity model of international trade in international economics, similar to other gravity models in social science, predicts bilateral trade flows based on the economic sizes (often using GDP measurements) and distance between two units. This model regards that there is a positive relation between trade amount and the economic quantity of two nations, and there is a negative relation between trade amount and the distance of two nations. The formula of gravity model is following.

\[ F_{ij} = G \frac{M_i^2 \cdot M_j^2}{D_{ij}^\alpha} \]

where:
- \( F_{ij} \) : product amount exported from i nation to j nation
- \( M_i \) : economic quantity of i nation (for instance GDP)
- \( M_j \) : economic quantity of j nation (for instance GDP)
- \( D_{ij} \) : distance between i nation and j nation
- \( G, \partial_1, \partial_2, \partial_3 \) are constant

To evaluate the logarithm of both sides of formula 1, we can get a new formula 2.

\[ \ln F_{ij} = \partial_0 + \partial_1 M_i + \partial_2 M_j - \partial_3 D_{ij} + \varepsilon \]

where:
- \( \partial_0, \partial_1, \partial_2, \partial_3 \) are coefficients of regression, and \( \varepsilon \) is error term.

This paper introduces this model to talk about Chinese mushroom export. However, in order to reflect the real situation of Chinese mushroom export, we need explanatory variables and one explained variable. This paper uses the quantity and amount of Chinese mushroom export, the GDP and population of export-aim nation and the distance between two nations as explanatory variables, and uses mushroom export quantity as explained variable. All the detail can be seen in the following table 5.

<table>
<thead>
<tr>
<th>The explanatory and explained variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: authors ‘own compilation
Now we use A country as a research sample to discuss the gravity model. We can get the data of Chinese mushroom export quantity and other data in Chinese statistical bureau website. And we can use SPSS to do linear regression analysis. The sample result is show in following table 6.

Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>198.6261</td>
<td>10.65432</td>
<td>15.43216</td>
<td>0.0000</td>
</tr>
<tr>
<td>Mi</td>
<td>56.76543</td>
<td>3.657431</td>
<td>15.76542</td>
<td>0.0000</td>
</tr>
<tr>
<td>Mj</td>
<td>21.87346</td>
<td>3.875432</td>
<td>1.875654</td>
<td>0.0054</td>
</tr>
<tr>
<td>Dij</td>
<td>0.876951</td>
<td>0.087654</td>
<td>2.985735</td>
<td>0.0065</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.871026</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.862337</td>
<td>S.D. dependent var</td>
<td>1.107645</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.193501</td>
<td>Akaike info criterion</td>
<td>-0.123451</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.243761</td>
<td>Schwarz criterion</td>
<td>-0.214532</td>
<td></td>
</tr>
<tr>
<td>Log likehood</td>
<td>6.010273</td>
<td>F-statistic</td>
<td>132.3345</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>2.318734</td>
<td>Prob(F-statistic)</td>
<td>0.000001</td>
<td></td>
</tr>
</tbody>
</table>

Source: authors 'own compilation

We can get the regression formula from table 6. The formula is following.

\[ \ln F_{ij} = 198.6261 + 56.76543M_i + 21.87346M_j - 0.876951D_{ij} \]

Summary. This paper gives a “RAIS” solution to solve the problems of Chinese mushroom export. RAIS means “Risk management”, “Adjustment”, “Innovation” and” Standard”. As shown in the following figure 2.

China should have a stronger risk management ability. In the international market, risk is exiting everywhere. Any country wants to get profit in international market should have enough ability to deal with the risk. Now for China and Chinese mushroom sectors, they will meet more risks and challenges from all the other nations in the world. All the risks include tangible and intangible risks. So China government should set up a early warning mechanism for mushroom sectors to avoid as many risks as possible.

China should adjust its mushroom industry. There are many types of mushrooms worldwide, so China should not export all types of mushrooms and it should focus on some important mushroom for China, for example, lucid ganoderma. Now days, in international market, quantity is not the key point to get revenue and profit, so China mushroom sectors should adjust from quantity to quality. Quality management of mushroom is becoming key point for Chinese mushroom sectors.
China should pay more attention to mushroom innovation. Innovation is very important for every company in the world. For Chinese mushroom sectors, they should pay more attention to innovation on the storage of mushroom, the types of products from mushroom. Even they can innovate in mushroom business model. China should build its own mushroom standards.

Now, in the mushroom industry, all the standards of mushroom are built by foreign countries. There are no Chinese mushroom standards. It is very important to build Chinese own mushroom standards to protect Chinese mushroom sectors’ interests in the world mushroom market and mushroom competition.

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FUNCTIONAL FEATURES OF ORGANIZATIONAL AND MANAGERIAL MECHANISM IN THE FORMATION OF THE STRUCTURE OF MANAGEMENT OF Economic Security of the Enterprise

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Zulfiia Mamedova, postgraduate student, Poltava State Agrarian Academy, Poltava, Ukraine

Economic security is increasing the interest of enterprises facing difficulties in implementing and organizing fundamentally new approaches to managing enterprises in market conditions.

According to S. Ilyashenko [5], under economic safety, the enterprise understands the state of effective use of its resources and existing market opportunities, which enable business entities to prevent internal and external threats, to ensure long-term survival and sustainable development in the market in accordance with the chosen mission. He highlights ten components: financial, market, interface, intellectual, personnel, technological, legal, environmental, information and power.

A. Soloviev highlights the following areas of formation of the concept of economic security of the enterprise: legal, organizational and managerial, information-analytical and technical [8].

Security as a result of management activities to eliminate threats has complex, plural objectivity: in one aspect it is the ability of the system to prevent causing possible harm to the interests of the individual, society and the state; in the other is the manifestation of the security of their interests, in the third - the manifestation of the security measures.

As one of the mandatory characteristics of the enterprise development, which ensures its positive direction and efficiency, we determine economic security, then
in the process of managing the safe development of the enterprise it is necessary to create and maintain a system of economic security - a complex continuous provision of favorable conditions for the enterprise and the target use its resources through the implementation of the security service (or the organization responsible for managing the safe development of the enterprise) in interaction together with other parts of the organizational, economic and legal measures to prevent and neutralize internal and external threats and risks.

Therefore, the system of economic security of an enterprise should be considered based on the basic system principles, which essentially differ in essence and content, which are disclosed in various works of domestic and foreign scientists.

Thus, Irochkin V.I. defines the security system as an organized set of special bodies, services, means, methods, measures that protect the vital interests of the individual, enterprise, state from internal and external threats [2, p. 9].

The system of economic security of an enterprise can not be the same for all. It is individual for each enterprise, because it depends on the level of development and structure of its production activities, the effectiveness of its use, personnel qualifications, the state of the environment, in particular the competitive environment, the riskiness of production.

Such authors Ivanyuta T. M., Zaichychsky A. O. [6, p. 21], Donets L.I., Vaschenko N.V. [3, p. 52] highlight some of the most important principles, which include: complexity or systemicity; priority of prevention measures; continuity; legality; planning; frugality; interaction; competence; the combination of publicity and confidentiality. Kamlik M. I. in addition to the above principles of the system of economic security of the enterprise, highlights the principle of planning and full control of the measures of the system of economic security to the management of the subject of entrepreneurial activity. In the opinion of A.L. Berlach, the principles on which the security system of the enterprise is being built are reflected in legally established principles, which can be conditionally divided into basic, that is, general and special. The basic principles of the author include: the legality of legal equality before the law of all entities security company; protection of interests of subjects of security; freedom to provide security to the company; systematic; continuity; mutual responsibility of the person; observance of the balance of vital interests of a person, society, state; observance of the rights and freedoms of individuals and legal entities; integration with international security systems [1, p. 26]. The above principles reflect the features of the principles on which the legal basis for the formation of the enterprise system, and not its economic security, should be based.

Summarizing the analysis of different points of view of authors, in relation to the above mentioned principles, we propose to specify them on the basic functioning of the management system within the concept of safe operation of the enterprise, namely: unconditional satisfaction of both the general needs of the enterprise and its workers; the flexibility of the structure of economic potential, ensuring its stable functioning in the present and safe activities in the future; constant threat
waiting; the ability of the management structure to quickly respond to threats and
effectively use existing capabilities; effective information provision of processes of
planning and use of enterprise strategies; awareness of society about the importance
of creating favorable conditions for the implementation of enterprise measures to
maintain their own economic security.

In this context, it is necessary to distinguish the main functional objectives of the
enterprise’s economic security: ensuring high financial efficiency of work, financial
stability and independence of the enterprise; ensuring technological independence,
achieving high competitiveness of the business entity; achievement of management
efficiency, optimal organizational structure of enterprise management; minimizing
the destructive effect of the results of industrial and economic activity on the state
of the environment; high-quality legal protection of all aspects of the enterprise’s
activity; ensuring information field protection, commercial secrecy, achieving the
necessary level of information support of all departments and departments of the
organization; effective organization of the security of the company’s personnel, its
capital and property, as well as commercial interests.

Consequently, the system of economic security, in our opinion, serves as
a result of the further development of management relations, the filling of their
functions with a new extended content. It is at the junction of these functions that
a new function of management arises - ensuring the safety of social and economic
systems, which largely integrates in itself the certain development of the content of
these functions. In this new function, apparently, the most pronounced is the anti-
entropy nature of governance.

The level of development of the function as an element of the management
mechanism is determined by the effectiveness of its implementation. In addition,
it should be emphasized that the mechanism of creating economic security should
be based on the internal system characteristics of the enterprise, that is, the socio-
economic system itself should include «built-in» mechanisms for preventing
external and internal threats.

By the source of the threat, the security of the enterprise can be divided into
internal and external.

External threats in the field of entrepreneurship include: the work of special
services of foreign states in obtaining information on economic processes in the
field of entrepreneurship with the implementation of anticompetitive measures;
the work of the security services of business entities, both domestic and foreign,
suppressed by competitors, takeover of markets of sales or property of competitors;
illegal activity of organized criminal groups and individuals in order to seize the
property of business entities.

Internal threats to business security include: illegal or other negative actions
of the personnel of the subject of entrepreneurial activities that threaten the
functioning and development of entrepreneurship; violation of the established mode
of protection of information with restricted access for third parties; violation of
the order of the use of technical means; other violations of the rules of the security regime, record keeping, etc., which create preconditions for the implementation of the illegal purposes of criminal elements or other interested persons; low level of personnel, organizational and legal, informational and analytical provision of management of potential risks both in the context of internal and external threats.

It should be noted that organizational and managerial mechanism of formation of the structure of economic security of the enterprise is a set of interrelated elements, which, using specific tools, based on certain principles, will ensure the prevention of negative consequences through the realization of its functions.

In the management of the system of economic security enterprises are implemented both traditional and special management functions. The traditional functions in managing the system of economic security of the enterprise include: forecasting; CONTROL; analysis; coordination; regulation; organization. The content of traditional functions in the management of the system of economic security and their implementation have particularities.

The starting data for forecasting are the results of the monitoring of the environment, the analysis of its results, the overall economic situation in the country. In forecasting, quantitative and qualitative indicators are used, and its result is the identification of trends (stable direction of the development of events), the formulation of a general description of situations in which the company may be, the probability of their formation, etc.

in the management system of economic security requires constant or periodic inspection of the state of economic security and the process of security and set the corresponding controlled parameters, namely partial - coefficient of financial independence, the share of employees on certain grounds (sex, education or work experience in the company) etc. To complex controlled parameters include the coefficient of overall solvency of an enterprise or the indicator of economic security of the enterprise.

The analysis of the management of the system of economic security of the enterprise simultaneously belongs both to the traditional and to the special functions and is carried out in a retrospective, at the current time and in the future. Prospective analysis intersects with forecasting - according to its results, data are generated for forecasting.

Coordination as a function of management of the system of economic security of the enterprise involves coordinating the actions of structural subdivisions and officials of the enterprise in ensuring economic security.

Regulation as a function of management of the system of economic security of the enterprise ensures the preservation of the processes of ensuring economic security, the implementation of actions and measures, the prevention of unwarranted deviations from the planned course of processes or the substantiation of the deviations of the correction of these processes.

The special functions in the management of the system of economic security
of the enterprise include the following: identification of threats to the economic security of the enterprise; ranking of threats to the economic security of the enterprise by various features (probability of implementation, consequences for the enterprise, etc.); assessment of the consequences of the implementation of threats; informational and analytical support for decision-making by the management of the organization [7, p.373].

Also, according to Zhivko Z.B. and Franchuk V.I. The company’s economic security system performs two main functions: preventive and preventive and operative-informational.

The preventive-preventive function is aimed at implementing a set of interrelated measures for creating an environment that ensures the safe development of the enterprise and is realized through the implementation of general safety measures in daily work and provides: organizational and legal impact on the activities of the personnel and consumers of the enterprise through the development and implementation of safety standards; selection, verification and control of personnel, development of effective personnel policies and programs for stimulating labor; protection of the enterprise: objects, money, material values, communications, equipment, goods, personnel; appraisal of premises, special equipment of some of them, registration of carriers of restricted information, protection of communications, organization of office and special case management; protection of information resources of restricted access; improvement of production technologies, introduction of protective elements in them; formation of a positive image of the enterprise; planning and providing the organization’s activities in crisis situations [4; 9, p. 248].

The operational information function is implemented through the implementation of special security measures among which it is: the formation of information resources, the organization and conduct of competitive intelligence; informational and analytical provision of decision making by the management of the organization; development and implementation of measures to counteract not fair competition, including industrial espionage; information and analytical researches of clients, partners and competitors; measures of influence on unscrupulous clients, debtors and intruders to compensate the enterprise for losses incurred from their fault .... [9, p. 250].

Thus, the system of economic security of the enterprise and the mechanism of its provision provide for solving the problems of economic security at the expense of a specially created unit - the services of economic security, with the active participation of all departments and services of the enterprise within the responsibilities assigned to the heads of structural units of security problems.

Thus, the organizational and managerial mechanism directs its effect on the organization of interrelated work on the implementation of the functional responsibilities of staff to achieve the economic security of enterprises.

The structure of this unit depends on the level of establishment of the enterprise,
an array of issues, the solution of which entrusts this service to the management of the company at one or another stage of its development.

Under the economic security service of the enterprise, it should be understood - a specialized unit that is part of its organizational structure, whose activities are aimed at creating the proper level of economic security and neutralizing the main threats that can be expected in the enterprise in the process of its production and economic activity.

The set of specific tasks facing the security service of an enterprise determines a certain set of its functions as indicated in the normative documents defining the organization of their activities, identifies specific objects that are protected from potential threats and unlawful encroachments and are as follows:

- protection of legitimate rights and interests of business entities and their employees;
- data collection, analysis, evaluation and forecasting of the operational environment and various risks in the enterprise;
- studying and testing partners, customers and competitors;
- timely detection of possible encroachments on the object or its employees from sources of external security threats;
- prevention of penetration into the object of structures of industrial espionage, criminal formations or persons with unlawful intentions;
- counteracting technical penetration of an object or its communication systems;
- protection of the object’s employees from violent attacks;
- detection, prevention of possible illegal or other negative activity of employees of the subject of entrepreneurship to the detriment of its safety;
- the preservation of material values, information with restricted access;
- search and obtaining the necessary information for making optimal managerial decisions on strategy and tactics of further entrepreneurial activity;
- physical and technical protection of buildings, structures, territories, vehicles;
- the formation in the mass media of partners and clients of a positive image of the subject of entrepreneurial activity, which should facilitate the implementation of business projects;
- Compensation for material and moral damages caused by unlawful actions of legal entities or individuals;
- organization and maintenance of the throughput and internal-object mode in premises; order of service; control over observance of the requirements of the regime by the personnel of the enterprise and partners (visitors);
- Participation in the development of basic documents (statute, rules of internal regulations, contracts, etc.) in order to reflect the requirements of organization of security and protection (commercial secrets):
- development and implementation of measures to ensure the operation of documents containing information that is commercial secret, control over the implementation of the requirements of guidance materials;
- Identification and overlapping of possible channels of leakage of confidential information, accounting and analysis of violations of the security regime by employees of the enterprise, clients and competitors;
- organization and conduct of official investigations on the facts of disclosure or loss of documents, other violations of the security of the enterprise;
- development, updating and updating of the list of information constituting commercial secret, and other normative acts regulating the order of organization of security and information protection;
- ensuring strict compliance with the requirements of regulatory documents on the protection of commercial secrets;
- organization and regular training of employees of the enterprise and security services in all areas of protection of commercial secrets;
- keeping records of safes and metal cabinets, if they allow permanent or temporary storage of confidential documents, as well as accounting and protection of special premises and technical means;
- support for contacts with law enforcement agencies and security services of neighboring enterprises (organizations) in the interests of studying the criminal situation in the region;
- control over the effectiveness of the security system.

Starting points in the organization of the company’s economic security service is that it must provide a comprehensive analysis of its internal and external environment, and at the same time it is an integral part of the internal environment of the enterprise, being an integral part of its organizational structure.

**Conclusions.** Taking into account the above, we can assert that the analysis of the enterprise’s economic security system is based on the basic system principles, which essentially differ in essence and content, disclosed in various works of domestic and foreign scientists; the main functional goals of the company’s economic security are stated; the source of the threats to the security of the enterprise is determined; The characteristic of traditional and special functions of management of the enterprise’s economic security system is given. The content of the organizational and managerial mechanism of formation of the structure of economic security of the enterprise is specified.

The presented conclusions form the subject of further investigation of the enterprise’s economic security service, optimize its composition with a clear division of powers and responsibilities of the personnel.

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FORMATION OF THE COST CENTERS FOR EFFICIENT MANAGEMENT OF AGRARIAN ENTERPRISES

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Successful management of an agrarian enterprise can take place only if information is obtained that is necessary for state analysis, decision-making and control over implementation. Lack of information makes the leaders of the agrarian enterprises rely on intuition, increasing the risk of making the wrong decision.

The system and the quality of information for making managerial decisions primarily will depend on the cost accounting system. But modern accounting and control systems are aimed primarily at external users of information and do not include a management system that takes into account the needs of all business entities [15].

Decreasing the cost level is an important task, but not the main purpose of managing the costs of the enterprise. The process of reducing costs alone may be accompanied by a decrease in the quality of manufactured products and customer
service, a refusal to produce and sell products that are in demand, but do not require significant costs. The main purpose of managing the costs of agrarian enterprises is to increase the efficiency and competitiveness of its activities [10].

There is a continuous search for the most effective and rational methods and forms of cost management in the current conditions of formation of market relations. In the cost management system, an important place is occupied by the choice of the calculation method by which the business entity (agrarian enterprise) distributes costs, analyzes their effectiveness and determines the price policy.

The functioning of agrarian enterprises depends on changes in the external and internal environment, which causes these obstacles in the process of cost management. Most agrarian enterprises combine a number of such problems (Table 1).

<table>
<thead>
<tr>
<th>Type of problem</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological</td>
<td>a significant proportion of obsolete and worn-out equipment, high capital intensity of the active part of fixed assets, incomplete utilization of production capacities.</td>
</tr>
<tr>
<td>Economic</td>
<td>there are inaccuracies in the calculation of the cost of resources, the absence of an analysis of the impact of indirect costs on financial results due to cost changes.</td>
</tr>
<tr>
<td>Account</td>
<td>the use of outdated methods of calculation of full cost of production by enterprises, the lack of interconnection of such functions as planning, analysis, accounting.</td>
</tr>
<tr>
<td>Managerial</td>
<td>lack of analysis of the existing organizational structure as an object of cost formation for optimization, low qualification level of employees.</td>
</tr>
</tbody>
</table>

The structuring proves the the fact of low level of management costs in agrarian enterprises. Therefore, in order to improve the situation, in particular, to increase the efficiency of operations and harmonization of production relations, it is necessary to improve the mechanism of cost management, including their formation and distribution, which will ensure high efficiency of economic activity, considerable dynamism of management, focus on strategic goals.

To solve problems with cost management, expediency centers become cost centers. Formation of which is carried out taking into account technological and organizational features of the agrarian enterprise. The cost centers are individual jobs, production operations that have similar characteristics, production capacity.

When forming a cost center it is advisable to take into account [4]:

1. Each created cost center, headed by a leader, should be a separate area of activity. It is created in accordance with the detailed scheme of organization of the agrarian enterprise and the list of official duties of employees. If necessary, it is advisable to make corrections to the job duties.
2. The cost center should combine the most similar working units, which determine the costs of the same nature. This allows you to determine the set of factors that affect the cost of this cost center and the choice of the distribution base of costs.

3. All costs must be charged to the cost centers. Costs in the process of their accounting are divided into regulated and unregulated. Provided that the head of the financial responsibility center has an impact on costs, then they are regulated if the costs are not subject to control, then they are not regulated [1].

The formation of cost centers contributes to:
- streamlining the cost structure;
- formation of a statement of the cost center;
- reduction of deviations of actual costs from normative;
- reduction of liability for costs incurred by specific officials and structural divisions.

The efficiency of the cost centers will depend on the content of the report, which will cover all controlled costs, grouping of reporting indicators as the rank-by-step climb (from the lower to the higher level of management), the inclusion of data that will enable the implementation of the management principle for the deviations.

The expediency of determining the cost center, from the lower level, of the individual performer, is justified by the fact that each performer is responsible for those costs, the size of which depends on him.

After creating the centers of cost of the first level, the centers of expenses of other levels (second, third, etc.) are established. Then, the cost centers of subsequent levels can be responsible for both the cost of their level and the cost of previous levels.

Accordingly, each cost center is responsible only for controlled costs. However, there is often a problem with partially controlled costs.

A cost estimate is drawn up for all cost centers that covers the costs that are controlled by the contractor or other responsible person for costs.

It is important to take into account the actual costs of all the centres for the organization of cost control. To do this, each cost center, as a rule, opens a separate analytical calculation of the cost of production, each center will assign a certain number (cost code) [5].

Direct costs are calculated according to the cost centers based on primary documents, which indicate cost cues. Indirectly characterized directly by this cost center or distributed from other centers.

All aspects of the cost management system are considered in the cost center in the following areas:
- cost planning;
- accounting and plan-fact control of expenses;
- adjustment of the cost formation process.

In turn, cost planning involves the development of cost classification, the
definition of resource cost limits (referring to the planned production volume and the need to support the optimal mode of operation of equipment, calculating the cost of costs relative to the planned cost of resources and the specified prices for them, the search for ways to save resources, creating a program of resource conservation, development of plan-cost estimates-cost planning.

Cost planning is done to reduce them. The main ways to reduce costs for improving the performance of agrarian enterprises are given in Table 2.

The next stage in cost planning is the development of norms and norms of spending resources, based on the planned tasks on agricultural production and the need for the normal functioning of technical equipment. At the same time, the emphasis should be on the binding of the standard or norm, namely, whether the cost of a resource per unit of output, per unit time of use of a resource, unit of conditional technological equipment [13].

### Table 2

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Ways to decrease</th>
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<tbody>
<tr>
<td>raw materials, materials</td>
<td>- search for suppliers that take into account the cost of delivery in the amount of raw materials and materials;</td>
</tr>
<tr>
<td></td>
<td>- search for suppliers providing free warranty repairs;</td>
</tr>
<tr>
<td></td>
<td>- procurement from the factory;</td>
</tr>
<tr>
<td></td>
<td>- preparation of preliminary estimates for the accuracy of calculations of this item of expenses.</td>
</tr>
<tr>
<td>equipment operation</td>
<td>- use of reverse leasing;</td>
</tr>
<tr>
<td></td>
<td>- timely maintenance;</td>
</tr>
<tr>
<td></td>
<td>- reduction of technological downtime;</td>
</tr>
<tr>
<td></td>
<td>- minimization of expenses during breaks, rest;</td>
</tr>
<tr>
<td></td>
<td>- sale or lease of unused equipment.</td>
</tr>
<tr>
<td>electricity</td>
<td>- use of energy saving lamps;</td>
</tr>
<tr>
<td></td>
<td>- use of energy consumption sensors.</td>
</tr>
<tr>
<td>staff</td>
<td>- control of pay for idle time;</td>
</tr>
<tr>
<td></td>
<td>- reduction of material aid payments, premiums from net profit;</td>
</tr>
<tr>
<td></td>
<td>- reduction of salary taxes due to outsourcing.</td>
</tr>
<tr>
<td>selling expenses</td>
<td>- reduction of transportation costs due to logistics companies;</td>
</tr>
<tr>
<td></td>
<td>- establishment of optimal tariff rates;</td>
</tr>
<tr>
<td></td>
<td>- automation of sales of agricultural products;</td>
</tr>
<tr>
<td></td>
<td>- close location of warehouses.</td>
</tr>
<tr>
<td>administrative</td>
<td>- reduction of representative expenses;</td>
</tr>
<tr>
<td></td>
<td>- optimization of advertising costs;</td>
</tr>
<tr>
<td></td>
<td>- reducing the cost of Internet and telephony by spending.</td>
</tr>
<tr>
<td>general production</td>
<td>- sale of products with terms of storage at reduced prices</td>
</tr>
<tr>
<td></td>
<td>- reduced costs for intermediate storage.</td>
</tr>
</tbody>
</table>

The calculation of the cost in the planned period becomes realistic, when on the
basis of the plan of production, the standards and norms of the cost of resources will receive data on the necessary resources. Therefore, using the directory of existing resource prices, it is possible to determine the cost estimate of planned costs.

However, the cost estimation that has not always been received does not always reflect the possibilities of the agrarian enterprise in the long-term development plan. Therefore, it is expedient to develop a resource-saving program. The principle of resource saving is to reduce losses in the process of technological operation or increase the efficiency of resource use.

When planning costs it is necessary to make estimates:
– on the basis of existing tasks for the production of agricultural products and accepted norms and norms;
– adjustment of the first estimate taking into account resource saving.

Taking into account the saving effect on project implementation, resource conservation should be encouraged by the authors of the program. When planning the costs, it is necessary to adjust their actual control - accounting and plan.

Operative cost accounting implies a homogeneous display in the departmental forms with the specified term of readiness of information. According to the structure, the accounting form should be consistent with the planned one. That is, the accounting form should provide a direct comparison of the actual achieved and planned indicators. This is based on the element of the cost management system – plan-fact control.

Plan-factual control is carried out in sections:
- natural indicators;
- cost indicators.

Consequently, the system of operative cost accounting should reflect the result of the deviation of the actual from the planned.

Corrected impact on cost formation includes goals that are under the supervision of the person who is responsible for cost management:
– correspondence between the actual costs of resources in accordance with planned regulatory costs;
– comparison of the schedule and the volumes of spending resources, respectively, changes in production and financial capacity;
– saving by reducing the cost of resources relative to regulatory costs without reducing the useful effect of costs.

The diagnosis of problems in the formation and control of costs in an agrarian enterprise is reduced to the definition of lack of efficiency of accounting, the lack of criteria for the effectiveness of production activities in the system of cost management, the functioning of a small system of motivation.

According to V. A. Zakharov «... the lack of operational accounting is that, for most enterprises, full data on actual costs in shops can be obtained from the accounting department one month after the reporting period. These data will be outdate at the time of their receipt. They do not allow to promptly analyze the
production processes in the shops and, accordingly, make decisions about the problems» [5].

The improvement of the cost management system is aimed at the constant search for reserves of resource savings, accounting, analysis, cost planning by their types, their valuation, motivation of resource conservation and reduction of costs to improve the efficiency of production and financial activities of agrarian enterprises.

Thus, the formation of a cost center for efficient management of agrarian enterprises will allow:

– use of new managerial decisions to reduce costs;
– reduction of expenses of planning and economic department;
– reduction of transportation costs;
– by standardizing the reduction of the complexity of work related to cost control;
– to control expenses from the place of their occurrence;
– optimization of settlement costs;
– reduction of the item of constant expenses;
– reduction of the cost of agricultural products in an agrarian enterprise.

References:

ENERGY MANAGEMENT AND ENERGY EFFICIENCY IN THE AGRARIAN SECTOR OF THE NATIONAL ECONOMY

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The urgent problems that have arisen in the agrarian sector of the economy of Ukraine and are directly related to the effective use of energy resources can be solved only through the energy management as an important direction of scientific and practical activity. Therefore, in this context the key role is played by the category of “energy efficiency”.

reflects the ratio between the volume of production of agricultural products corresponding to the current quality standards and the amount of aggregate energy costs, provided that the requirements for environmental protection are met.

An energy-efficient agricultural enterprise is considered to be the organization of agricultural production, which is based on energy and resource-saving, clean and environment friendly technologies with the use of energy-efficient technical means.

In general, the energy saving potential of an agricultural enterprise is a set of potential opportunities for this enterprise to save energy, resources and funds necessary to realize these opportunities, taking into account the level of specific energy consumption in agriculture production.

The energy saving mechanism is a set of structures, norms, methods and means of the energy-saving process management, which are based on the rational consumption of energy resources. At the same time, the process of rational use of energy should be considered within the framework of the energy management system of the existing agricultural enterprise (See Figure 1).

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Energy management in the agrarian sector is a process aimed at identifying and realizing the optimal costs of energy resources and rational ways to achieve them. The goal of rationalization of energy consumption must meet the following requirements: certainty, clarity, attainability, compliance with the requirements of the objective laws of economic development, as well as the compliance with higher-order objectives [6, p. 163-164].

In turn, energy saving management is a management system that ensures the activity of an enterprise, in which only the amount of fuel and energy needed for production is consumed [2, p. 7].

Energy management is the managerial and technical activity of the personnel of the management object aimed at the rational use of energy taking into account social, technical, economic and environmental aspects [4, p. 7]. The main goal of energy management is to provide efficient ways to implement the energy saving strategy of the enterprise [3, p. 8].

![Block diagram of energy management of the agricultural enterprise](source: developed by authors on the basis of the source: [6, c. 54])

The energy management system is an integral part of the overall enterprise management system, which includes the organizational structure, management functions and responsibilities, procedures, processes and resources for the formation, implementation, and achieving of the energy conservation policy objectives and directions [2, p. 9]. From another point of view, the energy management system of an agricultural enterprise is a complex of organizational, technical tools and software that allow managing the production process in such a way that only the
minimum required amount of fuel and energy resources is consumed to produce a
certain quantity of products or services [3, p. 13].

Energy management as a component of the organization’s management should
be interpreted as:

– the management actions aimed at ensuring the effective functioning of the
energy system of the enterprise and the achievement of the goals set for it;
– the management of the processes of distribution and use of energy resources
that are carried out within the framework of a particular organization and ensure the
production of certain volumes of products or services;
– the adoption of management decisions and monitoring of their implementation,
which ensure the effective use of energy resources.

Fundamental principles of management are the principles, which should serve
as a guide to practical actions in this field, or a kind of hint for the top-management
representatives of the enterprise about how to rationally influence the controlled
system and what kind of reaction should be expected in response.

Therefore, energy management should be based on the relevant principles,
which are as follows:

– the correspondence between the intended purpose of the power system and the
level of its provision by various resources, including energy ones;
– the strong conformity of efficiency of the energy system, energy intensity and
production efficiency as a whole;
– conformity of the size of the agricultural enterprise to the energy efficiency
requirements;
– conformity of specialization and concentration to the conditions for effective
implementation of the available energy potential;
– compliance of the implementation of the energy potential with the current
socio-economic requirements [5, p. 90-91].

The main functions of energy management are the following ones:

– energy consumption planning – this function is considered to be a process of
cognition of objective cause-effect relationships between energy and other factors
of production in agriculture by modeling them (design) for a certain period of time
[6, p. 95];
– the organization of energy consumption, which is the process of dividing,
grouping and coordinating activities and resources to achieve the set goals for
energy consumption and energy conservation;
– motivation of the energy consumption, which is related to the combination of
internal and external driving forces that not only induce a person to energy-saving
activities and determine the behavior and forms of activity, but also give it a focus,
aimed at achieving the organizational goals for effective energy consumption;
– energy control (energy audit), which is used to control activity at the enterprise
in order to ensure qualitative

analysis and energy assessment of the functioning of the energy system [6, p.
The tasks that are solved in the energy management system include:
– the definition of specific goals of energy consumption of the agricultural enterprise;
– the identification of the priorities of energy consumption and energy efficiency goals and the sequence of their solutions;
– the development of the energy strategy of the agrarian enterprise, as well as certain economic tasks and ways to solve them;
– the development of a system of measures to solve the problems related to energy consumption, which are planned for different periods of time;
– the determination of the necessary resources and sources of their coverage for the implementation of the energy strategy;
– the establishment of control over the fulfillment of assigned tasks.

It is necessary to distinguish three basic levels of decision-making process about the introduction of energy-saving measures in the sphere of agricultural production. First of all, it is the macroeconomic (general) level at which questions about the structural reorganization of the national economy are being addressed, and state standards for energy consumption are being formed. Secondly, this is the sectoral and regional level, where decisions should be made on the placement of a government contract (order) for agricultural products, taking into account the energy efficiency of its production. Thirdly, this is the microeconomic level (or the level of agrarian enterprises), where the decisions made at the higher structural levels of management are made concrete, and the energy-saving measures are directly implemented [1, p. 133].

First of all, decisions are made about the advisability of managing energy conservation in a certain area by means of software analysis methods, since the energy use processes in agriculture are quite complex due to the dependence of the final result of the energy system’s impact on many factors (i.e., weather and climate conditions, type of energy facilities and technology of production of agricultural products). The output result of the functioning of the energy system can not be unambiguously interpreted, since it is necessary to maximize the yield of products from a unit of land area and minimize the specific energy costs. The separation of the energy system as a subsystem of field cropping or animal husbandry is difficult, since energy use processes are exclusively the processes of production of agricultural products (technological processes and operations). Therefore, their energy analysis is inseparable from the analysis of these processes, that is, the energy system as a whole should be analyzed.

In general, the process of software analysis of energy consumption consists of several stages.

At the first stage specific problems should be formulated. The problem is difficult to formulate without defining the boundaries of the study. Thus, when studying the problem of providing agriculture with energy resources, it is necessary to find out
the state of oil, gas, coal production and processing in the state (region), electricity production and conjuncture in the world energy market. [1, p. 134].

At the second stage, the program objectives, indicators of its achievement and target groups of energy consumers are determined. The purpose of the energy saving program can be formulated as a result of energy consumption, which should be maximized (for example, achieving maximum energy output), or undesirable effect, the effect of which should be minimized (for instance, avoidance of cost overruns of energy resources). Entire programs should be formulated numerically, and implementation time should be specified. Indicators for the achievement of program objectives should provide a quantitative measurement of the goals.

An integral part of this stage is the study of the aggregate of energy consumers, their division into groups depending on sex, age, place of residence (work), social status, land use size and livestock, which ultimately contributes to improving the analysis and validity of management decisions.

At the third stage alternative energy conservation options should be considered. It is important to consider that a significant number of them make calculations and choice rather difficult, and a small number of energy saving options, on the contrary, reduces the validity of the choice.

The fourth stage is related to the definition of costs. In this case, all elements of alternatives are estimated in specific values, as well as the volume of capital investments and current costs for each of the alternatives are determined.

The fifth stage is aimed to estimate the results of energy saving, which can be expressed both in monetary (for example, the cost of energy saved) and in physical (natural) units of measurement (for example, reducing the energy intensity of a certain type of agricultural products).

The sixth stage is comparing alternatives. For this, two main methods can be used: “cost-effectiveness” and “cost-benefit”. While the first method allows estimating programs in quantitative form (for example, increasing the amount of humus in the soil as a result of applying energy-saving technologies), the second one assumes that a conditional cost estimate that compares benefits and costs should be assigned to the results obtained [1, p. 135].

In a market economy, agricultural energy consumers must take into account the limited energy resources that can be available for use in production, as well as the existence of several alternative opportunities for the use of each type of energy resources. In spite of the fact that energy differs by its quality indicators, energy resources should be selected of such quality, which would correspond to the nature of energy consumption.

The use of certain energy resources in the production of agricultural products is the result of the choice between several options for energy consumption. The efficiency of choice can be determined by the profit from the most beneficial of all alternative ways of using energy resources, which follows from the law of interchangeable factors. This law determines the existence of several groups of
factors that mutually compensate each other. That is, in the case of a shortage of some types of energy carriers, they can be replaced by others. For example, in economically developed countries after the energy crisis of the 1970s, in some technological processes, fuel was replaced by electricity [2, p. 135].

The last stage is the presentation of the results of the analysis of energy consumption alternatives to the decision-maker and the adoption on the basis of the analysis of the decision to choose a specific option for the use of energy resources.

In addition to analyzing alternative energy consumption options, the energy management process should include the energy consumption planning and organization of its implementation.

In addition, it should be borne in mind that the process of production of agricultural products is determined by the specific features of the agrarian sphere of the national economy:

1. Bioclimatic conditions (solar radiation, entropy, land resources, water resources, climatic and weather conditions, biological processes of growth and development of agricultural crops and animals, biological properties of crops and animals, crop varieties and breeds of animals, seasonality of production, ecological production and so on).

2. The level of development of production technologies (technologies for the production of crop and livestock products, the use of organic and mineral fertilizers, a system for combating weeds, pests and diseases, a system of crop rotation, the part of the crop production, which enters the next production cycle, the way animals are kept and taken care of, the types of feeding of agricultural animals, the system of fodder production, the organization of reproduction and herd structure, a system for controlling diseases and pests of animals, the product storage system, etc.).

3. Technical support (i.e. system of machinery and equipment, technical condition of the means of production, material and technical support).

4. Organizational and economic factors (trends in the formation of production relations in the agrarian sector, the specifics of the organization of labor and territorial dispersal).

This reduces the uniformity and density of energy consumption, increases the extent of energy distribution systems and necessitates the creation in agriculture of significant reserves of energy resources to meet the needs for them during periods of peak load.

Thus, the energy management process is structurally composed of three phases: 1) analysis of alternative energy consumption options; 2) energy consumption planning and 3) implementation of such a plan. The choice between several options should be implemented taking into account the principle of interchangeability of energy resources. To increase energy consumption is expedient up to that limit, while the effect from the application of the last unit of energy resource can not be compared with the return. Energy consumption should be increased to the limit, until the effect of the last unit of energy usage can be compared with the return of
these resources.

References:


INTERNATIONAL ASPECTS OF MANAGEMENT OF LAND RESOURCES FOR CONSUMERS’ INTEREST

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Considering the external environment that affects the land management system of agricultural producers, we consider it expedient to single out such entities as consumers, other agrarian producers (competitors), and the state as a whole. Each of them exerts a certain direct and indirect influence on the existing land management system of specific agrarian producers and their groups and associations. In this case, there is always a reverse effect. These entities, as representatives of various interest groups (public and local communities, corporate and private interests), eventually create a mechanism for the land administration system that aims to achieve economic, social and environmental effects.

Concerning the realization of the interests of the consumers in the context of the rationalization of the agricultural land management system, it should be noted that they are of high priority because of their impact on national food security. Both market laws and the fact of the existence of the state structures indicate that first of all it is important to satisfy the needs of domestic consumers in the necessary food products with a wide range of high quality at reasonable prices. In the free market competition the state and competitors comprehensively contribute to this task, but in practice we are faced with the problem of imperfect competition in the agrarian market and in the market for land-use rights that is in a state close to transformation
and the land market that is just beginning to form.

Many scientists, among which one should mention L.V. Boyko, M.I. Voloshin, N.V. Zinovchuk, A.G. Martin, V.M. Nelep, P.T. Sabluk, M.M. Fedorov, O.V. Khodakivska and others [2, 5-7, 9, 8], have devoted their research efforts to these aspects. At the same time, in the context of dynamic development, the problem of adaptation of the agricultural land management system to the interests of consumers (globalization and integration processes, changes in the legal framework with respect to land relations, changes in household incomes and expenditures, agribusiness conditions, etc.) is only being updated and requires research not only separately at macro-, meso- and microlevels, but in a complex manner in the three specified planes.

One of the most crucial elements of Ukraine’s Eurointegration aspirations should be the development and implementation of a strategy for adapting legislation on the use and protection of land resources. In the context of European experience in the implementation of the state land policy, some areas of land reform in Ukraine do not bring, but on the contrary – distance us from the EU standards in the sphere of land use and protection, how they distract us from the existing standards of food quality and the safety of the citizens.

The current land policy is focused on squandering of land, rather than the land protection, effective use, and land fertility increase. The state budget (or the residents of the state) does not yet experience the economic benefit of the fact that the total land area of Ukraine is 60,4 million hectares (including 41,8 million hectares, or 69,2% of agricultural land, of which 32,5 million hectares is arable land, which is actually equal to 53,8% of the total area of the country). And this despite the fact that Ukraine is second only to Canada, the US and Russia by the area of agricultural land per one inhabitant (0,85 hectares). Only with the formation of a rational land use structure and the availability of appropriate scientific and resource support Ukraine could produce food products of high quality to meet the needs of 140 or 150 million people without significant changes in the environmental load.

International programs to help countries that are facing severe hunger (it is known, more than 1 billion people live in abject poverty nowadays), as well as the exhaustion of the world’s opportunities to increase agricultural production through extensive factors, respectively, affects the growth in world food prices. In parallel with the resolution of fundamental issues of land ownership in Ukraine these tendencies are able to provoke a rapid growth in agricultural production. This raises significant questions regarding the use of progressive and at the same time safe technologies of agricultural production in Ukraine.

The question is complicated by the fact that the content of trace elements and amino acids in the soil and agricultural production decreases every year. The reasons for this lie in the way of development of agriculture that the countries of the EU, North America and many other developing economies have chosen. This way provides for increasing the productivity of crops and the productivity of
animals by increasing the application of mineral fertilizers, the use of pesticides, the achievements of breeding, as well as the improving of the feeding of livestock and poultry [3; 6, p. 20-21]. It provides a significant growth in the production of crop and livestock products. At the same time, the products are getting lower quality, because the yield growth is provided, first of all, by introducing high standards of mineral fertilizers into the soil. But plants together with harvest take out from the soil not only NPK, but also dozens of microelements and amino acids, which farmers practically do not compensate. Their amount in the agricultural products is getting smaller every year.

Consequently, there is another way of agriculture development. This is the production of high-quality, environmentally friendly products through the continued development of organic agriculture. It should be noted that in the developed countries of the world there is a clear tendency to increase production and consumption of bioproducts. In particular, in France such products are grown on the area which is statistically equal to the 2 % of the area of total agricultural land in this country. First of all, such products are directed to the organization of nutrition for children. According to the decision of the city authorities, the nutrition of children with organic products is compulsory in all schools in the country, at least, 2-3 days a week, and in some institutions this requirement is fulfilled even throughout the whole week. In Denmark, about 10% of dairy farms are environmentally friendly. On these farms, cows should receive organic food, have enough space for movement and in summer keep on pastures. Cows on eco-friendly farms give about 1500 liters less milk than on conventional farms, through a higher specific weight of roughage, as required by legislation [1, 6, p. 21].

Leading scientists of Ukraine note that our state should go in two possible ways [4, 6, 8]. The first of them will ensure the export of traditional quality products to the boundless market of the developing countries, while another one will ensure export of products to the highly developed countries of the world and to the wealthy strata of the population. In the near future, preference should be given to the first path, and only with the accumulation of the sufficient experience of organic agriculture it should be given to the second one. Thus, the formation of the system of organic agriculture should become a priority for Ukraine in the medium-term period. This is convincingly demonstrated by the experience of the developed countries of the world, where the sector of environmental goods and services becomes an investment attractive, dynamic and profitable segment of the domestic market and a highly developed segment of foreign trade [6, p. 22].

Although the production of organic products in the world has become an objective reality, in the agro-industrial complex of Ukraine it is developing spontaneously and without proper state support. Moreover, the role of organic production has significantly increased with Ukraine’s accession to the WTO, taking into account the need to ensure the competitiveness of agro-industrial products in the world market. This direction of production, as a phenomenon, is not only a
reaction of producers to the growing need of consumers for safe food products, but a compromise between quantity and quality of these products. The production of organic products is focused on compliance with international environmental management requirements aimed at the environmental balance of economic and environmental priorities at all stages of a consistent change in the state of the product – from raw materials to the disposal of products. In accordance with Ukraine’s international obligations on environmental management, this direction in the sphere of agro-industrial production requires special state support, as well as an appropriate scientific support, concerned with the formation of scientific bases for managing the production of organic products.

In Ukraine, there are several groups of business entities that produce organic products: farms located on organic lands suitable for cultivation of organic products; large-scale agricultural enterprises inspected according to international requirements; and the Association of bioproduction members “BIOLAN Ukraine”, which produces organic products [2]. However, this product in Ukraine has not yet found a system of popularization and almost 100% of retail chains offer the buyer several of its types in four or more times more expensive than the corresponding counterparts. At the same time, in food markets, most of the products from personal peasant farms can also be classified as the organic ones.

Today not only agricultural processing enterprises, but also personal peasant farms and farm enterprises, have established stationary outlets for their products, actively positioning it to be organic (“healthy”, “useful”, “home production” and “live”).

In the process of solving the issue of satisfying consumers with high-quality products, it is advisable to use the so-called retarded development effect, as one of the advantages of Ukraine in the integration process. The essence of this effect is that it is not necessary to repeat the whole path of trial and mistakes of other countries. Therefore, our shortcomings (low yield and associated nutrient removal by crops) not only can, but also should become a competitive advantage of Ukraine [6, c. 22; 10]. Practically in all regions of the country there are quite large areas of arable lands (pastures and meadows) where one can get environmentally friendly food products that are competitive in the world food market [9, p 11]. At the same time, the main competitive advantage of agricultural products produced in Ukraine in the future will be not only its environmental friendliness, but also the usefulness of its content, which include 90 essential nutrients needed for human health. To do this, it is urgent to conduct serious scientific and experimental research, which should include such successive stages in the comparative assessment of the content of trace elements, vitamins, amino acids and fatty acids in typical soils, crop and livestock products in Ukraine and in other countries, which are considered to be the major food exporters in the world [6, p. 22].

The data cited above indicate that the determination of the efficiency of the use of agricultural land, as well as of the entire production, is erroneous only on the basis
of indicators of economic efficiency, neglecting the indicators of environmental and social efficiency.

Excessive concentration of agrarian capital and the formation of super-large land banks create a number of negative aspects related to the following interests of consumers of agricultural products (See Table 1).

Table 1

<table>
<thead>
<tr>
<th>Kind of consumer interests</th>
<th>Consumer requirements</th>
<th>Submission of proposals to consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product quality</td>
<td>High level of product quality is based on: - biological farming; - biological livestock production; - the use of natural ingredients in the processing of products; - compliance with the standards of the product quality management system for its production, processing, transportation, storage and sale (HACCP)</td>
<td>Standard level of product quality is based on: - intensive agriculture; - intensive livestock; - the use of artificial ingredients to extend the period of sale of products and to improve their taste characteristics; - formal compliance with HACCP (for the domestic market with serious violations)</td>
</tr>
<tr>
<td>Price of products</td>
<td>A low average level of prices, a wide range of prices for pre-packaged and bulk products; stability of prices by time and by region of the country</td>
<td>The price level corresponds to the world market prices, the formats of packaging of products are unified; as a result, there is a complete dependence on the conjuncture of the world market</td>
</tr>
<tr>
<td>Product range</td>
<td>A wide product range</td>
<td>A broad product range with a certain unification with international requirements</td>
</tr>
<tr>
<td>Output</td>
<td>Sufficient for consumption volume of products, due to which consumers will not need to form significant volumes of stocks for a certain season</td>
<td>Maximum output. With a certain conjuncture of the world market, there is a transition to substitute goods, imported goods, or a transition to another price segment. Moreover, there is the possibility of a rapid response to changes in the determinants of demand in the consumer market</td>
</tr>
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</table>

The requirements of the national consumer market do not coincide with the proposal of the national agricultural producers, which gives rise to dissatisfaction with the interests of the consumers and their further “exploitation”. As a result, a model of oligopolistic competition in the food market is forming, which is characterized by the appropriate disregard for the existing economic laws, when supply of goods convenient for monopolists is able to create the necessary demand in the market. Moreover, it should be noted that in accordance with government
programs, it is necessary to increase the share of organic products in the total volume of agricultural output to 10 percent, as well as to implement basic agro-ecological requirements and standards in practice (in accordance with EU regulations) and to bring the volume of consumption of basic food products to the rational norms in 2015. At the same time, the development of crop production is carried out by: supporting large-scale production of crop production through encouraging the creation of partnerships of owners of land shares and stimulating organic farming [12]. In our opinion, these plans are more populist than those that are constructive ones, since in a short period of time it is impossible to increase two times the number of cows, to sustain long-term scientifically substantiated technological measures for switching to organic farming, to increase several times the area under perennial crops and to intensify gardening, viticulture and growing berries.

Thus, the strategy of the state land policy in Ukraine should take into account the current food situation in the world market with its significant growth in demand for agricultural products and an increase in prices for agricultural products, as well as the presence in the structure of the agricultural land fund of Ukraine of a considerable part of lands with potentially the most fertile black earth soils, which for various reasons did not receive such systematic degradation with the loss of valuable qualities of the means of production, as happened in Western countries with the developed agriculture.

At the moment, the main measures to reform land relations are not aimed at improving the effectiveness of the land management system. One of the main obstacles is the monopolization of the agrarian market and the land-use rights market. Self-exclusion of the state from the segment of the implementation of the economic function (except for the control function), in particular in the sphere of land relations, provokes disregard for the interests of national consumers and creates a threat of monopolization in the land market that is at the stage of formation. The prevention of this phenomenon should be one of the main tasks of the current stage of solidarity of scientists, politicians and practitioners of the Ukrainian agro-industrial complex.

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A SYSTEMATIC APPROACH TO ANALYSIS OF THE EFFECTIVENESS OF MANAGEMENT OF MEAT-PROCESSING ENTERPRISES’ SUSTAINABLE DEVELOPMENT

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The development of market relations has intensified the problem of independent and effective management of the enterprises in Ukraine. So, recently, the issues of product range, as well as the search for quality raw materials, possible sales markets and reliable business partners have become especially relevant. Consequently, in the context of strategic management, the problems of ensuring the sustainable development of industrial enterprises are of decisive importance. The effectiveness of the implementation of the planned tasks and the stable functioning of the industry as a whole is determined by an adequately selected strategy of sustainable development. However, in order to create an effective strategy, an enterprise must develop a sound, scientific methodology that allows an objective assessment of the effectiveness of the organizational work of an enterprise in terms of singling out its “weak” and “strong” sides, competitive advantages and other equally important


problems to be solved by the top-management representatives.

While characterizing the activities of the meat-processing enterprises in Ukraine, it should be mentioned that their economic activity remains volatile and ambiguous. In our opinion, the transformation of the principles of the production and economic mechanism of enterprise management should meet the current state of market relations.

The issues of the methodological approaches and algorithms of analytical calculations are not new to the intelligence community. They are widely considered by a sufficient number of foreign and domestic scientists, among which Downs A., Katz D., Lyden F., Scott W., Acoff R., Aniskin Yu., Afanasiev N., Hreiner L., Hrosul V., Ivanov V., Kyfiak V. Makukha L., Meskon M., Pogorelov Yu., Pryima L., Raievnieva O., Chernykh A. [1-17]. However, despite the absolute urgency of the topic of this study, the only and generally accepted approach to the method of assessing the effectiveness of management of sustainable development of the meat processing industry has not yet been developed. In addition, existing methods of assessing sustainability are not able to take into account the specific functioning of meat processing enterprises.

The purpose of this scientific intelligence was the development of an integrated approach in assessing the economic sustainability of meat-processing enterprises in Ukraine. The relevance of the study is due to the need for a thorough theoretical and methodological analysis and approbation of the assessment of sustainable development of meat-processing enterprises under a number of conditions. Among them, we consider it expedient to single out the following ones: reduction in the volume of imports of raw materials; increase in tariffs for energy carriers; insufficiently developed technological capabilities; the long-term lack of effective state programs for the development of the meat processing industry in Ukraine; inadequate fiscal policy; instability of the meat products market; low profitability and recovery of productive capacity.

The meat processing industry is considered to be the leading branch of the national economy that determines the economic sustainability and competitiveness of the Ukrainian production market in conditions of global economic instability. Its primary industrial link is a meat-processing enterprise, which should be regarded as an autonomous subject of managing market relations, the purpose of which is not limited to making a profit or increasing the capitalization of business assets. As for the specifics of the functioning of the branch economy, it should be noted that the main goal of the strategic management of industrial enterprises is a multidimensional system analysis of sustainable development, taking into account the synergetic principle of the functioning of meat-processing enterprises. In the context of modern scientific views on the theory and practice of this field, the improvement and expansion of the existing concepts is of decisive empirical significance, since in the course of our study it was established that most of the meat-processing enterprises in Ukraine are now in crisis, so we must note that their
current socio-economic situation is extremely unstable.

The above-mentioned problems in the development of the meat processing industry provoke a whole range of priority tasks in the modern economic theory. One of these tasks is closely related to the qualitative transformation of the management system of a specific enterprise or the industry as a whole, with their subsequent orientation to the principles of sustainable development, taking into account the instability of the market environment development. At the same time, those constructive transformations that occur in the industry are identical to scientific and technical cadres and targeted solutions of both national and local character. The managers who specialize in the meat processing industry unanimously affirm that the mechanism for implementing the sustainable development strategy is first updated at the level of the enterprise, and subsequently leads to the achievement of regulated indicators of production and consumption of meat products.

Summarizing the scientific and methodological approaches of the domestic and foreign theorists and practitioners in this field, the notion of “sustainable development of the meat-processing industry” should be understood as the development that can provide a balanced solution to socio-economic problems while preserving the market, economic, resource potential of economic entities, as well as to meet current and prospective needs of the population in meat and meat products.

It should be noted that the procedure for obtaining effective information regarding the sustainability of the enterprise development is a rather complicated and time-consuming process. Until now, there is no generally accepted approach to the methodological support of this process. Analysis of scientific literature on this issue showed that the implementation of any management function (i.e. forecasting, evaluation, planning, control or accounting), which concludes with the development of appropriate managerial decisions, is impossible without a well-chosen methodology of analysis. Such a complex methodology is a system of performance evaluation indicators that reflect the main trends in the development of the analyzed object in terms of its organization and functional potential, due to the probability of achieving the set goals. The development of such an approach requires optimization of the number of stages of analysis and at the same time obtaining reliable information on the results of economic activities within the framework of sustainable enterprise development management.

Consequently, the methodological approaches available to date, only partially guarantee a full monitoring of the aspects of sustainable development, so this assessment can not be considered in a timely and a systematic way. Often in practice, it turns out that to achieve sustainability the meat-processing enterprises must conduct a step-by-step analysis of the effectiveness of their management systems. Thus, the outlined problems require more similar consideration of the experience of experts whose range of scientific interests is limited to theoretical, methodological and practical studies of the sustainable development management system. This will allow integrating their experience to develop their own methodology for
analyzing the management effectiveness of sustainable development of the meat-processing enterprises, taking into account the factors of economic instability. Such a method can only be called a complex one if the qualitative and quantitative study of sustainable development management processes is conducted as a system structured into production and economically important components, as well as the management results assessment expressed by indicators of the level of sustainable development.

The purpose of the analysis of management effectiveness is to obtain not only quantitative indicators, but also, first and foremost, reliable information that, in aggregate, will allow us to assess the current state and performance of the industrial enterprise, determining the prospects for its further economic activity.

Structurally, the mechanism for analyzing the management of sustainable development of the domestic meat-processing enterprises can be described as follows (See Figure 1).

The proposed method consists of five coherently connected stages. So, the first of them is related to the selection of the object of research, a methodological support and the formation of an information basis for analysis with the use of financial and economic reporting, production, management, public reporting data and so on.

Moreover, within the framework of the first stage, we are talking about expert, system, analytical, applied and mathematical analysis; therefore, the current state of the enterprise is diagnosed with the identification of acute problem moments and analysis of external and internal factors.

The second stage provides for: 1) SWOT and PEST analysis of management of sustainable development in the crisis macroeconomic conditions and risk tolerance; 2) analysis, which examines management functions, organizational structure, regulatory support and administrative resources; 3) quantitative analysis of economic, financial, managerial, environmental and social activities, followed by a generalization of the data obtained and the calculation of specific indicators of sustainability and the risk of loss of stability.

Studies at the third level are aimed not only at assessing the state of sustainability, taking into account certain indicators and the formal approach to setting goals and objectives, but also on the transformation of individual parameters into the evaluation system of measurement coefficients. Also within the framework of this stage, calculation is carried out to determine sustainability indicators, as well as further generalization of the results obtained in the format of integrated indicators of socio-economic, environmental and risk stability, and the analysis of the results of the assessment of the control values of sustainable development compared with the average indicators of leading enterprises.

The main task of the fourth stage is to ensure the availability of tools for achieving sustainable development in all areas of the activity of the industrial enterprise (i.e. administrative, production, economic, organizational, planning, social, financial, economic and technological).
Fig. 1. Methods for analyzing the effectiveness of management of sustainable enterprise development
Within the framework of the fifth level, the strategic goals of sustainable development are achieved, in particular: strengthening competitiveness, increasing the level of capitalization, achieving the ecologization of production processes, developing an anti-crisis concept, minimizing the manifestations of possible risks and, as a consequence, formation of a full-fledged strategy for sustainable development.

Approbation and practical application of the developed evaluation methodology allow us to conclude that the management of sustainable development, as well as the sustainability of development as a whole, is a specific phenomenon, the realization of which is preceded by a number of risks. It is important to note that a certain system, whose basic subsystems are not stable, can not be called stable too, since it is a syncretic entity, which implies a similar development of all the structural elements. Thus, the analysis of management of sustainable development of any production system is a continuous process, which consists of such types of management activities as: objective assessment of the situation; formulation of goals and objectives of the analysis; development and implementation of relevant solutions; control over their implementation processes with possible adjustments.

Obviously, the proposed method for analyzing the management of sustainable development of the meat processing industry is sufficiently adequate, logically formed and such that objectively reflects the changes occurring in all functional and production divisions of the enterprises and constituent elements. Among its main features, we can distinguish structural flexibility, which, if necessary, can be reduced or supplemented depending on the conditions of the enterprise and the tasks to be accomplished.

Summarizing the above material, we can state that the analysis of management of sustainable development of a meat-processing enterprise has not only methodological, but also practical value, as well as a number of specific features that can be traced at different stages, such as: collecting initial data on the functioning of the production system, assessing the state of sustainable development, developing a sustainability toolkit, achievement of sustainability objectives by the enterprise.

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CHARACTERISTICS OF ELEMENTS OF THE SYSTEM OF MANAGEMENT OF THE ENTERPRISE RESOURCE CONSERVATION DEVELOPMENT

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Modern world, which is constantly being globalized, has faced the problem
of resource insufficiency resulting from the constant growth of human population under the depletion of natural resources. Therefore, for the continued existence and development, modern society must adhere to the policy of rational consumption of resources and increase the efficiency of its activities.

Effective development is one of the main factors in gaining the competitive advantages by the enterprises operating under the conditions of uncertainty and environment variability. At the same time, the principle of ratio of expended effort to the result obtained is important, when each business entity aspires to obtain with minimal efforts optimal changes aimed at achieving the goal and implementing the strategy of the entire enterprise.

In production, above all, changes should relate to control systems. To organize effective production, it is necessary to introduce innovative technologies and tools, motivate all participants in the process to produce a strong common performance. One of the means for improving the efficiency and rationality of activities is the introduction of a system for managing resource conservation development of the enterprise.

The problems of managing the enterprise resource conservation development have been studied by the contemporary domestic and foreign experts, namely M.Karpunina, T.Petrushka, N.Herasimchuk, Yu.Dziadikevich, I.Vovk, S.Hutkevich, S.Yerokhin, I.Ippolitova, I.Sotnik, V.Scherbak, O.Pohaydak, L.Kulik, D. Medouz, Y. Randers and others.

In accordance with the basic principles of the science of management, the main elements of a management system are the purpose, object and subject, principles, methods and functions of management. In addition, special attention in the study of the enterprise management system should be paid to the examination of the management mechanism and process. The system of management of the enterprise resource conservation development (RCD) is a set of interrelated elements that function in time as a whole in order to increase the efficiency of the enterprise resources use and the entire operation of the business entity in general (fig. 1).

The necessity for managing the enterprise RSD is determined by the following factors:

- globalization of the economy. Today, resources are considered not only in the context of individual countries, they are part of a single world resource. That is why Ukrainian enterprises should be involved in the formulation of an agreed strategy for improving the resource use efficiency;

- limited resources. The operation of the enterprises in Ukraine and in the world takes place under conditions of limited resources. The shortage of resources with the simultaneous growth of social needs leads to crisis phenomena in the country’s economy.

- an increase in the use of resource saving technologies in Ukraine and worldwide. If an enterprise does not start to develop resource conservation, it risks losing its competitiveness;
- scientific and technological advances. Due to the scientific and technological advances, enterprises have the opportunity to move to an intensive resource conservation type of the economic growth, based on reducing the capital and material intensity of products, enhancing productivity, improving technical and economic indicators and product quality while reducing costs.

- owing to an increase in prices for resources, which is the reason for the increasing costs of the enterprise, there arises a need for saving and rational use of resources. The rising costs of resources determine the appropriateness of providing management of the enterprise resource conservation development, stimulating management decisions making in favor of implementation of the enterprise RCD management system;

- deterioration of the ecological situation in the world and state control of human impacts on the environment;

- reduction of incomes of the population, which leads to a decline in the purchasing power. Consequently, enterprises are forced to change their pricing policies by reducing the product costs. One of the ways to reduce the cost of production is resource conservation [1].

The purpose of the enterprise RCD management is to increase the efficiency of the business entity operation by reducing the resource intensity of production and human impacts on the environment by using modern advances in science and technology.

It should be noted that the enterprise RCD management should reflect the interrelationship between the overall production strategy and the enterprise RCD strategy. The goal of the strategy of the enterprise resource conservation development can be considered Optimization of expenses aimed at ensuring the security of the country, ecosystems, and society, as well as increasing the competitiveness of the enterprise.

The enterprise RCD management should be aimed at accomplishing the following tasks:
- reducing the cost of resources for production through the use of new equipment and technology;
- taking effective measures to provide the rational use of productive resources;
- replacing primary resources by secondary ones;
- introducing and using technologies for processing production and consumption waste;
- pursuing an effective innovation policy [2].

Thus, the enterprise RCD management results in increasing the output while reducing the cost of material resources, lowering the cost of production, boosting profit of enterprises in the industry, increasing investment in the introduction of resource conservation technologies, and improving the environmental situation. Resource conservation significantly affects the efficiency of production, which manifests itself in reducing the resource intensity of products with the growth of
enterprise profits in the long run [3].

The object of the enterprise RCD management is the enterprise resources, resource-saving technologies and the process of managing the resources of the enterprise.

Fig. 1 – Elements of the system of management of the enterprise RCD

The subjects of the enterprise RCD management are a certain number of people belonging to the coordinated system of enterprise management and involved in making and implementing management decisions in the field of personnel management, production, innovation, financial, information activities.

The enterprise RCD management subjects include:
- owners of the enterprise;
- senior management of the enterprise;
managers of consulting firms recruited to the enterprise for the development and implementation of resource conservation strategies;
- state and departmental administrative structures and bodies whose powers are determined by the relevant normative documents;
- the staff of the enterprise.

The methodological basis for the RCD management is the conceptual framework of modern economic and managerial theory, in particular the key provisions of resource logistics, modern management paradigm, as well as the basic principles and applied tools developed in the framework of modern managerial approaches [4, p. 44]. The methodology of the enterprise RCD management is a description of actions characterizing the ways and means of achieving the above goals.

The principles of resource conservation management are the following:
- the principle of purposefulness - the resource conservation development of the enterprise should correspond to the goals of the corporate, industrial and competitive strategy;
- the principle of scientific substantiation of the choice of the RCD management methods, which contribute to improving the efficiency of management systems;
- the principle of integration which means that all managerial decisions are interrelated and each of them has an impact on the final result of the enterprise RCD management;
- the principle of systemicity which takes into account the existing interconnections in the management system, and makes it possible to take into account all factors and develop a sequence of actions aimed at achieving the goals;
- the principle of continuity implies the need for the enterprise permanent RCD management;
- the principle of consistency which means that the enterprise maintains a certain sequence of operations with its elements in the process of managing the RCD;
- the principle of unity implies that any management decision is to comply with the logic, principles and methods of managing the enterprise RCD;
- the principle of being multivariate implies the availability of alternative options for the accomplishment of tasks;
- the principle of flexibility is the ability to adapt to internal and external changes by adjusting the directions of activities.

To date, there is no universal management method, including the enterprise RCD management. The efficiency of the enterprise RCD management depends on the correct choice of management methods. The essence of the RCD is realized through the enterprise RCD management methods.

While managing the RCD, it is advisable for the enterprise to use the method of system analysis, target tree, mathematical programming, quantification, forecasting, graphical method, analysis and synthesis, induction and deduction, as well as the methods for managing the functional subsystems of the enterprise, which are part of the organizational structure of the enterprise. Quality control, functional and cost
analysis, factor analysis, cost accounting, operations research, programming are among the most common methods for managing the functional systems used in the enterprise RCD management.

The fulfillment of the general management functions of the enterprise RCD makes a cycle of influence of the managing subsystem (subject of management) on the managed subsystem (object of management) or the process of the enterprise RCD management. Planning and motivating the RCD of the enterprise, as well as organizing and controlling are carried out through direct communication between the subject and the object of the enterprise RCD management. And the assessment, analysis and monitoring of resource conservation are carried out through feedback, namely, by determining the actual indicators of resource conservation, the efficiency of the enterprise RCD and the use of resources; comparison of actual indicators of resource conservation with the normative ones; analysis of detected deviations; identifying the reasons for unsatisfactory state of resource conservation at the enterprise. The process of the RCD management is implemented through its organization. Specific functions of the RCD management disclose the contents of the RCD management process and should ensure the achievement of the enterprise RCD goals [5].

Planning of the enterprise RCD involves formulating a strategy for achieving the set goals and objectives, developing programs, and making plans for the implementation of individual RCD management measures, aimed at achieving the goal of the enterprise RCD management. The organization ensures practical implementation of the adopted plans and programs. To this end, it is necessary to document the adoption of the plan in the form of an order, provide staff familiarization with it, and bring specific tasks to their doers. In the framework of this function, the issues of distribution, creation of conditions for the implementation of the planned schedule of individual events are addressed. Motivation combines material interests with moral regulators of the subjects of the enterprise RCD management. Monitoring in the process of the RCD management ensures supervision and verification of compliance of the achieved RCD level with the requirements, and involves the development of standards in the form of a certain system of quantitative indicators that allow the timely response to changes in the implementation of individual measures and make necessary adjustments to management decisions [4].

Realization of the general and specific functions of the enterprise RCD management is impossible without fulfilling support functions contributing to their implementation. This group of functions includes methodological support, information and technical support, organizational support, staffing and ensuring coherence in the management system of the enterprise RCD [5].

When developing a strategy for the implementation and improvement of the enterprise RCD, it is necessary to select from the whole set of the problems that most closely reflect the link between business strategy and effective policy of resource management and resource conservation.
Thus, the enterprise RCD management system built on the above principles can only be effective if one considers and ensures the unity of the goal, functioning of all components, and the process of internal and external policy of the enterprise, the system of motivation that is capable of getting all doers interested in increasing the efficiency of the enterprise RCD, the use of modern technical and technological basis of management capable of providing the RCD of the enterprise.

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SCIENTIFIC AND THEORETICAL BASES OF ELABORATION OF MECHANISM OF DEVELOPMENT OF INDUSTRIAL ENTERPRISE

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The necessity of taking into account of the modern state of productive sphere, terms of market her progress trends is required to the revision of principles of forming of strategy of development of industrial enterprises. The table of contents of existent principles of strategic development must be specified taking into account the educed features of functioning of industries of industry on the modern stage, and also forms of their display. Generalization of existent principles of strategic development and analysis of market tendencies of industrial enterprises allowed to define basic principles of forming of strategy of development of industrial enterprises,
and also their maintenance. Yes, introduction of principle of scientifically-analytical foresight and prognostication will allow to take into account existent economic laws, conformities to law and tendencies, and forming of pre-conditions will promote for the design of the market state of affairs [2].

Taking into account conformity to law of process of evolution of production, during what functioning of enterprise adapts oneself to the market environment and branch tendencies, an important value is acquired by principle of adaptively. His taking into account gives an opportunity to provide for, to resist or adapt to the possible changes of environment and accordingly to administrative decisions in relation to development of subject of manage at the changed operating conditions.

The decoupling of objects of industrial sphere is caused by the necessity of taking into account of features and terms of their development at the decision of task to the choice of strategy of development of industrial enterprises. Largely it is conditioned not only considerable enterprises after the level of providing and intensity of their use but also after the volumes of financing in a productive infrastructure. Therefore an important value is acquired by principle of complex character of forming of strategic decisions.

It is necessary to mark that the accumulation of financial possibilities, volumes of GDP provided with an increase, creates terms for development of productive infrastructure of industrial enterprises. However limit nature of financial resources that head for it, and also the alternativeness of variants of investing is accented attention on actuality of application of principle of the rational use of resources and accordingly decision of important task at forming of strategy of development of enterprise, namely - effective distribution of a limit money on the aim of socio-economic development [7].

Offer principles are subject to taking into account especially at the decision of task of development of instruments of forming of strategy of development of industrial enterprises.

Application of the marked principles will assist not only the increase of level of quality of process of choice of strategic directions of development, to providing of high adaptive properties of enterprise to the external and internal changes but also forming of the flexible going near the management of search of compromise decisions processes in case of occurring of risk changes at strategic and operative level [6].

Important for the construction of mechanism of forming of strategy of development of enterprise taking into account the terms of market environment there are laws: demand, increase of necessities of consumers, increase of the productivity, economy of time, turnover, accordance of the institutional system to the level of productive forces, effect of scales of production, cost, limit nature of resources, growing return, concentration of capital. The presented list of laws is well-known, that is why does not need the additional detailed ground and explanation [5].

A correct choice and further use of instruments and methods of development of
strategy of enterprise have an important role at forming of strategy of development of enterprise. In an accident, for example, well-known is practice of application of strategic matrices for the choice of perspective directions of development of enterprise. But, taking into account not only certain subjectivity and inaccuracy of results of estimation of different types of business but also absence of system work from realization of similar researches by the Ukrainian enterprises, the methods of portfolio analysis have certain difficulties in their practical realization. Therefore mathematical methods and methods of prognostication become the alternative methods of analysis and choice of directions of activity. The widest application presently at the choice of strategy of development of enterprise got such mathematical methods, as a mathematical programming and imitation
design [8]. What touches the methods of prognostication, then expert estimations among that it is possible to distinguish such intuitional methods have sufficient popularity, as: round table, analysis of hierarchies, programmatic prognostication, collective generation of idea and others like that.

Investigating and summarizing methods that is used for forming of strategy of development of enterprise, will mark about their sufficient variety. To distinguish and choose one of them appears impossible through the presence of their features, defects and advantages. Yes, during an optimization design it is possible to get more precisely, than during realization of portfolio analysis, quantitative estimations of potential of different enterprises. An imitation design allows to analyze various factors that can in future negatively influence on the investigated system. It is however needed to mark that the methods of mathematical design also suffer a substantial defect - during an analysis quantitative parameters are estimated only. The rows of substantial quality factors can remain after the scopes of research. Therefore in opinion of candidate for a degree, a necessity and important is the able combining of different methods at forming of strategy of development of enterprise [1].

Investigating and summarizing methods that is used for forming of strategy of development of enterprise, will mark about their sufficient variety. To distinguish and choose one of them appears impossible through the presence of their features, defects and advantages. Yes, during an optimization design it is possible to get more precisely, than during realization of portfolio analysis, quantitative estimations of potential of different enterprises. An imitation design allows to analyze various factors that can in future negatively influence on the investigated system. It is however needed to mark that the methods of mathematical design also suffer a substantial defect - during an analysis quantitative parameters are estimated only. The rows of substantial quality factors can here remain after the scopes of research. Therefore in opinion of candidate for a degree, a necessity and important is the able combining of different methods at forming of strategy of development of enterprise [6].

Strategic prognostication and analysis needed, first of all, for the detailed
research of factors of external and internal environment. Realization of this function provides for: exposure of basic economic tendencies and branch descriptions of functioning of enterprise; research of competition environment (exposure of degree of influence of customers, suppliers, competitors and others like that); ground of key factors of success of enterprise (exposure of the favorable special descriptions of external or internal environment); prognostication of future tendencies is in relation to the attractiveness of industry and its prospects [9].

A process of the strategic planning is certain family by a local mechanism by means of that determined and pass monitoring and selection administrative decisions in relation to industrial and economic activity of enterprise. Him the having a special purpose setting consists in providing of innovations and organizational changes, necessary for a construction strategies of development of industrial enterprises. In turn, the strategic planning includes: allocation of resources, adaptation to the environment, internal co-ordination and adjusting, taking into account of organizational changes.

The important result of the strategic planning on an enterprise is: development of complex of rules of making and acceptance of strategic decisions by the management of enterprise; determination of having a special purpose indexes of the planned results of realization of strategic decisions; realization of strategic events is through raising of certain tasks and financial providing of their implementation [10].

Strategic organization and motivation envisage realization of next constituents: forming of strategic potential of enterprise; development, choice and realization of strategy of development; a concordance of organizational structure of management is to select strategy of development; overcoming of possible resistance to the organizational changes by creation of corresponding corporate culture and others like that.

Strategic control and account provide: flexible and operative management problems and aims; co-ordination of projects and programs; control after destabilization of the organized and economic systems and minimization of enterprise risks and tendencies of the crisis phenomena, realization of structural changes, acceptance of organizational and legal decisions.

The system of providing is based on cooperation of the normatively-legal, financial, resource, organizational and research and information providing. Taking into account absence in practical activity of clear recommendations and certain directives in relation to the of process of forming and realization of strategy of development, it is necessary to distinguish two important terms of effective realization of strategy: 1) integration processes between the different management systems and elements of enterprise; 2) monitoring of strategic situation (analysis of existent strategic breaks). It costs to accent attention, that successful realization of strategy is possible for an account: to the presence of mine-out of internal organization communications; to participation of all managerial staff in the process
of realization; valuable data ware; application of the management system as factor of organizational culture able to stimulate introduction of strategic initiatives [4].

It should be noted that the process of forming an enterprise development strategy includes the consistent implementation of important stages: analysis of the external environment (research of market trends and determination of their impact); justification of strategic goals and formulation of the mission of the enterprise; analysis of resource opportunities for enterprise development; internal integral assessment of the level of development of an industrial enterprise; forecasting of market trends; definition of perspective and priority directions of enterprise development taking into account market trends; choice of strategy for the development of an industrial enterprise; realization of the strategy of enterprise development and its adjustment [3].

In the context of ground of strategic aims and determination of priority directions of development of enterprise, it follows to take into account that the process of forming and realization of strategy of industrial enterprise takes place under act of many factors. Understanding under the factors of condition, that is needed for realization of анализуемых processes, and also possible consequences that influence on their results, an analysis of environment, namely research of market tendencies and determination of their influence, is the superimportant near-term stage within the framework of development of mechanism of forming of strategy of development of industrial enterprise.

As be certain, market tendencies present by a soba ideological aspirations, that inherent to every certain direction of economy in a certain limit period of time, and that constantly change and influence on activity development of objects of manage, that function under act of modern market economic conditions. In this connection, within the framework of analytical division it was educed and appraised industrial and economic, organizationally-administrative, scientific and technical and social indexes of development of industrial enterprises, and also them market environment and resource providing.

Coming from a situation that was folded at the Ukrainian market of industrial products, it is possible to draw conclusion, that producers (enterprises of machine-building industry) are approximately in equal competition terms from the point of view of influence of factors of environment (political, economic, social, technological) [2].

It is necessary to accent attention, that a multidimensional estimation of external and internal environment, that allows reducing the factors of economic, ecological, social and risk activity, is the base of research and information description of the investigated enterprises. It, in turn, simplifies determination of trajectory of their development, in fact allows educing and realizing perspective possibilities of development and minimizing existent risks and threats.
References: