



CREATING A STRATEGY FOR INTELLECTUAL-INNOVATIVE DEVELOPMENT OF THE NATIONAL ECONOMY

Zhanna Maksymenko¹, Veronika Komandrovskaya²

National Aviation University
Faculty of Economics and Business-administration,
Department of Economics and Business-Technology

Abstract: Achieving high competitiveness of Ukraine and ensuring a decent living standard is only possible if a flexible intellectual-innovation strategy development and effective mechanism for its implementation are developed. Today, the definition of strategic goals and objectives of innovative development of Ukraine becomes especially relevant. The innovation model of development should focus on instrumental support for the implementation of the intellectual potential of innovative resident enterprises. The purpose of the article is to define priority directions and improve the strategy of intellectual-innovative development of the national economy, and build an innovative development model for achieving high scientific and technical competitiveness of Ukraine. The structural and logical scheme of the research is determined, the methods of economic research used allowed to sufficiently characterize the strategy of intellectual-innovative development of the national economy on the basis of economic analysis, data comparison, and modeling. The article describes the directions, tasks, and goals of intellectual-innovative development. The dynamics of 2015-2019 scientific-technological and innovative development indicators of the national economy is analyzed. Peculiarities of innovative development and the main restraining factors of regional development are singled out. The analysis of normative-legal acts of scientific-technological and innovative development allowed the authors to single out intellectually innovative vectors of the national economy development. A long-term strategy of intellectual-innovative development of Ukraine is proposed. The innovative model of development of national economy, methods, means, direct and indirect organizational-administrative and financial-credit levers of influence on innovative development of Ukraine are schematically described.

Keywords: capital, human potential, innovative development, intellectual, organizational and economic mechanism, transformation

DOI: 10.17512/znpcz.2021.2.02

Introduction

The need to adapt the national economy to innovative development is due to the negative dynamics of reducing the number of researchers and low science-intensive GDP. The article is devoted to the study of current problems of human development, the creation of an innovative environment in Ukraine, as well as new approaches to

¹ Zhanna Maksymenko, Post-graduate student, zhanna.zadoenko@ukr.net, ORCID: 0000-0002-5547-2772

² Veronika Komandrovskaya, Ph.D., Associate Professor, veronika-2005@ukr.net, ORCID: 0000-0002-6849-5148

the formation and development of intellectual capital. Today, the priority is to build an adaptive strategy of intellectual and innovative development for the national economy, which will contribute to achieving the high competitiveness of Ukraine in the global dimension and the goals of sustainable development of the United Nations Development Programme (UNDP).

The Review of Recent Research and Publications

Scientific achievements of foreign researchers H. Ansoff, J. Barney, J. Bracker, Z. Ciekankowski, R. Godfrey, D. Hambrick, E. McDonnell, R. Rumelt, D. Schendel, H.A. Simon, D. Teece, J. Penc, M.A. Hugheslid, D. Ulrich allowed systematizing the definitions of „strategy”.

Foreign scholars G. Avigdor, Iu. Atamanova, Gudrun Rumpf, Jean Lehencari, George Strogilopoulos, Hannes Leo, as well as domestic scientists, S.O. Bila, Y.A. Zhalilo, O.V. Shevchenko, V.I. Zhuk, A.A. Vdovichen, O.V. Sokolyuk, M.S. Kuznetsov, V.F. Savchenko, L.A. Yaremko, study the key features of the strategy for scientific and technical, intellectual and innovative development of the national economy.

Analysis of the scientific literature on the theory of organization and strategic management shows that there is no consensus among researchers on a coherent approach to the concept of strategy. The study of the conceptual foundations of the strategy of management of intellectual and innovative development indicates the need to modernize the innovative model of development of Ukraine.

The purpose of the article is to identify priority areas and improve the strategy of intellectual and innovative development of the national economy, building an innovative model of development to achieve high scientific and technical competitiveness of Ukraine.

The authors used the methods of economic analysis to study the provisions of the economic theory of organization and strategic management, analysis of regulations in the field of intellectual and innovative development, statistical processing of information in the diagnosis of scientific-technical and innovative development of Ukraine, principles of systematization and generalization. definitions of “strategy”, “change management”, identification of priority vectors of scientific, technical, and innovative development of the national economy, together with the recommendations of building a long-term strategy of intellectual-innovative development for Ukraine and a modeling theory to build an innovative model of the national economy.

Main Results of the Research

The term “strategy” comes from the Greek *strategia*, and consists of two parts: *stratos* – army and *ago* – lead, i.e., the origin is a military term. Strategy is a higher field of martial arts that studies the patterns and nature of war, develops the theoretical foundations of planning and conducting military operations, defines the strategic objectives of a policy, and serves it. (Bracker 1980, p. 219-224; *Who Does UK National Strategy?*, 2010).

The definition of “strategic management” in economics was introduced in the '60s and '70s of the twentieth century. Many well-known scientists, in particular I. Ansoff, worked on the problems of strategic management. The author first proposed a strategic analysis and described the strategic “gaps” (the difference between the idea of the future and the state in which the company is). I. Ansoff considered the understanding of strategic management through the concept of synergy, which is revealed more deeply and in more detail in his scientific works. I. Ansoff's scientific substantiations made a powerful breakthrough in the formation of the paradigm of strategic management of almost all scientific schools of management (Ansoff, McDonnell 1990; Ansoff 1989; Ansoff 1999).

Along with the term management strategy, there is the concept of “change management”. Change management involves development management, education quality management, conflict management, self-development management. The concept of “change” and its derivative - “change management” characterizes the processes of innovation management and the corresponding signs of such changes. Innovative change is a key component of business development and competitiveness. Today, the definition of “change management” is almost non-existent. “Management strategy” is more relevant. At the same time, these two areas of management cannot be identified, as they perform different functions (Shadova 2021, pp. 64-67; Stadnyk, Yokhna 2006, p. 464).

Consider the genesis of the definition of strategy in *Table 1*:

Table 1. The genesis of the definition “strategy”

Author	Definition
1	2
Simon H.A. (1976), <i>Administrative Behavior. A Study of Decision-Making Process in Administrative Organization</i> , 3rd Edition, The Free Press, Collier Macmillan Publishers, London, p. 67	Decision, or choice..., is the process by which one of several alternatives is chosen for each moment of behavior to be performed. The set of such decisions, which determines the behavior of a certain period of time, can be defined as a strategy.
Hambrick D. (1980), <i>Operationalizing the Concept of Business-Level Strategy in Research</i> , “Academy of Management Review”, Vol. 5(1), pp. 567-575	Strategy – a model of decisions that guides the organization in its relations with the external environment, affects both the processes and internal structures, and the results of organizations.
Ansoff H., McDonnell E. (1990), <i>Implanting Strategic Management</i> , Prentice-Hall, New Jersey	Strategy is a set of rules for making decisions about managing an organization's behaviour. There are four different types of such rules: standards by which the current state and future results of the company are measured (objectives, goals); rules for the development of interaction with the external environment (product strategy and marketing, or business strategy), rules for establishing relationships and internal processes in the organization (organizational concept); as well as the rules under which the company will operate on a daily basis (operating policy).

Rumelt R., Schendel D., Teece D. (1994), <i>Fundamental Issues in Strategy: A Research Agenda</i> , Vol. 3, Harvard Business School Press, Boston, pp. 9-47	Strategy – determining the direction of movement of the organization. This includes a number of problems, primarily related to the manager or any other person who is looking for reasons for the success or failure of an organization.
Barney J. (2001), <i>Resource-Based Theories of Competitive Advantage: A Ten Years Retrospective on the Resource Based View</i> , “Journal of Management”, Vol. 27(1), pp. 643-650	Strategy is a firm's theory of how to compete successfully. It also recognizes the outcome as a factor in the impact of the strategy, as it can be considered that competing successfully means achieving acceptable results.
Rumelt R. (2011), <i>The Perils of Bad Strategy</i> , McKiensey Quartely	Qualitative strategy requires three conditions: a) accurate diagnosis - an explanation of the nature of the challenge, simplifying its complexity through the identification of certain critical aspects; b) a clear policy as a general approach to overcoming the obstacles identified in the diagnosis; c) concerted action – steps that are coordinated to ensure a clear policy.
Godfrey R. (2016), <i>Strategic Management. A Critical Introduction</i> , Routledge, New York	The key to a modern understanding of the content of strategy in business and a number of other areas is to achieve a certain advantage over competitors.

Source: Own study based on (Simon 1976; Hambrick 1980; Ansoff, McDonnell 1990; Rumelt, Schendel, Teece 1994; Barney 2001; Rumelt 2011; Godfrey 2016)

The most generalized description of strategy as a management category was given by G. Simon, who defined it as a set of management decisions (Simon 1976, p. 67).

Today, each organization builds its own management strategy, which is adapted to the needs of the market and the activities of the organization. The management strategy of the organization is manifested in the planning of and then in the efficient use of own resources (Penc 2007, p. 8).

According to the research, human resources are the most important elements of any organization, and they should be constantly invested in (Ciekanowski 2014, p. 140).

From the above data, we summarize that the strategy helps a company (organization) to adapt to the changing environment and achieve competitiveness in the market. Development of human capital, an increase of the professional level of workers, their qualifications, increase in financing the innovative scientific and technical level of the enterprise will promote innovative development.

Mark A. Huselid, Dave Ulrich, Brian Becker (*The HR Scorecard: Linking People, Strategy, and Performance*, 2007) described the influence of managers on profitability, technical and strategic management of the company:

1. Focusing on scientific developments, we outline the algorithm for shaping a strategy for intellectual and innovative development.
2. Planning. Shaping for short-term, medium-term, long-term development strategies. Identification of factors influencing the implementation of development strategy.
3. Economic justification of the strategy. Determining the value of human capital at micro and macro levels.

4. Commercialization of products and their sale on the market. Identifying how businesses create added value. Consumer orientation.
5. Analysis of the management policy structure. Programs to encourage intellectual and innovative activities.
6. Monitoring statistical system data.
7. Calculation of the system of efficiency indicators and results analysis.

The above research confirms the importance of strategic management for the shaping of an effective strategy for intellectual and innovative development of the national economy; the research issues are identified due to the insufficient level and low efficiency of management of intellectual property capitalization processes.

Researchers have various proposals to improve the strategy of intellectual and innovative development of Ukraine. However, we believe that the strategy of innovative development of the national economy should be focused on increasing human development and aimed at the formation and development of intellectual capital.

On the basis of scientific research, we propose a definition of the strategy of intellectual and innovative development – a comprehensive approach to measures aimed at realizing the competitiveness of the national economy, the development of an intelligent business environment; increasing the scientific, technical, and innovative potential of the country.

The strategy of innovative development of the national and regional economy began to be actively studied in the 20-30s. Studies of the innovative model of development for 2015-2019 show the negative dynamics of reducing the knowledge intensity of GDP, regional disparities in scientific, technical, and innovative development of Ukraine, and the need to modernize the intellectual and innovative strategy of the national economy.

In 2019, the share of GDP performers in the total employed population was 0.48%, in 2018 – 0.54%, in 2017 – 0.58%, in 2016 – 0.60%. The number of researchers in 2019 in the business environment was⁶ 26.63% of the total number of researchers, in the public sector – 50.32%, in education – 23.05% (Kuznetsov 2020, p. 11). The share of expenditures on research and development in 2015 reached 0.55% of GDP, and in 2019 expenditures decreased by 0.12% and amounted to 0.43% of GDP. The share of exports of goods using high-level technologies in total exports of goods in 2015 was 19.2%, which is 2.8% more than in 2019 (16.4%). Ukrainian exports by 54% consist of goods with low benefit: exports of raw materials, crop production, ferrous metals, IT products (outsourcing). The share of sold innovative products in the volume of industrial products in 2019 compared to 2015 decreased by 0.1%. It should be noted that the share of sold innovative products in 2017-2018 ranged from 0.7 to 0.8%, and in 2019 reached – 1.3% (*Audit of the economy...*, p. 7).

According to the research by L.A. Yaremko (2011), A.A. Vdovychen and O.V. Sokoliuk (2013), V.F. Savchenko (2014), the innovative development of the national economy is characterized by:

- active development of science and increase of innovation and technological potential of developed countries;
- increasing the technological gap between countries;

- determining by the developed countries the priorities for the development of high-tech and knowledge-intensive industries;
- development of international cooperation and cooperation in the field of R&D;
- accelerating the dissemination of knowledge and results of scientific and technological progress;
- exhaustion of the old and search for new sources of development, determinants of sustainable development;
- active development of information and telecommunication technologies;
- development of the international capital market and growth of foreign direct investment flows, integration processes.

According to the classification of the Organization for Economic Co-operation and Development (OECD) (*ISIC REV. 3...*), high-tech industries include:

1. Information technology (IT): production of computers, office equipment, and software development. This category also includes the provision of consulting services for digital business transformation and support of information and communication infrastructure (ICT infrastructure) based on modern business practices,
2. Aerospace,
3. Pharmaceutical industry,
4. Manufacture of electronics and telecommunications equipment,
5. Production of medical, high-precision, and optical equipment.

The study of the concept of scientific, technical, and innovative development of Ukraine should begin with the identification of the main problems that hinder the innovative development of the regions of Ukraine (*On the Approval of the Strategy...*, 2019; Bila et al. 2011, p. 5):

- shortage of investment resources from all sources of funding;
- low level of innovation activity, underdeveloped innovation infrastructure;
- low salaries of scientists and researchers;
- insufficient activity of territorial communities in solving problems of scientific, technical, and innovative development of territories;
- underdeveloped credit market, lack of significant qualitative changes in the banking sector;
- imperfection of institutions, in particular, the political, regulatory, and business environment;
- negative dynamics of environmental sustainability indicators;
- low-quality e-government.

According to the Concept of Development of the National Academy of Sciences: since the 1960s, Ukraine has paid considerable attention to fundamental applied developments and technologies, the development of its own research and production base, and various forms of links between science and industry. The institutes of the National Academy of Sciences of Ukraine significantly influence the improvement of the technical level of economic sectors, take an active part in the implementation of large-scale state programs, and have the ability to provide scientific and technical support to basic sectors of the economy (*On the Concept of Scientific...*, 1999).

Priority Vectors of Scientific-technical and Innovative Development

Priority vectors of scientific-technical and innovative development of the national economy are formed on the basis of the resolution adopted by the General Assembly on September 25, 2015. Transformation of our world: Agenda for sustainable development until 2030.

The priority areas of scientific-technical and innovative development are scientifically, economically, and socially justified vectors of intellectual-innovative development for the long term (over 10 years), which are given priority state support to form an effective sector of research and development to ensure competitiveness. production, sustainable development, national security and improve the quality of life of citizens (*About Priority Directions of Development*, 2001).

Having analyzed the regulations (*Table 2*), we will identify priority areas of intellectual and innovative development of the national economy, which will further form an innovative model of development for Ukraine and provide levers to increase the efficiency of the organizational and economic mechanism of formation and development of intellectual capital.

Table 2. Analysis of regulations in the field of intellectual-innovative development

Regulations	Vectors of intellectual-innovative development of the national economy
1	2
Constitution (<i>Constitution of Ukraine</i>)	<ul style="list-style-type: none"> – Ensuring human rights and freedoms and decent living conditions; – The right to entrepreneurial activity; – Protection of competition in business; – The right to education: availability and free of charge of pre-school, complete general secondary, vocational, higher education.
Law of Ukraine “On innovation” (<i>About Innovative Activity</i> 2002)	<ul style="list-style-type: none"> – Creating socio-economic, organizational and legal conditions for the formation and development of intellectual capital in Ukraine; – Promoting the development of innovation infrastructure; – Support of entrepreneurial activity in the scientific and technical sphere; – Interaction of science, education and business; – Entrepreneurship development in scientific, technical and innovative activities; – Support for international scientific and technological cooperation, technology transfer; – Protection of domestic products in the domestic market and its promotion on the foreign market.
On Amendments to the Law of Ukraine “On Investment Activity” Concerning State Investment Projects (<i>On Amendments to the Law...</i> , 2017)	<ul style="list-style-type: none"> – Creating favorable conditions for investors in the social sphere, technical and technological improvement of production; – Creating new jobs for researchers and scientists; – Lending at the expense of the state budget of business entities for the implementation of investment projects;

	<ul style="list-style-type: none"> – Providing full or partial compensation at the expense of the state budget interest on loans to businesses for the implementation of investment projects.
<p>Law of Ukraine “On scientific and scientific-technical activities” (<i>On Scientific and Scientific-Technical Activities</i>, 2016)</p>	<ul style="list-style-type: none"> – Determining the legal status of the subjects of scientific and scientific-technical activities, material and moral incentives for intellectual and innovative activities; – Determining the strategy of development of scientific institutions and promising areas of scientific and scientific-technical activities; – Evaluation of the effectiveness of scientific and scientific-technical activities; – Planning the amount of state budget expenditures to ensure the activities of such research institutions; – Providing state support to scientific institutions, regardless of ownership, whose activities are important for science, economics and industry.
<p>Law of Ukraine “On priority areas of innovation in Ukraine” (<i>About Priority Directions of Development</i>, 2001)</p>	<ul style="list-style-type: none"> – Ensuring the economic security of the state, creating high-tech competitive environmentally friendly products; – Providing high-quality services and increasing the export potential of the state with the effective use of domestic and world scientific and technical achievements.
<p>Law of Ukraine “On Priority Areas of Science and Technology Development” (<i>On the Priority Areas of Innovation in Ukraine</i>, 2012)</p>	<ul style="list-style-type: none"> – State support for priority areas of research and scientific and technical development; – Formation of an effective sector of scientific research and scientific and technical developments; – Ensuring the competitiveness of domestic production, sustainable development, national security of Ukraine and improving the quality of life.
<p>Law of Ukraine “On state target programs” (<i>About State Target Programs</i>, 2004).</p>	<ul style="list-style-type: none"> – Ensuring scientific, technical and innovative development of the regions of Ukraine; – Determining public expenditures on scientific, technical and innovative development as part of budget programs and during the formation of financial policy.
<p>Law of Ukraine “On the special regime of innovative activity of technology parks” (<i>About the Special Mode of Innovative</i>, 1999)</p>	<ul style="list-style-type: none"> – Creation, development, modernization of scientific-technological, experimental and research-industrial sites used for the purposes of innovative activity; – State financing of costs for the production of innovative products; – Patenting of developments, acquisition of rights to objects of intellectual property rights (patents, licenses for the use of inventions, utility models, industrial designs, know-how, etc.); – Carrying out of scientific, scientific and technical conferences, seminars and exhibitions, publication of results of scientific researches on priority directions of activity of technology parks.
<p>Law of Ukraine “On state forecasting and development of programs of economic and social development of Ukraine” (<i>On State Forecasting and Development...</i>, 2000)</p>	<ul style="list-style-type: none"> – Comprehensive analysis of the demographic situation; – Analysis of the state of use of natural, production, scientific, technical and labor potential; – Assessment of the competitiveness of the national economy, – Encouragement for business entities to develop their own forecasts, plans, business plans and other documents.

Source: Written by author

Directions of innovative development are determined by state scientific programs. State target scientific and scientific-technical programs are the main means of concentrating the intellectual potential of the state to solve major socio-economic problems and implement priority areas of science and technology, modernization of technologies, means of production, materials, and other knowledge-intensive and competitive products (*On State Target Programs*, 2004; Nekolyak 2018).

Implementation of the Strategy of Intellectual-innovative Development

The aim of the strategy of intellectual-innovative development of Ukraine is to combine public and private resources to increase the competitiveness of Ukraine by intensifying the transformational processes of human development, formation, and development of intellectual capital. The process of transformation of human development requires strategic support, as it is one of the priorities of the state development policy. We propose to implement the strategy of intellectual-innovative development on two levels (see *Figure 1*).

Level I. National – includes national programs that will be implemented by central authorities and are aimed at the overall development of the country;

Level II. Regional – includes regional programs that will be implemented by regional authorities and are aimed at the development of small innovative enterprises in the region.

At the first level of strategic planning, the main goals of infrastructure innovative development should be formed as follows: improving regulatory activities; improving organizational and institutional support; the framework for regulating relations within the framework of intellectual-innovative formation of guarantees for the protection of the rights of private investors and state and local authorities in the process of development, approval, and implementation of intellectual-innovative development projects.

Improving the strategy of intellectual-innovative development can be implemented by updating the regulatory framework of scientific-technical and innovative development; distribution of powers and responsibilities of state and local authorities in the conditions of formation of intellectual-innovative development; improvement of the state mechanism of formation and development of intellectual capital; strengthening the conditions of interaction between the state.

According to the Law of Ukraine *On Scientific and Scientific-Technical Activity* (2016), Resolution of the Verkhovna Rada of Ukraine *On the Concept of Scientific-Technical and Innovative Development of Ukraine* (1999), *Sustainable Development Goals of Ukraine until 2030* (2017), EU project *Improving Strategies, Policies, and Regulation of Innovation in Ukraine (Innovation Policy... Vol. 2, 2011; Innovation in Ukraine..., 2011)* and *Economic Strategy: Growth through Investment* (2020), in order to transform scientific and technological potential into intellectual capital, we recommend a long-term strategy of intellectual-innovative development for Ukraine.

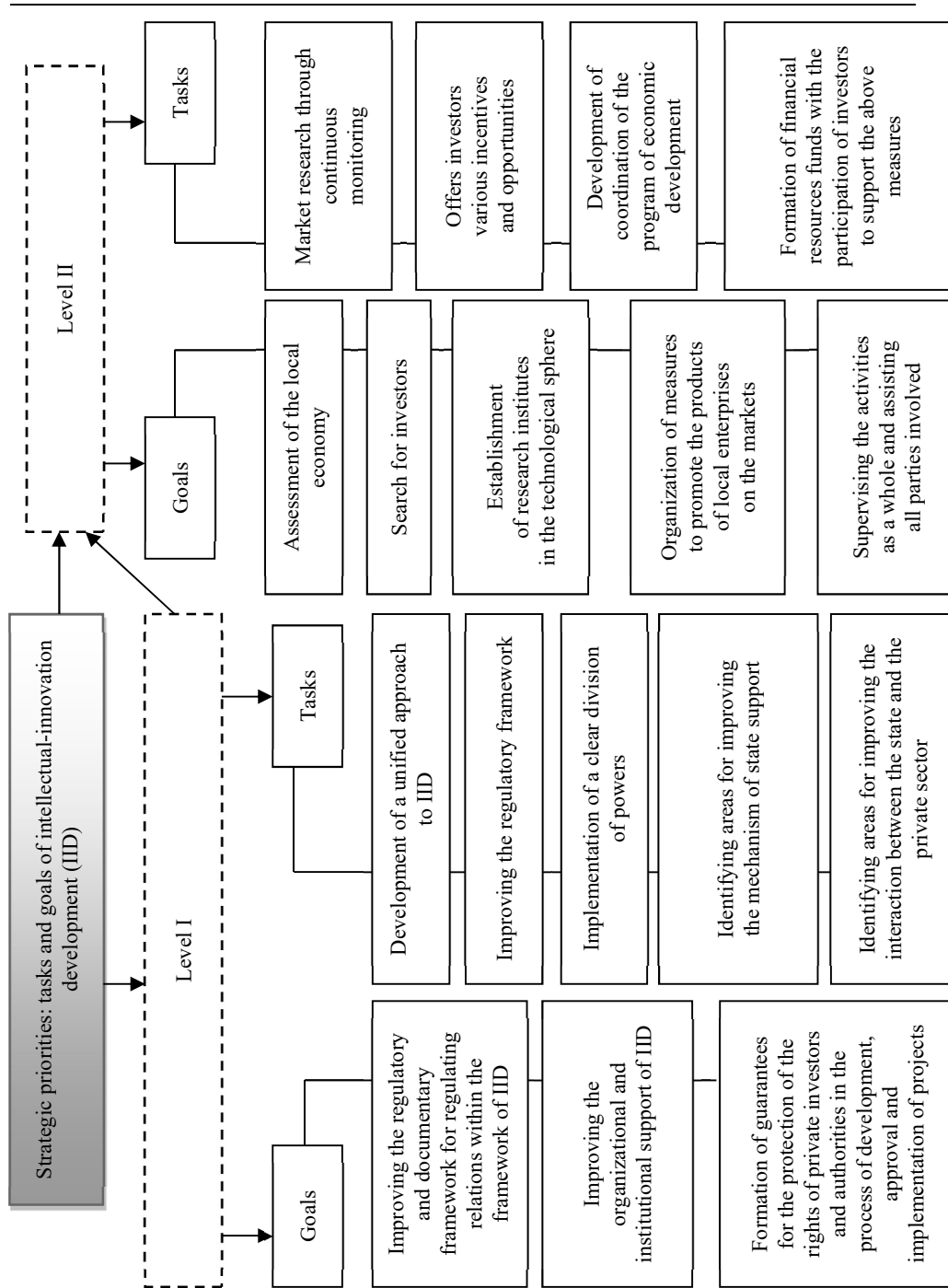


Figure 1. Strategic priorities: tasks and goals of intellectual-innovation development

Source: Author's own development

1. Increasing the intensity of knowledge of GDP through the development of high-tech sectors of the economy.
2. Combining branch and problem-oriented approach in the implementation of the strategy of intellectual and innovative development.
3. Directing up to 15% of regional budget expenditures on the formation of the innovation ecosystem of the regions of Ukraine.
4. Implementing the competitiveness strategy of Ukrainian cities through the use of ICT, artificial intelligence in agriculture, energy, transport infrastructure, and educational institutions.
5. Introducing a partnership between education, public administration, and business to improve the transformational processes of human development.
6. Holding joint round tables and online conferences to address the problems of intellectual and innovative development of the national economy.
7. Encouraging young people to scientific and technical research and development.
8. Increasing labor productivity, focusing production processes on the conservation of natural resources through the use of scientific and technical, innovative developments.
9. Attracting foreign direct investment in Ukraine for scientific, technical, and innovative development.
10. Increase R&D funding to 1.7% of GDP.
11. Improving the efficiency of the state employment fund, social and labor relations.
12. Developing an effective system of regulation of intellectual property protection and regulation of innovations in the private sector.
13. Monitoring public expenditures on R&D at the legislative level.
14. Creating regional centers of examination of scientific projects.
15. Implementing a regional innovation development program. Targeted use of public funds for the development of intellectual capital.
16. Improving the support mechanism.
17. Financial assistance to enterprises engaged in innovation. Involving financial institutions in stimulating scientific, technical, and innovative development of the national economy. Concessional lending to businesses active in the field of innovation.
18. Improving the organizational-economic mechanism of formation and development of intellectual capital in Ukraine.
19. Improving the system of accounting and statistics of scientific and innovative activities. Compliance of accounting and statistics with international European standards.
20. Making society aware of the importance of the impact of scientific, scientific-technical, and innovative activities on the socio-economic development of Ukraine.
21. Advanced training and retraining of specialists, experts who will promote the development of scientific, scientific-technical, and innovative activities.

Building an Innovation Model for National Economic Development

The innovative model of development of the national economy is a combination of innovative methods, levers, and tools aimed at improving the institutional and legal instruments of intellectual and innovative activities. Based on the above research, we will build an innovative model of the national economy (Figure 2).

The shaping of an innovative model of national economic development, which combines elements of a market economy with the preservation of flexible levers of state regulation, will help build an organizational and economic mechanism for the formation and development of intellectual capital in Ukraine.

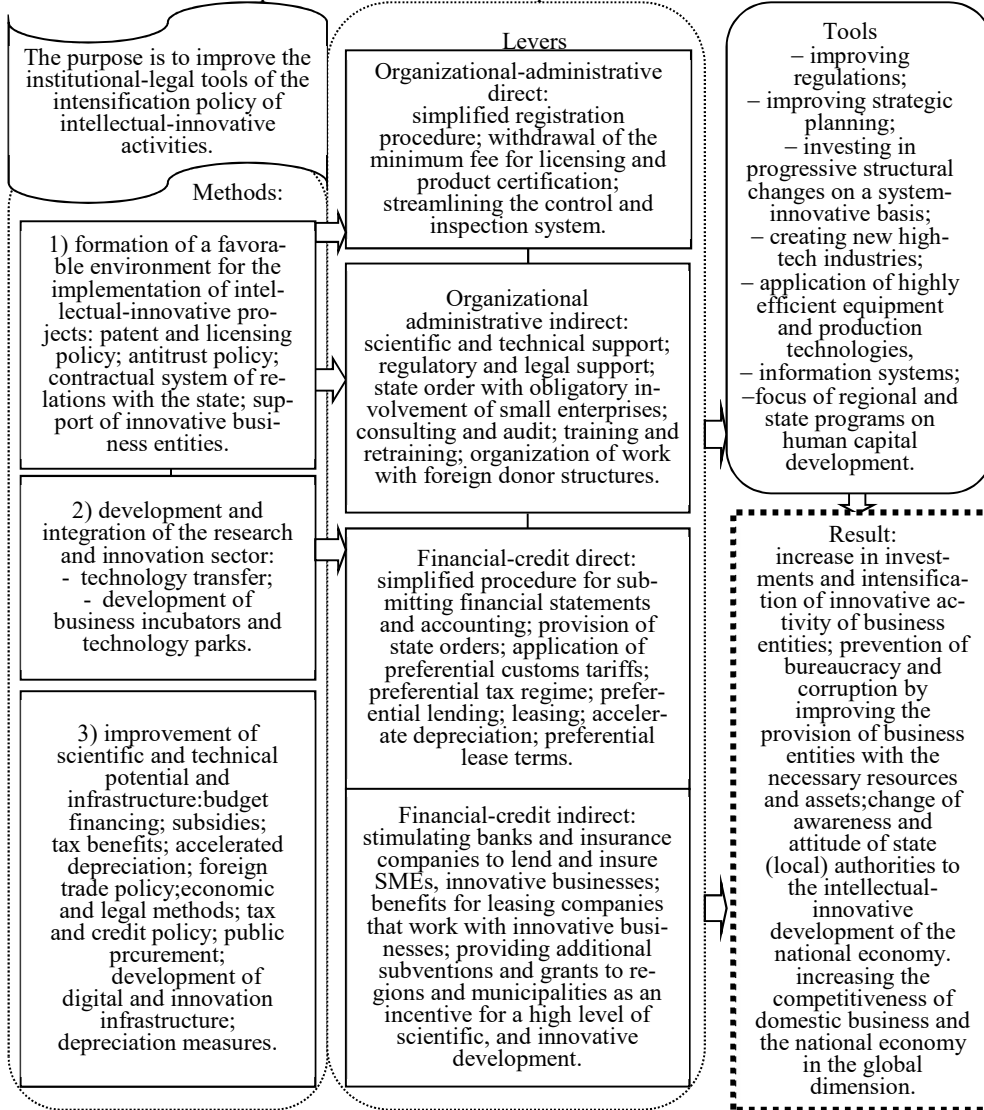


Figure 2. Innovative model of national economy development

Source: Author's own development

Conclusions

Analytical studies indicate the need to modernize regulations in the field of scientific, technical, and innovative activities, develop effective management strategies for managing the organization and a flexible innovation model of the national economy, which would combine market and government tools for the formation and

development of intellectual capital in Ukraine. They also indicate the need for:

- Comprehensive solution of problems of human potential development, formation, and development of intellectual capital at micro-, meso- and macro-levels.
- Increasing the scientific-technical and innovative potential of the regions by improving the business climate, digitalization, trade liberalization and protection of property rights, support of high-tech production sectors, simplification of licensing, taxation, and business lending.
- Strengthening the interaction between state and local authorities, businesses, and educational institutions.
- Professional development of civil servants in order to conduct an effective innovation policy, use of foreign experience of the EU in building an innovative development strategy.

References

1. *About Innovative Activity* (2002), The Verkhovna Rada of Ukraine, No 36, Art. 266, <https://zakon.rada.gov.ua/laws/show/40-15#Text> (accessed: 20.04.2021).
2. *About Priority Directions of Development of Science and Technology* (July 11, 2001), The Verkhovna Rada of Ukraine, No 48. Art. 253, <https://zakon.rada.gov.ua/laws/show/2623-14#Text> (accessed: 20.04.2021).
3. *About State Target Programs* (2004), The Verkhovna Rada of Ukraine, No 25, Art. 352, <https://zakon.rada.gov.ua/laws/show/1621-15#Text> (accessed: 20.04.2021).
4. *About the Special Mode of Innovative Activity of Technology Parks* (1999), The Verkhovna Rada of Ukraine, No. 40, Art. 363, https://ips.ligazakon.net/document/t990991?an=127&ed=2012_10_16 (accessed: 20.04.2021).
5. Ansoff H., McDonnell E. (1990), *Implanting Strategic Management*, Prentice-Hall, New Jersey.
6. Ansoff I. (1989), *Strategic Management*, Economics, Moscow.
7. Ansoff I. (1999), *New Corporate Strategy*, SPb, Piter.
8. *Audit of the Economy of Ukraine 2030*, Cabinet of Ministers of Ukraine, <https://nes2030.org.ua/docs/doc-audit.pdf> (accessed: 20.04.2021).
9. Barney J. (2001), *Resource-Based Theories of Competitive Advantage: A Ten Years Retrospective on the Resource Based View*, "Journal of Management", Vol. 27(1).
10. Bila S.O., Zhalilo Y.A., Shevchenko O.V., Zhuk V.I. (2011), *Innovative Approaches to the Regional Development in Ukraine: Analytical Report*, NISD, Kiev.
11. Bracker J. (1980), *The Historical Development of the Strategic Management Concept*, "Academy of Management Review", Vol. 5(1).
12. Ciekankowski Z. (2014), *Human Capital as the Most Important Element in the Organization*, „Scientific Papers of the University of Natural Sciences and Humanities in Siedlce. Administration and Management”, Vol. 28(101).
13. *Constitution of Ukraine* (1996), The Verkhovna Rada, <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text> (accessed: 20.04.2021).
14. *Economic Strategy: Growth through Investment* (2020), Ministry of Economic Development,

- Trade and Agriculture of Ukraine, <https://drive.google.com/file/d/1DmerrNq53rk4PixQRv-CTgatC08YgFMW/view> (accessed: 20.04.2021).
15. Godfrey R. (2016), *Strategic Management. A Critical Introduction*, Routledge, New York.
 16. Hambrick D. (1980), *Operationalizing the Concept of Business-Level Strategy in Research*, "Academy of Management Review", Vol. 5(1).
 17. *Innovation Policy: European Experience and Recommendations for Ukraine, Vol. 1, Key Features of Innovation Policy as a Basis for Developing Measures to Promote Innovation, Directing Ukraine to a Knowledge-Based Competitive Economy – Comparison of the Situation in the EU and Ukraine* (2011), Fenix, Kiev, https://www.researchgate.net/publication/315744060_Innovation_Policy_European_Benchmarking_for_Ukraine_Volume_1 (accessed: 20.04.2021).
 18. *Innovation Policy: European Experience and Recommendations for Ukraine, Vol. 2, The Analysis of the Legislation of Ukraine in the Sphere of Research, Developments and Innovation Activity and Suggestions for Amendments for Legislation* (2011), Fenix, Kiev, https://kneu.edu.ua/userfiles/our_partners/gudrun/2_EN.pdf (accessed: 20.04.2021).
 19. *Innovations in Ukraine: European Experience and Recommendations for Ukraine, Vol. 3, Innovation in Ukraine: Proposals for Policy Measures Final Version* (2011), Phoenix, Kiev, https://kneu.edu.ua/userfiles/our_partners/gudrun/3_UA.pdf (accessed: 20.04.2021).
 20. *ISIC REV. 3 Technology Intensity Definition Classification of Manufacturing Industries into Categories Based on R&D Intensities*, <https://www.oecd.org/sti/ind/48350231.pdf> (accessed: 20.04.2021).
 21. Kuznetsov M.S. (2020), *Scientific and Innovative Activity of Ukraine*, State Statistics Service of Ukraine, Kyiv.
 22. Nekolyak R.V. (2018), *State Regulation of Scientific and Scientific-Technical Activities: Organizational and Legal Aspect*, http://idpnan.org.ua/files/nekolyak-r.v.-derjavne-regulyuvannya-naukovoyi-i-naukovo-tehnichnoyi-diyalnosti-organizatsiyno-pravoviy-aspekt-_d_.pdf (accessed: 20.04.2021).
 23. *On Amendments to the Law of Ukraine "On Investment Activity" Concerning State Investment Projects* (2017), The Verkhovnoi Rady, No 18, Art. 221, <https://zakon.rada.gov.ua/laws/show/1981-19#Text> (accessed: 20.04.2021).
 24. *On Approval of the Strategy for the Development of Innovation for the Period up to 2030* (2019), Cabinet of Ministers of Ukraine, <https://zakon.rada.gov.ua/laws/show/526-2019-%D1%80#Text> (accessed: 20.04.2021).
 25. *On Scientific and Scientific-Technical Activities* (2016), The Verkhovna Rada, No 3, Art. 25, <https://zakon.rada.gov.ua/laws/show/848-19#Text> (accessed: 20.04.2021).
 26. *On State Forecasting and Development of Programs of Economic and Social Development of Ukraine* (2000), The Verkhovna Rada of Ukraine, No 25, Art. 195, <https://zakon.rada.gov.ua/laws/show/1602-14#Text> (accessed: 20.04.2021).
 27. *On the Concept of Scientific, Technological and Innovative Development of Ukraine* (1999), The Verkhovna Rada of Ukraine, No 37, <https://zakon.rada.gov.ua/laws/show/916-14#Text> (accessed: 20.04.2021).
 28. *On the Priority Areas of Innovation in Ukraine* (2012), The Verkhovna Rada of Ukraine, No 19-20, Art. 166, <https://zakon.rada.gov.ua/laws/show/3715-17#Text> (accessed: 20.04.2021).
 29. Penc J. (2007), *Nowoczesne kierowanie ludźmi, wywieranie wpływu i współdziałanie w organizacji*, Difin, Warszawa.
 30. Rumelt R. (2011), *The Perils of Bad Strategy*, McKiensey Quartely, June 2011.
 31. Rumelt R., Schendel D., Teece D. (1994), *Fundamental Issues in Strategy. A Research Agenda*, Vol. 3, Harvard Business School Press, Boston.
 32. Savchenko V.F. (2014), *Problems of Investment and Innovation Policy in the Economy of Ukraine*, „Scientific Bulletin of the Chernihiv State Institute of Economics and Management”,

- Series 1: Economics, Iss. 2, p. 61-69.
33. Shadova V.V. (2021), *Innovative Orientation of Pedagogical Activity. Pedagogy and Psychology of Formation of Creative Personality: Problems and Searches*, Institute of Pedagogy and Psychology prof. of Education of the Academy of Pedagogical Sciences of Ukraine, Zaporizhia.
 34. Simon H.A. (1976), *Administrative Behavior. A Study of Decision-Making Process in Administrative Organization*, 3rd Edition, The Free Press, Collier Macmillan Publishers, London.
 35. Stadnyk V.V., Yokhna M.A. (2006), *Innovative Management*, Navchalnyi posibnyk, Akademyvdav.
 36. *Who Does UK National Strategy?* (2010), First Report of Session 2010-11 Report, together with formal minutes, oral and written evidence Ordered by the House of Commons, <https://publications.parliament.uk/pa/cm201011/cmselect/cmpubadm/435/435.pdf> (accessed: 20.04.2021).

TWORZENIE STRATEGII INTELEKTUALNO-INNOWACYJNEGO ROZWOJU GOSPODARKI NARODOWEJ

Streszczenie: Osiągnięcie wysokiej konkurencyjności Ukrainy, rozwój potencjału intelektualnego i zapewnienie wyższego poziomu życia jest możliwe tylko przy budowie adaptacyjnej, innowacyjnej strategii rozwoju i skutecznym mechanizmie jej wdrażania. Dziś określenie strategicznych celów i założeń innowacyjnego rozwoju Ukrainy nabiera szczególnego znaczenia. Budowa innowacyjnego modelu rozwoju powinna być ukierunkowana na instrumentalne wsparcie realizacji potencjału intelektualnego przedsiębiorstw aktywnych innowacyjnie. Celem artykułu jest określenie obszarów priorytetowych i doskonalenie strategii intelektualnego i innowacyjnego rozwoju gospodarki narodowej oraz budowanie innowacyjnego modelu rozwoju dla osiągnięcia wysokiej konkurencyjności naukowej i technologicznej Ukrainy. Przedstawiono schemat strukturalny i logiczny badań, a zastosowane metody badań ekonomicznych pozwoliły na dostateczne scharakteryzowanie strategii intelektualnego i innowacyjnego rozwoju gospodarki narodowej na podstawie analizy, porównania danych i modelowania. Określono schemat strukturalny i logiczny badań. Zastosowane metody badań ekonomicznych pozwoliły na dostateczne scharakteryzowanie strategii intelektualnego i innowacyjnego rozwoju gospodarki narodowej na podstawie analizy, porównania danych i modelowania. W artykule opisano kierunki, zadania i cele rozwoju intelektualnego i innowacyjnego. Dokonano analizy dynamiki wskaźników lat 2015-2019 w zakresie rozwoju naukowo-technicznego i innowacyjnego gospodarki narodowej. Zwrócono uwagę na specyfikę innowacyjnego rozwoju oraz główne czynniki hamujące rozwój regionalny. Analiza aktów normatywno-prawnych rozwoju naukowo-technicznego i innowacyjnego pozwoliła autorom wyodrębnić intelektualnie innowacyjne wektory rozwoju gospodarki narodowej. Zaproponowano długofalową strategię intelektualnego i innowacyjnego rozwoju Ukrainy. Schematycznie opisano nowatorski model gospodarki narodowej, metody, środki, bezpośrednie i pośrednie organizacyjno-administracyjne i finansowo-kredytowe dźwignie wpływu na innowacyjny rozwój Ukrainy.

Słowa kluczowe: kapitał, potencjał ludzki, rozwój innowacyjny, intelektualny, mechanizm organizacyjno-ekonomiczny, transformacja