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In modern conditions of dynamically changing environment, questions about new regional ways of innovative development are being updated. Researches confirm that the innovative development of regions is becoming a significant factor in increasing the competitiveness of the region and the formation of high innovative activity. The purpose of the article is to identify the essence of modern approaches to the management of regional innovative development, that are appropriate in the context of transformational changes and to analyze them. To achieve this goal next following tasks have to be done: to study main methods of managing the regional innovative development; to analyze legal and legislative framework; to analyze statistical indicators of innovative development of the region; to identify regions-leaders and regions-outsiders in Ukraine; to study the concept and essence of Smart Specialization Strategies and the entrepreneurial discovery process in the conditions of the Ukrainian regions' development.

The article discusses the competitiveness and efficiency of innovations in a regional context. These are two interrelated economic categories, reflected in their synergistic effect in various areas of the economic and social life of the regions. Their assessment can be carried out at different levels – regional, national and international levels. Regional competitiveness and efficiency of innovation is the result of comprehensive stakeholder actions at these levels.

The article also identifies the main obstacles to the management of regional innovation development and analyzes the regulatory and legal framework for the development of innovations at the regional level.

The article also carried out a multifactorial comparative analysis based on statistical data of development indicators to assess the development of regions. Regions-leaders and region-outsiders are defined. The article considers the main effective instruments of innovation policy and the most effective ways of its implementation at the regional level. One of the tool is the Smart Specialization Strategy, which aims to grow economically through a strategy based on localization and stakeholder mobilization at the regional level. The paper also studied the entrepreneurial discovery process, that is a «conceptual pillar» of smart specialization.

**Key words:** Regional Innovation Development, Management of Regional Innovation Development, Innovative Potential, Regional Competitiveness, Smart Specialization Strategy, Entrepreneurial Discovery Process.

**УПРАВЛІННЯ ІННОВАЦІЙНИМ РОЗВИТКОМ РЕГІОНУ****Демченко Софія Вікторівна****старший лаборант***e-mail: sofia.demchenko95@gmail.com**ORCID ID: 0000-0003-3658-5197***Барінова Діана Семенівна****здобувач***e-mail: diana.barynova@lgdc.org.ua.**ORCID ID: 0000-0001-7191-9792***Лю Цзеюй****магістрант***e-mail: heiheixiaotudou@gmail.com**ORCID ID: 0000-0002-4293-3736***Харківський національний університет імені В.Н. Каразіна***вул. Мירוносицька, 1, Харків, 61002, Україна*

У сучасних умовах динамічно змінюваного середовища актуалізуються питання про нові регіональні шляхи інноваційного розвитку. Дослідження показують, що інноваційний розвиток регіонів стає значущим чинником підвищення конкурентоспроможності регіону та формування високої інноваційної активності. Мета статті полягає у виявленні сутності та аналізі сучасних підходів до управління інноваційним розвитком регіону, що є доцільними в умовах трансформаційних змін. Досягнення поставленої мети обумовило визначення та вирішення наступних завдань: дослідження основних методів управління інноваційним розвитком регіону; аналіз правової та законодавчої бази; аналіз статистичних показників інноваційного розвитку регіону; визначення регіонів-лідерів та регіонів-аутсайдерів; дослідження понять та сутності Стратегій смарт-спеціалізацій та процесу підприємницького пошуку в умовах розвитку регіонів України.

У статті розглядаються конкурентоспроможність і ефективність інновацій у регіональному розрізі, які представляють собою дві взаємопов'язані економічні категорії, що відбиваються в їх синергетичному ефекті в різних областях економічного та соціального життя регіонів. Їх оцінка може здійснюватися на різних рівнях: як на регіональному, так і на національному та міжнародному рівні. Регіональна конкурентоспроможність і ефективність інновацій є результатом комплексних дій стейкхолдерів на цих рівнях.

У статті також визначено основні перешкоди управління регіональним інноваційним розвитком та проаналізовано нормативно-правове забезпечення розвитку інновацій на регіональному рівні.

Також у статті проведений багатофакторний порівняльний аналіз для оцінки розвитку регіонів України, що базується на статистичних даних індикаторів розвитку. Виявлені регіони-лідери та регіони-аутсайтери. У статті розглянуто основні сучасні дієві інструменти інноваційної політики та найбільш дієві шляхи її імплементації на рівні регіону. Одним із таких інструментів є Стратегія смарт-спеціалізації, що має за мету економічне зростання за допомогою стратегії на основі локалізації і активізації зацікавлених сторін на регіональному рівні. У роботі розглянуто також процес підприємницького пошуку, що є «концептуальним стовпом» смарт-спеціалізації.

**Ключові слова:** регіональний інноваційний розвиток, управління інноваційним розвитком регіону, інноваційний потенціал, конкурентоспроможність регіону, стратегії смарт-спеціалізації, процес підприємницького пошуку.

## УПРАВЛЕНИЕ ИННОВАЦИОННЫМ РАЗВИТИЕМ РЕГИОНА

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В современных условиях динамично меняющейся среды актуализируются вопросы о новых региональных путях инновационного развития. Исследования показывают, что инновационное развитие регионов становится значимым фактором повышения конкурентоспособности региона и формирования высокой инновационной активности. Цель статьи заключается в выявлении сущности и анализе современных подходов к управлению инновационным развитием региона, что являются целесообразными в условиях трансформационных изменений. Достижение поставленной цели обусловило определение и решение следующих задач: исследование основных методов управления инновационным развитием региона; анализ правовой и законодательной базы; анализ статистических показателей инновационного развития региона; определение регионов-лидеров и регионов-аутсайдеров; исследование понятий и сущности стратегии смарт-специализаций и процесса предпринимательского поиска в условиях развития регионов Украины.

В статье рассматриваются конкурентоспособность и эффективность инноваций в региональном разрезе, которые представляют собой две взаимосвязанные экономические категории, отражаются в их синергетическом эффекте в различных областях экономической и социальной жизни регионов. Их оценка может осуществляться на разных уровнях, как на региональном, так и на национальном и международном уровне. Региональная конкурентоспособность и эффективность инноваций является результатом комплексных действий стейкхолдеров на этих уровнях.

В статье также определены основные препятствия управления региональным инновационным развитием и проанализировано нормативно-правовое обеспечение развития инноваций на региональном уровне.

Также в статье проведен многофакторный сравнительный анализ для оценки развития регионов Украины, основываясь на статистических данных индикаторов развития. Обнаружены регионы-лидеры и регионы-аутсайдеры. В статье рассмотрены основные современные действенные инструменты инновационной политики и наиболее действенные пути ее имплементации на уровне региона. Одним из таких инструментов является Стратегия смарт-специализации, которая имеет целью экономический рост с помощью стратегии на основе локализации и активизации заинтересованных сторон на региональном уровне. В работе рассмотрен также процесс предпринимательского поиска, который является «концептуальным столбом» смарт-специализации.

**Ключевые слова:** региональное инновационное развитие, управление инновационным развитием региона, инновационный потенциал, конкурентоспособность региона, стратегии смарт-специализации, процесс предпринимательского поиска.

**Introduction.** Regional economies face the constant challenge of restoring their economic structures and providing new growth paths to offset the decline of old industries and specializations. This pressure is exacerbated by periodic economic crises, globalization, and serious social problems, such as global warming and demographic change. Therefore, in today's conditions of regional development, there are actual questions about how and where new regional industrial routes arise and which types of policies are most suitable for the development of new ways of sustainable development. Global financial and economic changes confirm the urgency of innovation development of regions, which becomes a significant factor in increasing the region's competitiveness and formation of high innovative activity. This leads to the need in formulating new approaches to the management of the regional socio-economic development with an innovative basis. Ensuring the most innovative way of development becomes one of the main tasks for state authorities of the regional level.

**Literature review.** A lot of attention has been paid to the study of various directions of regional innovation development recently, which, in turn, is connected with the deepening of decentralization and European integration processes, the shift in the innovation sphere of the country and the general tendencies of innovative development at the macro-, meso-, and micro-levels. It is necessary to note the contribution of Ukrainian scientists such as O. Balatsky, V. Heyets, O. Dimchenko, I. Matyushenko, S. Mochernyi, D. Stechenko, A. Chukhno in the study of these issues. Also, theoretical-methodological and methodical issues of the management of states and regions innovative processes are studied by foreign researchers: M. Porter, J. Dunning, B. Ashaym, R. Kaplinsky, C. Christensen, M. Reiner and others.

**The aim of the study** is to identify the essence and analysis of modern approaches to the management of innovative development in the region.

**Key research findings.** The formation of the innovative development of the region is greatly influenced by the macroeconomic situation in the country, also by social, organizational and managerial factors, as well as by the nature of the interaction between science and production, the implementation of competitive achievements and infrastructure support. The financial, investment, labor and natural resource potential of the region also influence its development and may be aimed at implementing innovations [1]. At the same time, the balance of innovation economic development of the Ukrainian regions can be achieved with the help of well-balanced regional policy and administrative and economic management mechanisms only. Organizational, economic, legal solutions and conditions that help accelerate the development of innovative production and the market introduction of high-tech competitive products are needed.

State support for innovation development of the region may be based on the use of administrative, legal, economic and communicative methods [2]. These methods of management are a homogeneous set of methods of purposeful influence of the management system (state authorities operating on a regional level) on the object of management (a set of acts of innovation activity, which constitute the process of innovation development of the territory in general) to achieve the pre-set goals of regional innovation development or for realization of a certain variant of alternatives of structural-innovative transformations of the economic complex of the territory [2].

Administrative-legal methods represent various forms of direct subjugation of the will of the participants in certain economic processes associated with the generation and implementation of innovations, to orient these participants to the achievement of established management tasks (priorities, goals and objectives of regional innovation development).

Legal methods provide the definition of obligatory for the implementation rules of participants' behavior (laws, regulations, etc.) of certain economic processes, administrative - express the various forms of direct government intervention of the state in economic operations.

The application of economic methods involves the implementation of indirect forms of influence on the object of management (the process of regional innovation development), where the concentration of material interest and the will of the participants of regional innovation development on solving the set tasks, is carried out through the transformation of the economic situation around the object of management.

Communication methods represent a means of ensuring effective coordination of participants' activities of regional innovation based on the support of a constant information exchange (i.e., communication as a certain type of human relations - communication of people) in the process of joint activity. Its essence consists in the exchange of ideas, thoughts, feelings, information. The choice of specific forms and methods of state regulation and support of innovation processes at the regional level should be determined by the strategic priorities and tasks of the regional socio-economic development, as well as the content and nature of the innovations that are needed to achieve these strategic goals [2].

Innovation activity in the region depends on a number of factors, the main of which is the level of development and effective use of innovative potential. However, on the way to stabilize and improve the indicators of socio-economic development of both regions and country, there are a number of obstacles in the current management of the regions. According to researchers [3], such obstacles include weak institutional provision of innovation activity, the lack of motivational elements of entrepreneurship activities to implement innovations as the main way of achieving competitive advantages. The problem of the weakness of civil society institutions and the low level of involvement of territorial communities in addressing local development issues is gradually being solved within the framework of the decentralization reform (2014). However, at the same time, one of the major obstacles of this process is the imperfection and incompleteness of the legislative, normative, regulatory and methodological basis of the strategic vision of innovation development of the regions. The Laws of Ukraine «On the Principles of State Regional Policy» [4] and «On Stimulating the Development of Regions» [5] do not accompany methodological recommendations on the development of regional strategies for innovation development and their implementation. Therefore, the innovative component is only partially reflected in existing strategies for the development of domestic regions as one of the factors for achieving strategic or operational goals [3]. However, according to Minister of Education and Science L. Grinevich, MES has 2 strategic tasks that should give an impetus to the development of innovations: the creation of the Strategy of Ukraine's Innovation Development and the drafting of the Law «On Technology Transfer». In October 2018 the Ministry proposed to public discussion of the Strategy of Ukraine's Innovation Development until 2030. In particular, the strategy identifies the key areas of regional development, which include launching pilot projects to create innovative infrastructure elements (including innovative clusters, technology transfer centers, technology platforms, business incubators and accelerators) to establish partnerships between Ukrainian innovators and individuals, interested in commercializing their ideas [6].

Today, the main regional development instrument is the State Strategy for Regional Development for the period until 2020 [7]. Action Plan according to its second stage of implementation was approved in the fall of 2018 by the Government. One of the main measures planned to be implemented and aimed at increasing competitiveness is the implementation of a system of strategic planning of regional development based on Smart Specialization considering world market and technological trends of innovation development, competitive areas of economic activity.

To assess regional innovative development it's appropriate to make multivariate comparative analysis based on data from the official's statistical indicators for the regions in 2017. This source of information is the statistical compilation of the State Statistics Service of Ukraine «Scientific and Innovative Activity of Ukraine» [8].

For the calculations, the following indicators were selected: number of organizations that carried out research and development (units), number of employees involved in the implementation of research and development (individuals), financing of internal costs for research and development (thousand UAH), gross expenses for research and development (thousand UAH), number of industrial enterprises in the areas of innovation (units), total amount of expenses in the areas of innovation activity (thousand UAH), implementation of innovations in industrial enterprises (units), volume of innovative products sold (thousand UAH), and also innovative activities of industrial enterprises by regions were analyzed.

During 2017, research and development in Ukraine were carried out by 963 organizations, 45,8 % of which belonged to the state sector of the economy, 39,0 % – to the entrepreneurship, 15,2 % – to the higher education. Almost a third of the total number of scientific organizations is located in Kiev, 15,5 % in Kharkiv, 7,8 % in Lviv, 5,6 % in Dnepropetrovsk and 5,0 % in Odessa regions (fig. 1).

The smallest number of organizations that carry out scientific research and development has Rivne Oblast – 1,14 %, Volyn and Zhytomyr have 0,93 %, Zakarpattia and Khmelnytskyi have 0,83 % of the total amount.

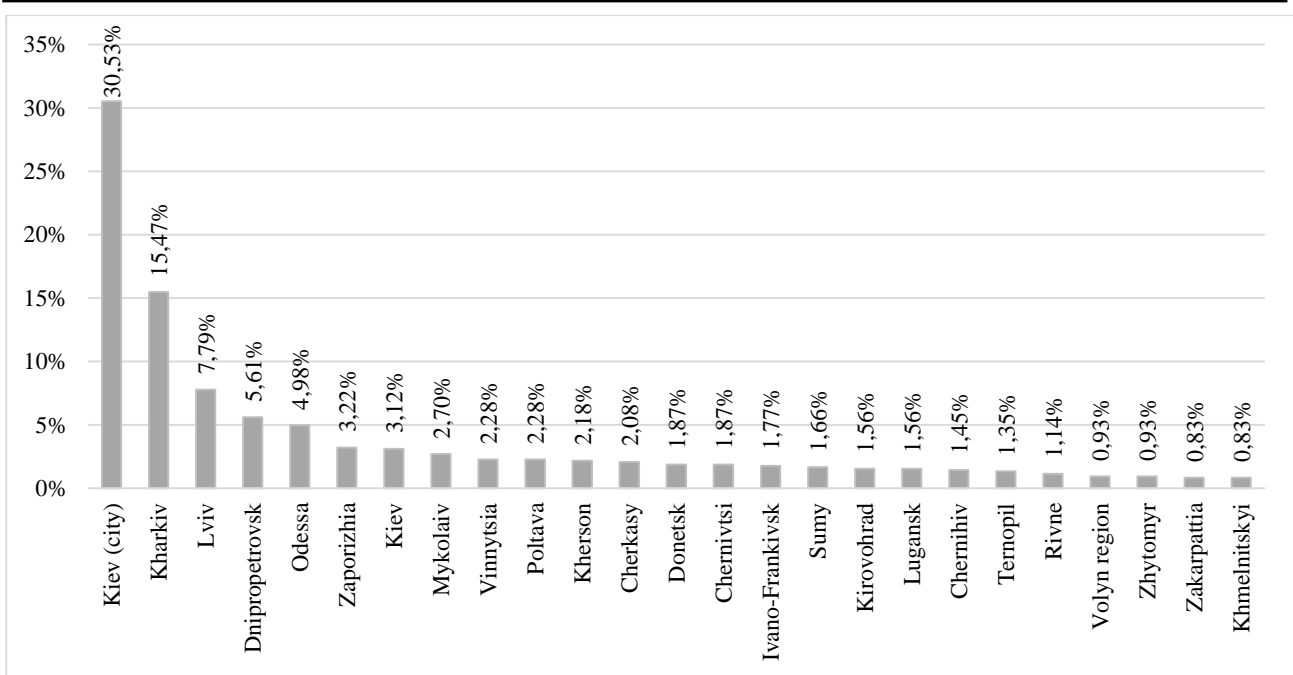


Figure 1 – The organizations that carried out research and development by regions in 2017, % of the total amount [8]

The largest share of workers involved in the implementation of research and development is in Kyiv – 46,23 %, Kharkiv region has 15,75 %, Dnipropetrovsk has 9,5 %, Lviv has 4,96 %, and Zaporizhia has 4,47 % (fig. 2). Among the regions-outside, this indicator has the following values: in Rivne Oblast 0,4 %, in Ternopil – 0,38 %, in Luhansk – 0,37 %, in Volyn – 0,33 % and in Donetsk – 0,25 %.

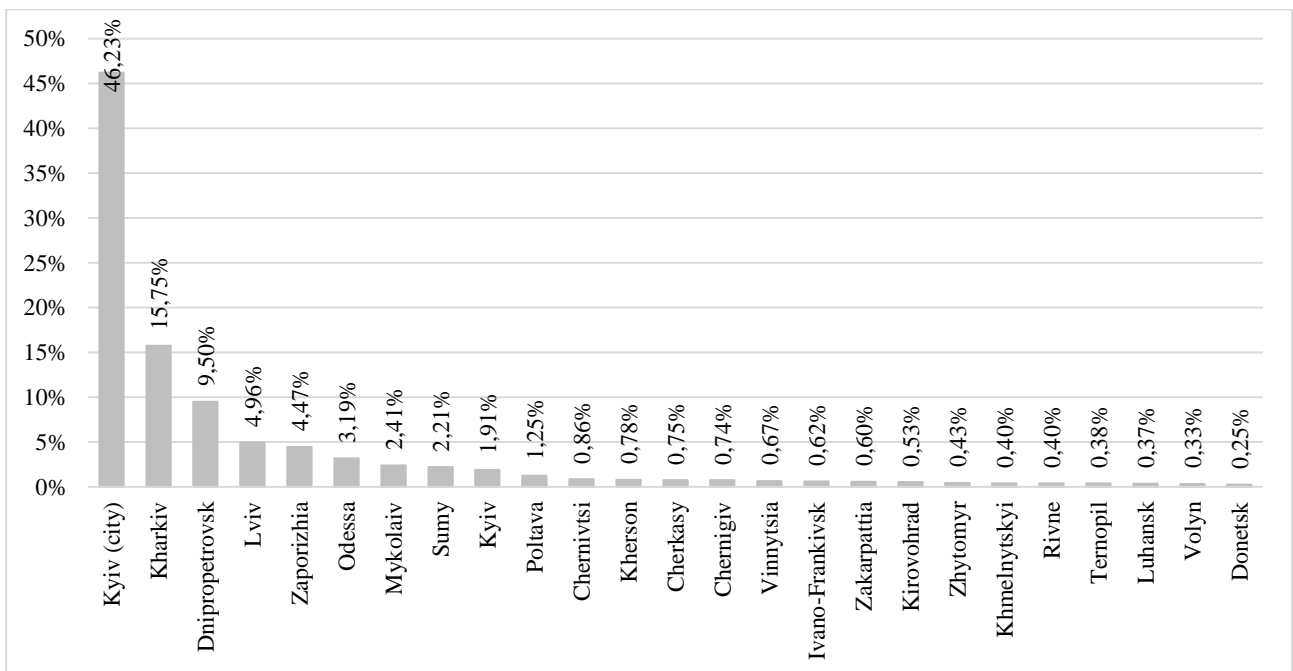


Figure 2 – The number of employees involved in the implementation of scientific research and development, by regions in 2017, % of the total amount [8]

According to the State Statistics Service of Ukraine in 2017, 759 enterprises, or 16,2 % of surveyed industrial enterprises, were engaged in innovative activities in industry. Among the regions, the share of innovatively active enterprises was higher than the average in Ukraine in Kharkiv, Ternopil, Mykolaiv, Cherkasy, Kirovohrad, Ivano-Frankivsk, Sumy, Zaporizhia regions and in Kyiv. The smallest share of such enterprises was in Luhansk, Chernigiv, Chernivtsi and Rivne regions.

In 2017, 88,5 % of innovatively active industrial enterprises implemented innovations (or 14,3 % of surveyed industrials). They introduced 2387 innovative products, 477 of them were new exclusively for the market, 1910 were new only for the enterprise. Of the total number of products implemented, 751 of them were new types of machines, equipment, instruments, devices, etc., of which 30,5 % are new to the market. The largest number of innovative types of products has been introduced at Kharkiv enterprises (16,6 % of the total number of implemented types of innovation products), Zaporizhia (13,4 %), Lviv (10,3 %), Sumy (9,1 %) regions and in Kyiv (8,3 %); by types of economic activity (at enterprises producing machinery and equipment that are not attributed to other groups (23,9 %), food products (21,4 %), basic pharmaceutical products and pharmaceuticals (7,8 %)).

The number of implemented innovative technological processes (new or improved methods of processing and production) was 1831 in 2017, the largest of which were enterprises of Kyiv (30,0 %), Kharkiv (12,6 %), Sumy (12,3 %), Zaporizhia (7,8 %) and Dnipropetrovsk (5,8 %) oblasts; by types of economic activity – enterprises producing machinery and equipment not included in other groups (18,8 %), natural gas production (17,7 %), manufacture of finished metal products, except machinery and equipment (13,4 %) and food products (7,9 %). Of the total number of innovative technological processes introduced, 611 of them are low-waste, resource-saving.

In 2017, 4049 applications for inventions were received, including 2285 from national applicants, whose activity grew by 2,4 % in comparison with the previous year. The share of applications from foreign applicants slightly decreased and amounted to 43,6 % in the total number of applications (compared with 45,5 % in 2016).

Among the national applicants, enterprises and organizations working in the field of education and science remained the most active. In 2017, they filed nearly 6400 applications for inventions and utility models (89,4 % of the total number of applications from national applicants – legal entities). The number of applications submitted by educational institutions exceeds the number of applications submitted by scientific organizations annually (4570 and 1831 applications, respectively). The inventive activity in industry remains low, industry-wide 280 applications for inventions and utility models are filed (against 343 applications in the previous year), representing 3,9 % of the total number of applications submitted.

In 2017, the activity of applicants in Kyiv, Kharkiv and Vinnytsia regions remained high, but the number of applications from them decreased by 7,2 %, 3,6 % and 30,0 %, respectively. At the same time, the activity of the applicants of Dnipropetrovsk and Odesa regions increased by almost 17 % and 14 %. In general, the applicants of these regions filed more than 7,1 thousand applications, or 63,3 % of the total number of applications for inventions and utility models submitted by the national applicants in 2017.

In 2017, the total amount of expenditures on the implementation of R&D by organizations' own forces amounted to 13379,3 million UAH. Regions-leader among the financing of internal expenditures for research and development have become Kyiv (42,35 % of total expenditures), Kharkiv Oblast (17,93 %), Dnipropetrovsk (16,91 %) and Zaporizhia (6,83 %) regions.

The regions-outsiders: Donetsk and Rivne regions (0,1 %), Khmelnytskyi (0,13 %), Ternopil (0,14 %) of the oblast [8].

According to analyzed data, the regions-leaders with innovative self-sufficiency, which can ensure the most effective investment process of state resources to the development of their innovative potential with the state support measures for innovation activity for the current and short-term period have become Kharkiv, Dnepropetrovsk, Lviv, Zaporizhia, Kiev Oblasts. These regions can provide innovative products, both for domestic and foreign markets, have a resource base for the formation of budget revenues. Also, according to the results of the Kyiv Smart City Forum 2018, Kharkiv was awarded as the most innovative city. In the Kharkov region idea to unite all supporters of innovations was emerged and developed to eliminate unnecessary competition at the municipal level [9].

The regions-outsiders are Rivne, Khmelnytsky, Zakarpattia Oblasts, as well as Luhansk and Donetsk. These regions require the development of special measures of state support for innovation activity. Economic growth through a strategy based on the localization and activation of stakeholders at the regional level is the heart of the new European growth model, based on the regional smart specialization (Smart Specialization Strategy, S3). This model was launched by the European Commission in 2013 as a prerequisite for support by the European Structural and Investment Funds and is considered as an «important concept for a more effective and more focused innovation policy» in Europe.

Research of technological and market opportunities of the regions is carried out through the cyclical interaction of the stakeholders who are at the very center of the development and implementation of smart specialization strategies, within the framework of the model of the Quadruple Helix [10].

The traditional triple helix model of innovations refers to a set of interactions between academic

circles, industry and government to stimulate economic and social development [11]. Based on this model, the quadruple helix includes a civil society to overcome the gap between innovation and needs of society without limiting their potential impact.

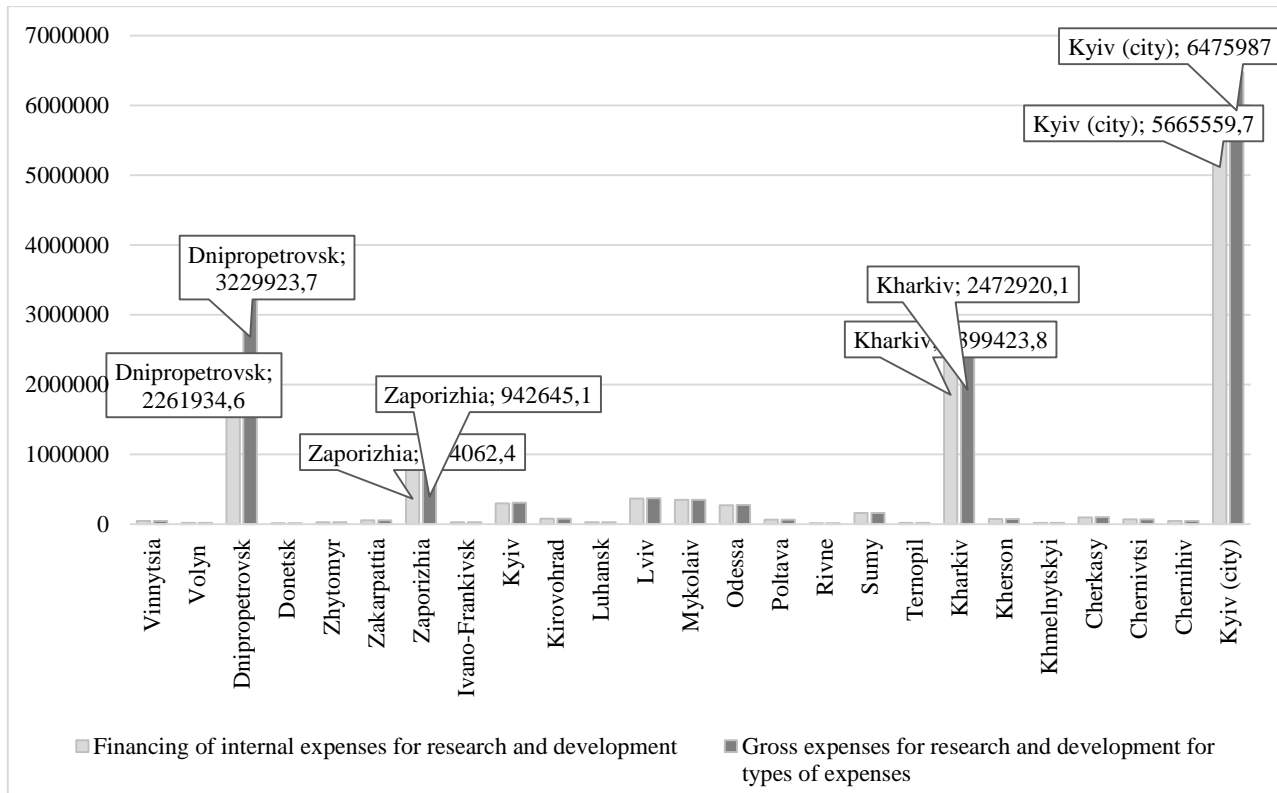


Figure 3 – Financial indicators of innovation activity of regions in 2017, thousand UAH [8]

Operating at the regional level proactive government authorities form an effective grouping of quadruple helix stakeholders as a prerequisite for choosing strategic priorities, developing partnerships and implementing strategies for smart specialization through regional and interregional cooperation at the European level.

Identifying regional opportunities within selected priority sectors and identifying the concentration and location of these opportunities within established and growing European value chains is a challenge for regional authorities. Mapping of stakeholders and opportunities and ensuring integration into value chains is an important cornerstone in the implementation of a number of EU policies, including: S3 policy, cluster policy (including the development of cluster partnerships and internationalization of clusters), SME support policy, technology policy, science and innovation policy, regional development policy and interregional cooperation networks [11].

The European Smart Specialization Policy is aimed at mobilizing innovative and entrepreneurial opportunities, as well as at creating jobs and economic growth through interregional cooperation. The fundamental principles of this political initiative are the entrepreneurial discovery process (EDP), which aims to mobilize all stakeholders at all stages from concept to strategy implementation [12].

In order to formulate strategies for smart specialization, public authorities should develop a vision of how a region's specialization can integrate with broader European value chains and how it can connect to global markets. The development of the value chain arises both at the firm level and for monitoring internationalization and globalization. Smart specialization strategies and the process of their implementation should be guided by facts, as well as strategic vision, where the combination of public and private interests must be carefully organized.

The entrepreneurial discovery process, which is an important step towards creating strategies for smart specialization, requires the reflection and involvement of stakeholders, as well as detailed knowledge of key players in the industry, knowledge providers and innovation leaders at the regional level, beyond the traditional government role.

The entrepreneurial discovery process is a comprehensive and interactive down-to-mountains process, in which participants from different environments (politics, business, academic environment, etc.) open and

publish information about possible new activities, identifying the potential opportunities arising from this interaction, and politicians evaluate the results and ways to promote this potential. EDP pursues the integration of entrepreneurial knowledge, fragmented and distributed across many Internet resources and organizations, companies, universities, clients and users, specialized suppliers (some of these organizations are located outside the region) by building links and partnerships. EDP consists of exploration and the opening a new space of opportunity (technological and market), potentially rich in numerous innovations that are becoming feasible and attractive.

EDP is a «conceptual pillar» of the smart specialization. This bottom-up approach to prioritizing is crucial for understanding the underlying characteristic that distinguishes S3's approaches from the innovative strategies of the past. EDP reconciles the idea that policy deals with the formation of a regional system by setting priorities and the idea that market processes are central to generating information about the best areas for future priorities.

To effectively implement the strategy, it is necessary to have key components of the EDP: legal evidence base, identification of relevant stakeholders, transparent and clear rules, implications and confidence building, hidden program management, long-term engagement [13].

In today's dynamic environment, the traditional role of public authorities is not sufficient and must comply with the principles of adaptability and flexibility. Accordingly, researchers of smart specialization strategies highlight the new role of regional authorities – strategic, which requires not only the selection of forms and methods of public management of innovation development, but also a continuous flow of business analytics, which allows the authorities to choose strategic priorities and stimulate strategic partnership and cooperation. The challenge for politicians and public authorities is to choose the right priority areas where there is a concentration of opportunities and innovative potential and where policy intervention can enhance the competitiveness of the region.

Increasing regional competitiveness is based on the ability to perform the tasks of innovation policy in the context of a national or regional innovation system. From the point of view of the European Commission, regional competitiveness is understood as «the ability of regions to produce goods and services that that outpace competition in international markets, and at the same time, they maintain a high and sustainable level of income in the region» [14].

In order to achieve the goals of effective management of innovative development and increase competitiveness, state authorities must fulfill three different roles: as public administrators, politicians and strategists – to develop and implement strategies for smart specialization and public investment. As public administrators, regional and national authorities must fulfill their regulatory function of representing public interests and managing the democratic processes that underlie the public sphere. As state policy agents, regional and national authorities should develop new policy frameworks that create new incentives for entrepreneur's innovation, and cooperation. As agents for designing and implementing a strategy, public authorities should adopt an entirely new set of initiatives, such as:

- local entrepreneurial discovery process;
- assessment of localized strategic opportunities as comparative advantages;
- formulation of strategic sector priorities;
- -creation of quadruple helix coalitions with participants in innovation activities, commercial organizations of the private sector, technology entrepreneurs and other strategic organizations and resources;
- creation of interregional coalitions in the public and private sectors [12].

The main focus of policy measures to support small and medium-sized enterprises (SMEs) is the is the development of a business-friendly environment, the provision of financial support, the promotion of cluster growth, the integration of SMEs into clusters and support for internationalization. All these measures require knowledge of the individual capabilities of SMEs and the adaptation of policy tools to accelerate business strengths.

The emerging policy framework suggests that the best way to support SMEs is if they are organized into clusters [12]. This approach assumes that clusters as meta-organizations are effective forms of organizing and coordinating support measures, as well as building trust between stakeholders.

In Ukraine, there are programs of the European Union to support small and medium-sized businesses, which include the EU4Business Initiative and the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME).

The Minister of Economic Development and Trade of Ukraine signed the Order on the creation of the SME Development Office under the Ministry of Economic Development and Trade. The SME Development Office will work as an advisory body under the Ministry, and subsequently become a government body that provides support to entrepreneurs. The financial support of the Office is provided



by the European Union within the framework of the FORBIZ project and the EU4Business Initiative [15].

The implementation of a number of pilot projects in 2018-2019 will be the result of the Office's work, among which, in particular, will be the launch of the network of Entrepreneurship Support Centre (ESC) at the regional and local levels on the basis of existing institutions of local self-government, including Administrative Service Centres.

According to the concept, the ESC will provide a basic level of free informational and advisory support for businesses with an emphasis on available opportunities: accessible SME support programs and how to participate in them, conducting training and information activities through a network of partner institutions. One of the tools of the ESC consultant's work will be business cases [15].

**Conclusions.** Effective management of regional innovative development in modern conditions with the aim of increasing economic growth provides for the state and regional authorities to take a set of measures to stabilize the socio-economic situation of the regions. It also includes overcoming the lagging of certain regions from others and ensuring the conditions for their further development. The mechanism of regional innovation development should take into account regional interests, selection of development priorities, interaction between stakeholders from different environments in order to create competitive innovative products, their further successful commercialization and, as a consequence, increase the region's economic prosperity.

### Література

1. Чухно І. А. Інноваційні підходи в управлінні регіональним розвитком. *Теорія та практика державного управління*. 2015. Вип. 1(48). С. 165–170.
2. Гнатенко М. К. Форми та методи державної підтримки регіонального інноваційного розвитку. *Економічний простір*. 2008. № 18. С. 126–134.
3. Полякова Ю. В. Визначальні характеристики інноваційної діяльності у регіональному вимірі. *Приазовський економічний випуск*. 2018. № 1(06). С. 100–105.
4. Про засади державної регіональної політики : Закон України від 05.02.2015 № 156-VIII. URL : <https://zakon.rada.gov.ua/laws/main/156-19> (дата звернення: 22.10.2018).
5. Про стимулювання розвитку регіонів : Закон України від 08.09.2005 № 2850-IV. URL : <https://zakon.rada.gov.ua/laws/show/2850-15/ed20150808> (дата звернення: 22.10.2018).
6. Стратегія інноваційного розвитку України враховуватиме ізраїльський досвід // Міністерство освіти та науки. URL : <https://mon.gov.ua/ua/news/strategiya-innovacijnogo-rozvitku-ukrayini-vrahovuvatime-izrayilskij-dosvid-liliya-grinevich-na-naukovij-ministerskij-konferenciyi-v-izrayili> (дата звернення: 10.10.2018).
7. Про затвердження Державної стратегії регіонального розвитку на період до 2020 року : Постанова Кабінету Міністрів України від 06.08.2014 № 385. URL : <https://www.kmu.gov.ua/ua/npras/247566248> (дата звернення: 10.10.2018).
8. Статистичний збірник «Наукова та інноваційна діяльність» // Державна служба статистики України, 2018. URL : [http://www.ukrstat.gov.ua/druk/publicat/kat\\_u/publnauka\\_u.htm](http://www.ukrstat.gov.ua/druk/publicat/kat_u/publnauka_u.htm) (дата звернення 30.11.2018).
9. У рамках Київ Smart City Forum 2018 відбулося нагородження найкращих проєктів українських міст. URL : <https://www.kyivsmartcity.com/news/forum-rewarding/> (дата звернення: 25.11.2018).
10. Using the Quadruple Helix Approach to Accelerate the Transfer of Research and Innovation Results to Regional Growth // Consortium Progress Consulting Srl. & Fondazione FORMIT. URL : <https://cor.europa.eu/en/engage/studies/Documents/quadruple-helix.pdf> (дата звернення: 20.10.2018).
11. Tödtling F. Regional innovation policies for new path development – beyond neo-liberal and traditional systemic views. *European Planning Studies*, 2018. URL: <https://www.tandfonline.com/doi/full/10.1080/09654313.2018.1457140> (дата звернення: 20.10.2018).
12. Smart Specialisation at work: The entrepreneurial discovery as a continuous process // Joint Research Centre. URL : [http://s3platform.jrc.ec.europa.eu/documents/20182/222593/S3+at+work\\_ED/9f0c2ccc-97a0-4322-919d-4e89f3d6bf1c](http://s3platform.jrc.ec.europa.eu/documents/20182/222593/S3+at+work_ED/9f0c2ccc-97a0-4322-919d-4e89f3d6bf1c) (дата звернення: 25.10.2018).
13. Gianelle C., Kyriakou D., Cohenand C., Przeor M. (eds). *Implementing Smart Specialization : A Handbook*. Brussels: EuropeanCommission, 2016.
14. Zinovyeva I. Regional Innovation Developmentas a Competitiveness in the XXI Century. *Contemporary Economics*, Vizja Press & IT. 2016. Vol. 10. Iss. 4. Pp. 333–342.
15. Мінекономрозвитку створило Офіс розвитку малого та середнього підприємництва (МСП) // Прес-служба Мінекономрозвитку, 2018. URL : <http://www.me.gov.ua/News/ /Detail?id=0e8bab2e->

**References**

1. Chukhno, I. A. (2015). Innovative approaches to regional development management [“Innovatsiini pidkhody v upravlinni rehionalnym rozvytkom”]. *Teoriia ta praktyka derzhavnoho upravlinnia*, 1, pp. 165–170.
2. Hnatenko, M. K. (2008). Forms and methods of state support for regional innovation development [“Formy ta metody derzhavnoi pidtrymky rehionalnoho innovatsiinoho rozvytku”]. *Ekonomichniy prostir*, 18, pp. 126–134.
3. Poliakova, Yu. V. (2018). Indicative characteristics of innovation activity in the regional dimension [“Vyznachalni kharakterystyky innovatsiinoi diialnosti u rehionalnomu vymiri”]. *Pryazovskiy ekonomichnyi vypusk*, 1(06), pp. 100–105.
4. Verkhovna Rada Ukrainy. (2015). On the Principles of State Regional Policy [“Pro zasady derzhavnoi rehionalnoi polityky”] (Law of Ukraine № 156-VIII, official text dated February 05, 2015). [online] Available at: <https://zakon.rada.gov.ua/laws/main/156-19/> [Accessed 22 Oct. 2018].
5. Verkhovna Rada Ukrainy. (2005). On Stimulating the Development of Regions [“Pro stymuliuвання rozvytku rehioniv”] (Law of Ukraine № 2850-IV, official text dated September 08, 2005). [online] Available at: <https://zakon.rada.gov.ua/laws/show/2850-15/ed20150808/stru> [Accessed 22 Oct. 2019].
6. Ministry of Education and Science of Ukraine. (2018). The strategy of Ukraine’s innovation development will take into account the Israeli experience [“Stratehiia innovatsiinoho rozvytku Ukrainy vrakhovuvatyme izrailskiy dosvid”]. [online] Available at: <https://mon.gov.ua/ua/news/strategiya-innovacijnogo-rozvitku-ukrayini-vrahovuvatime-izrayilskij-dosvid-liliya-grinevich-na-naukovij-ministerskij-konferenciyi-v-izrayili> [Accessed 10 Oct. 2018].
7. Cabinet of Ministers of Ukraine (2014). On Approval of the State Strategy for Regional Development for the period until 2020 [“Pro zatverdzhennia Derzhavnoi stratehii rehionalnoho rozvytku na period do 2020 roku”] (Decree № 385, official text dated August 06, 2014). [online] Available at: <https://www.kmu.gov.ua/ua/npas/247566248> [Accessed 10 Oct. 2018].
8. State Statistics Service of Ukraine. (2018). Statistical compilation «Scientific and Innovative Activity of Ukraine» [“Statystychnyi zbirnyk «Naukova ta innovatsiina diialnist»”]. [online] Available at: [http://www.ukrstat.gov.ua/druk/publicat/kat\\_u/publnauka\\_u.htm](http://www.ukrstat.gov.ua/druk/publicat/kat_u/publnauka_u.htm) [Accessed 30 Nov. 2018].
9. Kyivsmartcity.com. (2018). Kyiv Smart City Forum 2018 awarded the best projects of Ukrainian cities [“U ramkakh Kyiv Smart City Forum 2018 vidbulosia nahorodzhennia naikrashchykh proektiv ukrainskykh mist”]. [online] Available at: <https://www.kyivsmartcity.com/news/forum-rewarding/> [Accessed 20 Nov. 2018].
10. Consortium Progress Consulting Srl. & Fondazione FORMIT. (2016). Using the Quadruple Helix Approach to Accelerate the Transfer of Research and Innovation Results to Regional Growth. [online] Available at: <https://cor.europa.eu/en/engage/studies/Documents/quadruple-helix.pdf> [Accessed 20 Oct. 2018].
11. Tödtling, F. (2018). Regional innovation policies for new path development – beyond neo-liberal and traditional systemic views. *European Planning Studies*. [online] Available at: <https://www.tandfonline.com/doi/full/10.1080/09654313.2018.1457140> [Accessed 20 Oct. 2018].
12. Joint Research Centre. (2018). Smart Specialisation at work: The entrepreneurial discovery as a continuous process. [online] Available at: [http://s3platform.jrc.ec.europa.eu/documents/20182/222593/S3+at+work\\_ED/9f0c2ccc-97a0-4322-919d-4e89f3d6bf1c](http://s3platform.jrc.ec.europa.eu/documents/20182/222593/S3+at+work_ED/9f0c2ccc-97a0-4322-919d-4e89f3d6bf1c) [Accessed 25 Oct. 2018].
13. Gianelle, C., Kyriakou, D., Cohenand, C. and Przeor, M. (eds). (2016). *Implementing Smart Specialization: A Handbook*. Brussels: EuropeanCommission.
14. Zinovyeva, I. (2016). Regional Innovation Development as a Competitiveness in the XXI Century. *ContemporaryEconomics, VizjaPress & IT*, 10(4), pp. 333–342.
15. Press Service of the Ministry of Economic Development. (2018). The Ministry of Economic Development has setup the Small and Medium Entrepreneurship Support Centre (SME) [“Minekonomrozvytku stvorylo Ofis rozvytku maloho ta serednoho pidprijemnytstva (MSP)”]. [online] Available at: <http://www.me.gov.ua/News/Detail?id=0e8bab2e-e13f-4bf0-864d-52c9393d78d7&isSpecial=true> [Accessed 03 Nov. 2018].