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INNOVATIVE POTENTIAL OF SCIENTIFIC INSTITUTIONS OF UKRAINE: PHILOSOPHICAL AND LEGAL ASPECTS

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Abstract. The article covers possible mechanisms for assessing the innovative potential of scientific institutions and their constituent parts.. It emphasizes the need for the development of science as a vital factor for the normal work of all spheres of the state, as well as the creation of the most comfortable social and living conditions for the population, in accordance with the European level of the society development. Proceeding from the relevance of the chosen topic, the **goal** is set, the **objectives** are formulated. **Aim and tasks.** The purpose of the research is to develop guidelines for evaluating the innovative potential of scientific activity of scientific institutions as a factor for increasing the investment value of science in the market of scientific services of Ukraine (on the example of research results of the research topic of the department). The tasks are: generalization of features of innovative potential of scientific institutions (especially socio-humanitarian); formulation of theoretical definitions of innovation potential, innovation activity; substantiation of the necessity of modeling the processes of evaluation of the innovative potential of scientific activity, etc. The **methodological basis** of the study is a set of generally recognized principles and methods of scientific knowledge. For scientific results, general scientific principles and approaches that ensured the unity of analysis, historicity, objectivity of research, etc. were used. **It is concluded** that the reliable and effective application of scientific developments in many spheres is the basis of steady development of the country's economy and is an integral part of ensuring the civilized living conditions of all its citizens. A number of changes to the current legislation are proposed, namely, the Law of Ukraine "On Scientific and Technical and Technical Expertise", "On State Regulation of Activities in the Field of Technology Transfer". It is noted that on the background of changes in the role of science and technology and high technologies in human life, the study of the innovative potential of science becomes of particular relevance. But despite the great interest in a comprehensive study of the development of science, so far, the common approaches to its evaluation are not yet settled.

Key words: science, scientific activity, scientific and technical activity, the right to quality, the rule of law, organizational and legal measures of evaluation of innovative potential.

Introduction. Scientific activity, being one of the elements of Ukrainian economy functioning, largely determines the prospects for the development of the state, the degree of safety of the national

security and the level of welfare of the population in the state. The Strategy for Sustainable Development "Ukraine 2020", approved by the Decree of the President of Ukraine dated January 12, 2015, No. 5/2015, reforming the scientific sphere has been proclaimed the top priority of the state policy of Ukraine. That is why at the end of 2015 the new wording of the Law of Ukraine "On Scientific and Scientific-Technical Activity" was adopted, in which formation and further improvement of the scientific sphere in Ukraine was defined as a perspective direction of our state development, taking into account the fact that the state of science and technology is decisive factor in the progress of society, increasing the well-being of citizens, their spiritual and intellectual growth. For all, without exception, the developed countries of the world, science is the leading industry, one of the most important areas of national wealth, and is defined in the category of basic, strategically important industries. The development of science is vital for the normal work of all sectors of industry, transport, agriculture, economic development, as well as the creation of the most comfortable social and living conditions for the population, in line with the European level of development of society. Reliable and effective application of scientific developments in many spheres is the basis for the progressive development of the country's economy and is an integral part of ensuring the civilized living conditions of all its citizens. But, despite all of the above, a lot of problematic issues are arisen. This is the definition of the effectiveness of innovation, produced by scientific institutions, and the possibility of introducing developed innovative approaches in the daily life of society. In our view, physico-mathematical, technical and other material innovations can be assessed and implemented, the problems are philosophical, sometimes legal novellas. But their role should not be diminished. This is a negative phenomenon in our opinion and a scientific article will consider it.

The selected research direction is one of the priority and executed in accordance with the Law of Ukraine of November 26, 2015, No. 848-VIII "On Scientific and Scientific-Technical Activity", the Law of Ukraine "On Scientific and Scientific and Technical Expertise". The professional article is part of the research results conducted within the framework of the scientific theme "Scientific principles of quality management of higher education in the context of the current legislation of Ukraine", PK 0117U002379, 2017-2019, which is secured by the Department of Professional and Higher Education and Law. Central Institute of Postgraduate Education and Law of the State Higher Educational Establishment "University of Management Education" of NAPS of Ukraine.

Literary data and the problem statement. By working on the research on the scientific topic "Scientific principles of quality management in the field of higher education in the context of the current legislation of Ukraine", certain results

were achieved by the scientists and significant suggestions which were reflected in scientific works: Otich O. M. (2018) Problems and prospects of education development in Ukraine in the context of the global challenges of the information society; Alla Vasylyuk, Olena Otich, Marina Day (2018) Adult Education in the Future of Change: Innovation, Perspectives, Forecasts: Monograph; Molchanova A.O. (2018) The Way to Open Education; Otamash I.G. (2018) Innovative Technologies in the Modern Educational Space // Implementation of European Standards in Ukrainian Educational Research. Such significant achievements have been somewhat tested and implemented in practice, but the results still need to be faced with a monetary equivalent. This requires expertise, an assessment of the real value of research innovations. Without assessing their effectiveness, and on the basis of this and financial support, the efficiency and innovation of research will eventually collapse. This is understandable, scientists will not be able to work physically for a long time on bare enthusiasm. Therefore, most of the qualitative research will be directed towards the subjects who will directly order and fund one or another study. That is, a system of target research will be formed. This is evidenced by studies in the field of technology transfer. Such tendencies already exist in Ukraine and in our opinion the result will be negatively affected by the provision of national interests and security. Because strategically important issues for the state of philosophy, education, socio-humanitarian sphere will gradually disappear. But, precisely these sciences form the basic human outlook, explain the need for human and society needs, and so on. Such inalienable parts of a strong legal state should be financed at the expense of public funds for the benefit of people in order to secure their constitutional rights and freedoms. Taxes paid by citizens should be directed to qualitative research with the aim of full and indispensable maintenance of human rights and freedoms.

All of the above raises the question of a mechanism for evaluating scientific results in these areas. It should be noted that from a scientific study to real results, there is a fairly large period of time, which complicates the real assessment of the importance of the results of the study.

Aim and tasks. The purpose of the research is to develop guidelines for evaluating the innovative potential of scientific activity of scientific institutions as a factor for increasing the investment value of science in the market of scientific services of Ukraine (on the example of research results of the research topic of the department). The tasks are: generalization of features of innovative potential of scientific institutions (especially socio-humanitarian); formulation of theoretical definitions of innovation potential, innovation activity; substantiation of the necessity of modeling the processes of evaluation of the innovative potential of scientific activity, etc.

Research results. The result of the study are concrete proposals for improving the current legislation on technology transfer as one of the elements of the methodology for assessing the innovative potential of a research institution. It is proved that the ordering by independent subjects of scientific researches in state scientific institutions testifies to the quality of their execution. In addition, unresolved and problematic issues are the order of exchange of innovations. So in order to solve the problem of the imperfection of the system of exchange (sales) of technologies among the participants of the innovation process we understand that it is it necessary to introduce a number of changes and clarifications to the Law of Ukraine "On State Regulation of Activities in the Field of Technology Transfer":

1.1. At the legislative level, principles of technology transfer should be defined: efficiency, mobility, transparency, etc.

Participants in the market of innovative technologies should be informed about existing developments in order to increase the efficiency of their own production.

The state should provide an open, transparent access to information on innovative developments and to improve the transfer of technology. (The exceptions are developments in the field of national security).

The principle of effectiveness - is to create conditions that would contribute to the abandonment of innovative technologies in Ukraine, with a view to their effective use.

1.2. The Law should expand possible ways of interaction between subjects of technology transfer (Article 4), namely: to provide the opportunity to attract specialists from other sectors to develop one or another technology.

1.3 The law should provide for the extent of responsibility of state bodies, entities of technology transfer in order to prevent abuse of their official powers, as well as the elimination of corruption manifestations.

We consider it is necessary to bring the Law of Ukraine "On Scientific and Scientific and Technical Expertise" in one line with the current needs of citizens and the state in order to carry out a real assessment of the innovative potential of scientific institutions, and based on their indicators of financing directly their scientific research (paying special attention to socio- humanities).

Consequently, the role of science is of inestimable value for society, since the use of fundamentally new scientific technologies in the process of establishing democratic, rule-of-law state will not only promote its innovative development, but also can enhance the image of Ukraine in the international scientific space.

Discussion. In the Law of Ukraine "On Scientific and Scientific-Technical Activity", in its latest edition, dated 11.10.2017, science is defined as "the main factor in the progress of society, improving the well-being of citizens, their spiritual and intellectual growth. This necessitates the priority state support for the development of science as a

source of economic growth and an integral part of national culture and education, creating conditions for the implementation of intellectual potential of citizens in the field of scientific and scientific and technical activities, ensuring the use of the achievements of domestic and world science and technology for the satisfaction of social, economic, cultural and other needs "[1].

Changes in the scientific sphere that have taken place in recent decades, as well as structural changes in the world and domestic economy, have not only influenced the work of the subjects of scientific activity, their organizational structure, mechanisms of management of activity and financial resources, but changed the course of scientific history. Thanks to collective approaches to the implementation of scientific projects, hundreds and even thousands of researchers are involved in the implementation of complex tasks. Such opportunities have certainly arisen thanks to modern communication technologies, an increase in the calculated capabilities of computer technology, which in general has changed the paradigm of modern science. The formation of the market of scientific services, the presence of competition between the subjects of scientific activity (hereinafter – the SSA) create the preconditions for increasing the number of threats and uncertainties only increase the relevance of scientific research in the modern world. Therefore, the main strategy for achieving high competitiveness between scientific institutions is the development of measures that will promote the effectiveness of science, including changes in all areas of their activities: from a scientific project to a style of management of scientific resources. It should be noted that the reform of the scientific sphere of Ukraine is based on the following principles: demonopolization and development of competition in the scientific sphere (support of scientific projects, scientific discoveries, improvement of technologies based on the introduction of innovative components, etc.); providing all scientists and consumers of scientific services with equal access to scientific resources; the unity of scientific standards, technical norms and rules actual in this field; ensuring financial transparency of the markets for scientific services and activities of scientific institutions; provision of legal rights of investors, creditors and shareholders in the process of realization of scientific projects; free access to scientific resources, including the training of all Ukrainian citizens.

In addition, it should be noted that regardless of organizational conditions, funding and other factors influencing the development of science, the reform of the scientific sphere is not enough. Hence the question: what factors of the effectiveness of the activities of scientific institutions were lost?

For example, in Soviet times, the financing of science and individual scientists was higher than average, but not so high compared to world standards, but the dynamics of the development of innovative potential

had the best indicators in the world in comparison with world trends. Only the United States succeeded in catching the figures of the former Soviet Union in 1961-1965 [2, p.44], therefore the definition of the peculiarities of such productivity of science attracts the interest of the organizers of the scientific process, politicians, heads of scientific institutions, entrepreneurs, and others. This emphasizes once again that modern reforms do not take into account certain components that are necessary and important for increasing the efficiency of scientific institutions. Scientific activity cannot exist without innovation, and therefore the innovation potential and scientific activity cannot exist separately. If science does not create innovative discoveries, then why do they need it? In the scientific environment there are different opinions about the definition of the term innovation. For example, a researcher from neighboring Poland, M. Khuchek, believes that innovation can be presented as the introduction of something new [3]. G. Azgaldov and A. Kostin have a separate opinion. They believe that innovation cannot be considered any innovation, but only that seriously increases the efficiency of the current system [4, p. 162-164]. S. Mazurenko connects innovation with market processes. He also considers innovation to be an innovation, but only that involves the development of a new technology in the process of forming a competitive product [5]. M. Fedotov and A. Kamalov also support this theory and believe that innovations create radically new technologies that are capable of revolutionizing the market [6]. Consequently, by summing up the statements of scientists, innovation can be presented as an innovation **demanded by the market.** It is quite possible to agree with the definition of scientists, but in our opinion, public interest was not sufficiently represented, since market needs do not always reflect public interest and needs. In society we will consider the overwhelming majority of the population living in a certain territory. Therefore, it is proposed to improve the definition of innovation as an innovation that meets the needs of society, people and has prospects for development in a market environment. That is, it satisfies not only physical needs, but also spiritual things that are not material. Accordingly, the innovation potential can be represented as the availability of certain resources for the achievement of scientific developments and projects, which is conditioned by the needs of the society and has a certain market value, but can meet the diverse needs of people. For a comprehensive understanding of the concept of innovative potential of scientific activity, it is not enough to reveal the concept of innovation and scientific activity. This term includes a number of components, representing the general views of scientists, we can say that the motive mechanisms that make it possible to create the innovative potential of scientific activity are the intellect of scientists, their motivation and working conditions, but nevertheless the key factor in the development of innovation potential is

the scientist's intellect, about which today is written a lot. However, the role of the intellect, its influence on the number of scientific discoveries and the number of scientific projects implemented to date has not been studied, but there are only heuristic assessments based on static data and expert estimates.

In modern literature, intelligence is defined as the systemic form of the organization of consciousness. It is presented as a systemic phenomenon, which includes a number of functional subsystems and structural-functional groups that form the fundamental integrity and unity of consciousness.

Its species have classifications that have been studied by many scholars. So, the most well-known categories are social intelligence as an integrative concept, which summarizes the mentality of certain social groups, organizations, institutions and societies, which includes ideas, worldview, beliefs, values, beliefs, experience and socio-cultural content. It is synonymous with social intelligence. Also, distinguish personal intelligence as a person's ability to create certain to stay, perform a certain job, etc. All these types of intelligence have a certain potential, which we call intellectual.

The innovative potential of scientific activity can be reflected as a certain system of constituents, and intellectual potential is precisely one of these (fig. 1.1 developed by the author).

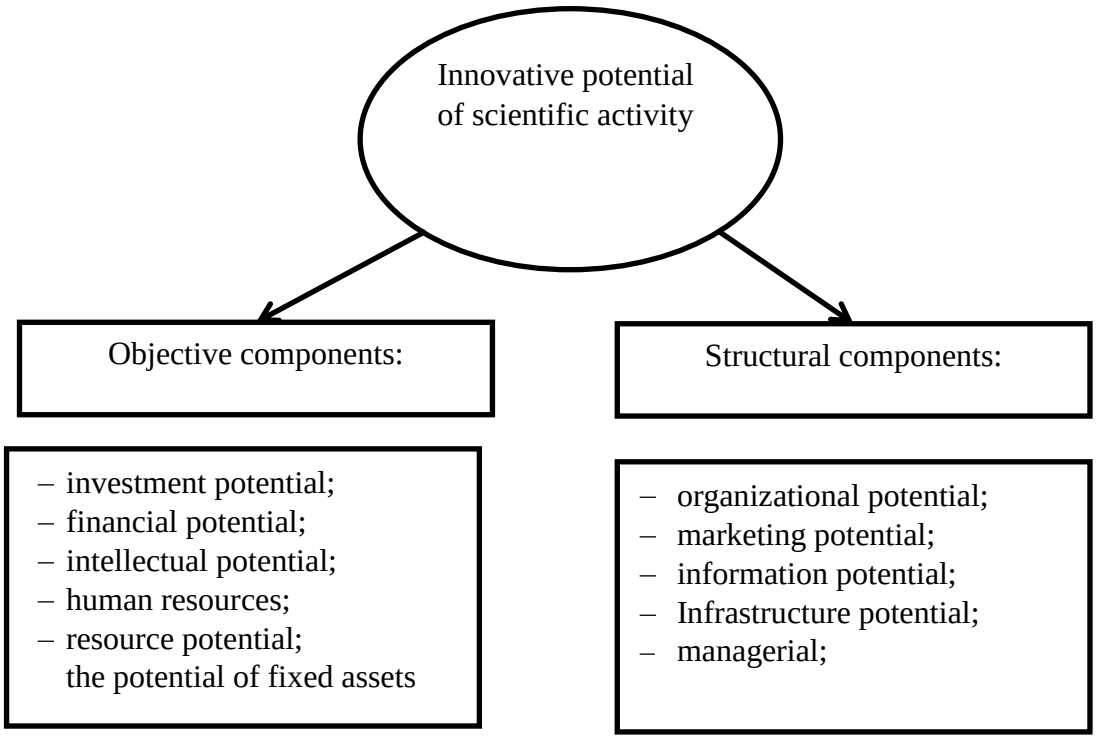

Fig. 1.1. Structure of innovative potential of scientific institutions scientific activity

Special attention is paid to the innovative processes, from the initial stage to the scientific discovery, and special attention was paid to the methodology of innovation activity and the processes of its implementation.

In the scientific literature, the innovation process is defined as a complex of consistent actions from obtaining theoretical knowledge to the finished scientific product created on its basis. The concept of innovation process involves the presence of feedback between the consumer of the new product and the scientific sphere. Innovative processes can be of varying lengths depending on the stage at which the research is sought by the consumer to improve the way to meet their needs.

Currently, the socio-economic situation in Ukraine requires the transition to an innovative way of development, and science is the main engine of such development. At the same time, considerable efforts should be directed towards the development of research and innovation activities in the field of vocational and higher education. The efficiency of the transition to an innovative model of economic development depends on this fact. The heyday of the economy depends on the level and quality of education. In this direction, in our opinion, the development of research and innovation activities in scientific institutions in the following directions is more relevant: organizational forms of research works in the field of innovations; directions of research work; the volume of budget and extra budgetary financing of research works; directions of realization of innovative activity; Achievement of scientific institutions for the last three years in research work; assessment of the potential of the scientific institution in the scientific and innovation sphere.

Undoubtedly, conducting any assessment of the above-mentioned components of efficiency can be realized on the basis of statistics, which is conducted by the scientific institution itself, or other subjects of scientific activity or conducting an expert evaluation.

Conclusion. Consequently, an innovative way of development, which is based mainly on the achievements of science, technology, and high technology, is becoming crucial for the development of human civilization. Therefore, the concept of innovation economy is supported by the social and political elites, the elite of almost all developed countries. The main feature of such an economy is that the processes of creation, dissemination and introduction of new knowledge become crucial to the development of countries, providing a harmonious combination of economic growth with preserving the natural environment with social progress. It should be noted that the sector that produces knowledge and transforms it into human consumption products is growing at a faster pace. So according to the information and analytical agency "League of Law", the capacity of the world market of high-tech products is now 3.3 trillion. dollars USA, and in the coming years 15 years can approach 10 trillion. dollars [7]. Also, many international studies

of scientists suggest that in recent decades, against the backdrop of a decline in the values of traditional factors of economic growth (labor, investment in fixed assets), the contribution of the innovative potential of scientific activity will affect the growth of GDP of developed countries by an order of magnitude more than it was in recent years. If at the end of the twentieth century. the share of new knowledge embodied in technology, equipment and production organization, the current development of innovative potential in the world on average affected the development of GDP by 45.5%. In France, by 58%, in Finland and Sweden - by 63%, Austria and Germany - by 67%, while in a number of advanced countries, the contribution of the innovative component to GDP growth has already reached 70-85%. Thus, the scientific and technological progress, which the innovative potential based on , is the engine of intensive economic growth, pushing forward the following traditional factors such as labor and capital, population size, mineral resources, etc.

Against the background of changes in the role of science and technology and high technologies in human life, the study of the innovative potential of science becomes of particular relevance. But despite the great interest in a comprehensive study of the development of science, so far, there are not yet settled common approaches to its evaluation. There are a number of differences in approaches, which is explained by the fact that each of the researchers considers only a few features of this process. In some interpretations, the emphasis is on the versatility of this category, in others on the peculiarities of their functioning, on the nature of use and their interrelation with other spheres of human activity, etc.

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ІННОВАЦІЙНИЙ ПОТЕНЦІАЛ НАУКОВИХ УСТАНОВ УКРАЇНИ: ФІЛОСОФСЬКО-ПРАВОВИЙ АСПЕКТ

Анотація. У статті, на прикладі дослідження наукової тематики кафедри, висвітлюється можливі механізми оцінки інноваційного потенціалу наукової установ та її складових частин. Підкреслюється необхідність розвитку науки, як життєво необхідного фактору для нормальної роботи всіх сфер держави, а також створення найбільш комфортних соціально-побутових умов для населення, відповідно до європейського рівня розвитку суспільства. Метою дослідження є розробка методичних положень щодо оцінки інноваційного потенціалу наукової діяльності наукових установ, як фактора збільшення інвестиційної вартості науки на ринку наукових послуг України (на прикладі результатів дослідження наукової теми кафедри). Завданнями є: узагальнення особливостей інноваційного потенціалу наукових установ (особливо соціо-гуманітарних); формулювання теоретичних визначень інноваційного потенціалу, інноваційної діяльності; обґрунтування необхідності моделювання процесів оцінювання інноваційного потенціалу наукової діяльності тощо. Виходячи з актуальності обраної теми ставиться мета, формулюються завдання. Методологічну основу дослідження складає сукупність загальновизнаних принципів та методів наукового пізнання. Для отримання наукових результатів застосовувалися загальнонаукові принципи та підходи, які забезпечили єдність аналізу, історизм, об'єктивність дослідження тощо. Робиться висновок про те, що надійне та ефективне застосування наукових розробок у багатьох сферах є основою поступального розвитку економіки країни та представляє невід'ємну складову забезпечення цивілізованих умов життя всіх її громадян. Пропонується ряд змін до чинного законодавства, а саме до Закону України «Про наукову та науково-технічну експертизу», «Про державне регулювання діяльності у сфері трансферу технологій». Зауважується на тому, що на тлі змін ролі науки і техніки та високих технологій в житті людства питання вивчення інноваційного потенціалу науки набувають особливої актуальності. Та незважаючи на великий інтерес до усебічного вивчення напрямів розвитку науки, до сих пір не врегульовано єдиних загальних підходів до його оцінювання.

Ключові слова: наука, наукова діяльність, науково-технічна діяльність, право на якість, верховенство права, організаційно-правові заходи оцінки інноваційного потенціалу.

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ИННОВАЦИОННЫЙ ПОТЕНЦИАЛ НАУЧНЫХ УЧРЕЖДЕНИЙ УКРАИНЫ: ФИЛОСОФСКО-ПРАВОВОЙ АСПЕКТ

Аннотация. В статье освещается возможные механизмы оценки инновационного потенциала научных учреждений и их составляющих частей. Подчеркивается необходимость развития науки, как жизненно необходимого фактора для нормальной работы всех сфер государства, а также создание наиболее комфортных социально-бытовых условий для населения, приближенного европейскому уровню развития общества. Целью исследования есть разработка методических положений относительно оценки инновационного потенциала научной деятельности научных учреждений, как фактора увеличения инвестиционной стоимости науки на рынке научных услуг Украины (на примере результатов исследования научной темы кафедры). Задачами исследования есть: обобщение особенностей инновационного потенциала научных учреждений (особенно социально-гуманитарных; формулирование теоретических определений инновационного потенциала, инновационной деятельности; обоснование необходимости моделирования процессов оценивания инновационного потенциала деятельности и т. п. Исходя из актуальности выбранной темы ставится **цель,** формулируются **задачи. Методологическую основу исследования** составляет совокупность общепризнанных принципов и методов научного познания. Для получения научных результатов применялись общенаучные принципы и подходы, которые обеспечили единство анализа, историзм, объективность исследования и тому подобное. **Делается вывод** о том, что надежное и эффективное применение научных разработок во многих сферах является основой развития экономики страны и представляет неотъемлемую составляющую обеспечения цивилизованных условий жизни всех ее граждан. Предлагается ряд изменений в действующее законодательство, а именно в Закон Украины «О научной и научно-технической экспертизе», «О государственном регулировании деятельности в сфере трансфера технологий». Отмечается то, что на фоне изменений роли науки и техники и высоких технологий в жизни человечества вопросы изучения инновационного потенциала науки приобретают особую актуальность. Но, несмотря на большой интерес к всестороннего изучения направлений развития науки, до сих пор не урегулирован единых общих подходов к его оценке.

Ключевые слова: наука, научная деятельность, научно-техническая деятельность, право, верховенство права, организационно-правовые меры оценки инновационного потенциала.

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