ІНТЕЛЕКТУАЛЬНИЙ ПОТЕНЦІАЛ ЯК ВАЖЛИВА СКЛАДОВА ІННОВАЦІЙНОГО РОЗВИТКУ ПІДПРИЄМСТВА

Актуальність. Сьогодні, в умовах жорсткого конкурентного середовища, забезпечення інноваційного розвитку підприємства стає все більш актуальним завданням. Сучасна економіка та глобальні світові процеси розвитку країн спонукають суб’єкти господарювання до впровадження в свою діяльність інновацій та розвитку наявного інтелектуального потенціалу, що є важливим джерелом безперервного розвитку і можливостей адаптації підприємств до ринкових вимог. Створення, нарахування і реалізація інтелектуального потенціалу можливі тільки в довгостроковій перспективі, що каже про актуальність та необхідність дослідження інтелектуального потенціалу як важливої складової інноваційного розвитку підприємства.

Мета та завдання. Метою статті є дослідження інтелектуального потенціалу як складової інноваційного розвитку підприємства. Для досягнення поставленої мети було вирішено наступні завдання: розглянуто поняття інноваційний розвиток підприємства та його складові; визначено інтелектуальний потенціал як важливу складову інноваційного розвитку підприємства; проаналізовано основні показники інноваційного розвитку та активності українських підприємств.

Результати. У статті розглянуто поняття та складові інноваційного розвитку підприємства; визначено важливу складову інноваційного розвитку підприємства – інтелектуальний потенціал; проаналізовано основні показники інноваційного розвитку та активності українських підприємств. Запропонована структура основних складових інноваційного розвитку підприємства, виявлено основні характеристики інтелектуального потенціалу, розглянуто взаємозв’язок інтелектуального та інноваційного потенціалу.

Висновки. Рівень економіки країни залежить від рівня її інноваційної розвитку, тому впровадження інноваційного потенціалу у ринкову економіку є одним із найбільш важливих завдань конкурентної боротьби та економічного зростання підприємства. Саме інноваційний шлях розвитку дозволить стабілізувати і розвивати діяльність підприємства, забезпечити Україні гідне місце у світовому просторі та виходити із кризи. Однак, інноваційний розвиток держави неможливий без достатнього інтелектуального потенціалу, який в сучасних умовах є важливим фактором забезпечення інноваційного розвитку в поєднанні з ефективними та дієвими фінансовими, економічними, правовими методами та зокрема освітою. Багато університетів та студентів, що розробляють та впроваджують інновації.
INTELLECTUAL POTENTIAL AS AN IMPORTANT COMPONENT OF ENTERPRISE INNOVATIVE DEVELOPMENT

**Topicality.** Today, in a highly competitive environment, ensuring the innovative development of the enterprise is becoming an increasingly important task. The modern economy and global development processes encourage businesses to innovate and develop their existing intellectual potential, which is an important source of continuous development and opportunities for companies to adapt to market demands. Creation, building and realization of intellectual potential is possible only in the long run, which indicates the relevance and necessity of the study of intellectual potential as an important component of innovative development of the enterprise.

**Aim and tasks.** The aim of the article is to study the intellectual potential as a component of innovative development of the enterprise. To achieve this goal the following tasks were solved: the concept of innovative development of the enterprise and its components were considered; identified intellectual potential as an important component of innovative development of the enterprise; the main indicators of innovative development and activity of Ukrainian enterprises are analyzed.

**Research results.** The concept and components of innovative development of the enterprise are considered in the article; identified an important component of innovative development of the enterprise - intellectual potential; the main indicators of innovative development and activity of Ukrainian enterprises are analyzed. The structure of the main components of innovative development of the enterprise is offered, the basic characteristics of intellectual potential are revealed, interrelation of intellectual and innovative potential is considered.

**Conclusion.** The level of the country’s economy depends on the level of its innovative development, so the introduction of innovation potential in a market economy is one of the most powerful levers of competition and economic growth of enterprises. It is the innovative way of development that will stabilize and develop the activities of enterprises, provide Ukraine with a worthy place in the world and overcome the crisis. However, the innovative development of the state is impossible without sufficient intellectual potential, which in modern conditions is an important factor in ensuring innovative development in combination with effective and efficient financial, economic, legal mechanisms of the state. It can be said that for any country, education and innovation should become one of the most important areas of development in terms of long-term prospects of the country, its potential and competitiveness in today’s world. Therefore, innovation development is not considered without the construction of a new innovative intellectual resource. An example for Ukraine can be Switzerland, which shows the best results among the world’s leading countries in terms of economic openness and integration of human capital, or Sweden, which has a well-organized and efficient work of state institutions in implementing innovation, high level of staff skills. in the field of innovative technologies and processes, many universities and students that develop and implement innovations.

**Keywords:** innovative development of the enterprise, innovative potential, intellectual potential, intellectual property, innovation, innovative product, innovation market, labor market, labor resources, innovative activity, competitiveness, enterprise finance.
**Problem statement and its connection with important scientific and practical tasks.** Today, in a highly competitive environment, ensuring the innovative development of the enterprise is becoming an increasingly important task.

The modern economy and global development processes encourage businesses to innovate and develop their existing intellectual potential, which is an important source of continuous development and opportunities for companies to adapt to market demands.

Intellectual potential is the basis for the development of innovative economy, and the production of high-tech products is the basis for GDP. In the economic activity of enterprises there is an increasing need to introduce intellectual innovations and strengthen the competitiveness of economic entities, as in recent years the survival of industries and countries increasingly depends on the ability to perceive and produce intelligent products.

In recent years, the pace of innovation development is insignificant and the decline in Ukraine's potential as a competitive country is due to the presence of raw materials and low-tech industries. For the efficient functioning of the economy, the innovation factor and the competence of the labor force in the field of innovation development management are important, and the development and implementation of measures to stimulate these processes should become a priority for the country's leadership.

Creation, building and realization of intellectual potential is possible only in the long run, which indicates the relevance and necessity of the study of intellectual potential as an important component of innovative development of the enterprise.

**Analysis of recent publications on the problem.** Theoretical and practical issues related to the definition, evaluation, aspects of formation, development, use and management of intellectual potential of the enterprise at the micro and macro levels are considered in many works of domestic and foreign scientists, namely E. Brooking, M. Malone, T. Stewart, L. Edvinson, A. Gaponenko, O. Grishnova, I. Guseva, G. Tesla, V. Inozemtseva, I. Ivanyuk, G. Shvydanenko and others. Although many scientific publications on these issues require further research, the problem of the relationship between intellectual potential and innovative development of both enterprises and the country as a whole.

**Allocation of previously unsolved parts of the general problem.** Despite many studies in economic sources on the problem of innovative development of the enterprise, the current conditions of fierce competition require the need for continuous improvement of enterprise development strategies. The constant search for new ways and areas of realization of intellectual potential requires in-depth theoretical study of it as a key component that can ensure long-term innovative development of modern enterprises.

**Formulation of research objectives (problem statement).** The aim of the article is to study the intellectual potential as a component of innovative development of the enterprise.

To achieve this goal, the following tasks were solved:
- the concept of innovative development of the enterprise and its components are considered;
- identified intellectual potential as an important component of innovative development of the enterprise;
- the main indicators of innovative development and activity of Ukrainian enterprises are analyzed.

**An outline of the main results and their justification.** From the point of view of O. Adamenko, innovative development of the enterprise is the activity of the enterprise, which is based on the constant search for new methods and means of satisfying consumer needs and improving the efficiency of management; development, which involves expanding the boundaries of innovation and the introduction of innovations in all areas of the enterprise [1].

H. Gumba believes that the innovative development of the enterprise is not only the main innovation process, but also the development of a system of factors and conditions necessary for its implementation, ie innovation potential [5].

S. Ilyashenko considers innovative development of the enterprise as an economic process based on continuous search and use of new ways and spheres of realization of potential of enterprises in changing environmental conditions within the chosen mission and accepted motivation of activity and connected with modification of existing and formation of new markets [3].

S. Polyakov, I. Stepnov, I. Fedulova and some other researchers believe that the source of innovative development of the enterprise is innovation [7, 10].

Innovative development, according to M. Porter [8], is one of the factors of increasing competitiveness, and distinguishes three levels: national competitiveness, competitiveness of industries and competitiveness of enterprises.
In our opinion, the innovative development of the enterprise is a process of purposeful change of the state of the enterprise, which depends on its existing innovation potential and the source of which are innovations that create qualitatively new opportunities for future activities in the market by realizing intellectual potential.

Innovative development of the enterprise is closely related to the innovation process, an important component of which is the intellectual potential, which should be closely related to innovation or management and aimed at improving economic efficiency, competitiveness, value of the enterprise, i.e., to create attractiveness in terms of financial return on investment and leads to qualitative changes.

The main components of innovative development of the enterprise are offered in Figure 1.

Fig. 1. The main components of innovative development of the enterprise

The basis for the formation of an innovative type of development of the country, based on intellectual and information technologies of production, is the development of intellectual potential, so the main characteristics of intellectual potential are:

1. Intellectual potential is a holistic, dynamic system of intellectual resources, in which all intellectual components are interconnected and interact.
2. The intellectual potential of the enterprise has two levels: the level of the carrier of intellectual potential and the level of the enterprise.
3. Intellectual potential is formed due to the internal capabilities of the enterprise, but it is influenced by the external environment.
4. The time factor is important for the development of intellectual potential.
5. The intellectual potential of the enterprise is used to carry out its innovative activities.

The final stage of formation and realization of intellectual potential is the creation and implementation of innovations in economic activity in order to increase innovative development and ensure the competitive advantages of the enterprise.

The ability of intellectual potential to be realized and provide the company with profit turns it into the intellectual capital of the enterprise. That is, intellectual potential is an opportunity that may not be realized, and intellectual capital is a form of realization of intellectual potential, which is proposed in Figure 2.
In the mid-90s of the twentieth century British researcher E. Brooking [2] identified four elements in the structure of intellectual capital: market, infrastructure, human and intellectual assets.

In his opinion, intellectual capital is a set of intangible (intellectual) assets, without which the company cannot exist and develop.

Market assets are the potential provided by intangible assets related to market operations (reputation, regular customers, distribution channels, licensing agreements, etc.).

Human assets are a set of collective knowledge of employees, their creative abilities, problem-solving skills, leadership skills, entrepreneurial and managerial skills and others.

Infrastructure assets are technologies, methods and processes that enable the operation of the enterprise (risk assessment methods, methods of managing sales staff, financial structure, level of education of employees, information equipment of the enterprise and others).

Intellectual assets are objects of intellectual property (objects of copyright and related rights, industrial property and non-traditional objects of intellectual property).

Analysis of the information of the State Statistics Service of Ukraine [3] showed that for the period 2016 – 2020 the innovation activity of Ukrainian enterprises decreased, namely: the total amount of expenditures on innovation decreased almost twice from 23229.5 million UAH in 2016 to 14406.7 million in 2020, most of it is lost on the purchase of machinery equipment and software, this happened mainly at their own expense.

In 2020, research and development in Ukraine was performed by 769 organizations, which is 19% less than in 2019 (950 in 2019), due to a significant (more than twice) reduction in the number of organizations in the business sector.

One of the most important indicators of the labor market, which characterizes not only the development of science, but also the economy as a whole – is one of the components of intellectual potential – human potential.

The level of professional qualification and creative activity of scientific personnel belongs to the category of the main indicators of the state of science and intellectual potential of society.

In Ukraine, there is a trend to reduce the number of researchers (from 133,7 in 2010 to 51,4 thousand in 2020), which leads to a gradual degradation of scientific potential.

Per 1000 employed population (aged 15-70) in Ukraine, the number of researchers in 2020 was 3.2 people (in 2019 – 3.1 people). According to Eurostat, the highest values of this indicator in 2018 - 2019 were in Norway (23), Finland (23,4), Iceland (20,1), Portugal (21,7); between 11-16 people – in Slovenia, Lithuania, Hungary, Spain, Poland, Czech Republic, Estonia, Slovakia, and the lowest – in Latvia (8,5), Bulgaria (7,4), Northern Macedonia (4,6), Romania (3,3).

The number of executors of research work at the end of 2020 was 78,86 thousand people (in 2017 – 94,3 thousand people), of which 65,2% – researchers, 9% – technicians, 25, 8% – support staff.

The share of doctors of sciences and candidates of sciences among performers of research and development was 31,8%, among researchers – 48,4%.

The largest number of researchers in public sector organizations (in 2020 – 52,5%) and accounted for technical (38,9%) and natural sciences (30,2%).

In 2020, 45,4% of researchers were women, including 61,7% in the social sciences, 64,7% in the medical sciences, 58,7% in the humanities and 34,3% in the technical sciences.
To maintain the required level of scientific and technological potential, the share of GDP that the country should spend on innovation is recommended by the European Union in the range of 3.3% to 3.3%. According to experts, with a science intensity of less than 0.9% of GDP, science ceases to perform an economic function and performs only a cognitive function.

At that time in Ukraine it is 0.41%, in Sweden 3.4%, Austria 3.19%, Germany 3.18%, Denmark 2.96%, Belgium 2.89%, Finland 2.79%, France 2.19%; in Northern Macedonia, Romania, Malta, Latvia and Cyprus from 0.37% to 0.64%. The highest values of this indicator are Israel 4.93% and South Korea 4.64%, Japan 3.24% and the United States 3.07%, China 2.2%.

In 2020 – 25% of the total expenditures were directed to the implementation of basic research (in 2019 – 21.7%), the share of expenditures to the implementation of applied research was 23.3% (in 2019 – 21.1%), to perform 51.7% of the total expenditures were directed to scientific and technical developments (in 2019 – 57.2%).

The share of the number of enterprises that implemented innovations in the total number of industrial enterprises decreased from 16.6% in 2016 to 14.9% in 2020, while the volume of sold innovative products (goods, services) in the total volume of sold products of industrial enterprises increased from 0.7% in 2017 to 1.9% in 2020, but is constantly declining compared to previous years.

In 2020 – 1086 patents for inventions were issued to national applicants, which is 13% less than in 2019. The low level of patenting of Ukrainian inventions abroad is mainly due to their lack of financial resources, which deprives them of the opportunity to protect their rights for inventions in other countries.

In 2020 – 1298 technologies created at the expense of the budget were transferred, which correspond to the strategic priority areas of innovation, which is 96.3% of the total amount of transferred technologies created at the expense of the state budget.

The transfer of these technologies was carried out mainly in the domestic market – 96.8%. Revenues from technology transfer in 2020 amounted to 225.8 million UAH due to an increase in revenues in the domestic market, which is 12.2% more than in 2019. In the foreign market, revenues decreased by 3.7 times. In the domestic market 755 transferred technologies are new for Ukraine, in the foreign market all 41 technologies are new.

Today, an important role in the innovative development of any country is played by assessing the ability of its enterprises to develop technologies and implement related innovations.

Ukraine participates in various international rankings assessing innovation potential and capacity [6]. The most important are the Global Innovation Index (GII), the Bloomberg Innovation Index – IAB (Bloomberg Innovation Index), the Global Talent Competitiveness Index – GICT (Global Talent Competitiveness Index), the European Innovation Scoreboard (EIT).

Ukraine's ability to master advanced technologies is assessed by the Advanced Technology Readiness Index introduced by UNCTAD in 2021 (A Frontier Technologies Readiness Index). The dynamics of Ukraine's ratings on the four indicators of assessment of the ability to innovate in 2014-2020 shows the lack of active policy and breakthroughs in supporting innovation both by the state and by entrepreneurship [6].

The basis of Ukraine's innovative competitiveness is human capital, higher education, as well as knowledge and research results. However, weak state institutions, an unfavorable environment for innovative business and an unfriendly financial system hinder the disclosure of entrepreneurial potential, create obstacles to the commercialization of innovations and their impact on GDP growth. Ukraine has remained in the group of countries with below-average income over the last decade (according to the World Bank grouping of countries).

According to the Global Innovation Index in 2020, Ukraine ranks 45th out of 131 countries in terms of their level of innovation performance (80 indicators in 7 areas). Leading the ranking of leading innovators are Switzerland, Sweden and the United States, and Ukraine ranks 30th among countries in the European region and second in the group of countries with below-average incomes, with a GDP per capita of $ 8533.5.

In 2020, according to the Global Innovation Index, Ukraine rose by 2 positions compared to 2019, and by 26 positions compared to 2013. The basis of its innovative capacity is human capital and research (39th place), as well as knowledge and technological results (25th place).

According to the Bloomberg Innovation Development Index, Ukraine ranked 56th out of 60 countries surveyed in 2020, compared to 46 in 2018 and 53rd in 2019. In 2020 Germany, South Korea and Singapore topped the list.

The Global Talent Competitiveness Index ranks 132 countries in terms of their ability to develop and attract talent in 6 components (70 indicators). Switzerland, the United States, Singapore, Sweden and
Denmark are the leaders in this indicator in 2020. Ukraine ranks 66th – there was a deterioration of positions compared to 2018 and 2019.

The European Innovation Scoreboard provides a comparative assessment of the strengths and weaknesses of the innovation systems of the 27 EU Member States and 10 neighboring countries, including Ukraine. According to the overall EIT Innovation Index (36% in 2019-2020), Ukraine is at the level of Romania and behind Bulgaria, Montenegro and Northern Macedonia.

Ukraine's strengths are an innovation-friendly environment and an impact on employment. Weaknesses include finance and support, the attractiveness of the research system and intellectual assets.

To assess the ability of countries to implement and use modern advanced technologies, there is a Readiness Index, which is formed of five components: the introduction of information and communication technologies, personnel (skills), research and development, industrial use and access to finance.

Ukraine has a fairly high rating for such components as the level of education (skills) of the population and research activity (number of patents and publications), the share of high technology in industrial production, however – low rating for information and communication infrastructure loans.

**Conclusions and perspectives of further research.** The level of the country's economy depends on the level of its innovative development, so the introduction of innovation potential in a market economy is one of the most powerful levers of competition and economic growth of enterprises. It is the innovative way of development that will stabilize and develop the activities of enterprises, provide Ukraine with a worthy place in the world and overcome the crisis.

However, the innovative development of the state is impossible without sufficient intellectual potential, which in modern conditions is an important factor in ensuring innovative development in combination with effective and efficient financial, economic, legal mechanisms of the state.

It can be said that for any country, education and innovation should become one of the most important areas of development in terms of long-term prospects of the country, its potential and competitiveness in today's world. Therefore, innovation development is not considered without the construction of a new innovative intellectual resource. An example for Ukraine can be Switzerland, which shows the best results among the world's leading countries in terms of economic openness and integration of human capital, or Sweden, which has a well-organized and efficient work of state institutions in implementing innovation, high level of staff skills. In the field of innovative technologies and processes, many universities and students that develop and implement innovations.

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