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Viktoriya Shuklina,
PhD (Economics), Associate Professor,
ORCID 0000-0002-2284-092X
e-mail: shuklina.viktoriya@kntu.edu.ua
Kherson National Technical University, Khmelnytskyi

CONCEPTUAL POTENTIAL OF SMART SPECIALIZATION IN THE DEVELOPMENT OF THE INNOVATIVE ECONOMY OF SMALL AND MEDIUM-SIZED BUSINESSES IN THE REGIONS

Introduction. Research of smart specialization and its impact on the development of an innovative model for the regional economy indicates significant advantages of this 'smart tool' for small and medium-sized businesses. First and foremost, it increases the competitiveness of regions by concentrating resources on innovation-active sectors of their economies and adapting to global challenges. Experts and scientists emphasize that applying the conceptual potential of smart specialization makes it possible to avoid duplication of efforts, stimulate synergies between different industries, and create effective partnerships between government, business, science, and the public, whose competitive advantages and innovative activity are significantly higher than they could be individually.

The European community of scientists and practitioners is actively researching smart specialization and offering comprehensive guidance, a network of contacts, and support for implementation in EU member states. The lack of recommendations, coupled with the desire to integrate into the European business space, is accelerating the conceptual improvement of the innovative economic model through the use of smart regional development tools, introducing local approaches to accelerate green, digital, and social transitions, among other things, in the post-war restoration of information flows through effective knowledge management, capitalization and strategic communications.

Smart specialization within our country's national economy is a relevant state project, similar in approach to the cluster movement and Ukrainian Industry 4.0, the current form of which is the mini-project 'Integration 4.0', aimed at reducing gaps in its implementation. Most of the actions for its implementation in small and medium-sized businesses focus on conceptual coordination and formalization of processes in regional development strategies. This article advocates for the integration of smart specialization into the innovative regional economic model, suggesting that its implementation will lead to irreversible positive changes in small and medium-sized businesses. Based on these assumptions, the challenges faced by domestic enterprises in the context of forced digital transformation are analyzed. Based on these assumptions, the involvement of participants in cluster partnerships in implementing regional strategies within the context of formalizing smart specialization processes is investigated. The key role of regional authorities in ensuring the consistency of cooperation projects between small and medium-sized businesses, research and innovation participants, and civil society, with priorities defined in the smart specialization strategy of the participants, is identified. The presented study contributes to the conceptual development of an innovative economic model for small and medium-sized businesses in the regions, adapting to new external threats and rethinking the European vision.

The scientific novelty of this study lies in revealing the specifics of the entry of smart specialization into small and medium-sized businesses through the flexibility of innovative cluster partnerships and the development of unique strategies for utilising the local potential of participants. Unlike existing approaches, this study offers a deeper understanding of the processes involved in adapting general smart specialization policy to address priority opportunities for low-cost innovation and the specific needs of this scale of business within situational partnerships, aiming to solve particular problems and find joint innovative solutions.

Analysis of recent research and publications. The breadth of aspects of theoretical and methodological support for smart specialization in attracting innovations to regions and the mechanisms of its influence on the regional economy are revealed in the scientific works of foreign scientists. Aranguren M., David P., Foray D., Kristensen I., McCann P., Rinne T., Wilson J. та вітчизняних авторів Laranja M., Mora L., Senchenko V., Shatska Z., Storonyanska I, Oleshko A., Pinto H., Vozniak G. etc. However, given the current challenges and the importance of small and medium-sized businesses for ensuring the stability and growth of the country's regions, the conceptual possibilities of start-specialization in the development of the innovative economy require further research. This study adopts a comprehensive interdisciplinary approach that integrates both qualitative and quantitative methods to analyze the conceptual potential of start-up specialization as a tool

for developing an innovative economy for small and medium-sized businesses in the regions. The empirical basis of the study consists of the following sources: official statistical reports and analytical studies conducted by international organizations (EPC, CEPS, European Business Association, EU Science Hub − JRC, ICDT), the official website of the European Commission on thematic platforms for smart specialization, official information from government portals, including the Cabinet of Ministers of Ukraine; scientific publications by domestic and international researchers in the field of smart specialization and models of innovative and smart economies (more than 10 sources, including the World Intellectual Property Organization and Business & Information Systems Engineering rating journals); analytical reviews published by leading Ukrainian business media (NV Business, Interfax-Ukraine, Stock World, UA-Region); data from surveys and expert interviews conducted among representatives of small and medium-sized businesses in Ukraine (Action-business analytics, Gradus Research, Centre for Innovation Development).

The purpose of this article is to identify the opportunities presented by the smart specialization concept in the development of an innovative economic model and to justify the advantages of its application in the challenging conditions faced by small and medium-sized businesses in regions, focusing on the technological, social, and environmental aspects of the direction of change and determining the impact of small and medium-sized businesses on generating demand for innovation, shifting the focus in solving development problems, adapting to extreme conditions by concentrating resources to support unique sectors of the economy or types of economic activity that constitute the specialization of certain regions, and clustering stakeholder cooperation.

Presentation of the main research material. Economic zoning implies economic uniqueness and differences in relations, corresponding to the differentiation of management concepts and development forecasting under conditions of rationalization of decisive strategic plans, systemic views, principles, and business values, ultimately leading to the success of regions. Their socio-economic role is growing significantly in the context of decentralization of power, transfer of revenue sources to the budget, and changes in the configuration of interregional interaction. As a result, there is an increasing need for a conceptual transformation of the regional economy, based on a rational justification of specialization, the formation of niche industries, the introduction of constant innovations, technological improvements and the manufacture of high-tech products, as well as the effectiveness of the flow of innovations, where the results of scientific research are commercialized to create new competitive market offerings. Each of the factors in the business environment has a certain degree of influence, thereby shaping the conditions for strengthening the regional economy in terms of innovation, including conceptual renewal and more effective regulation of development processes.

The regional economy in the country is undergoing difficult trials in countering military aggression and overcoming the consequences of a large-scale military conflict, in which small and medium-sized businesses play a central role. It is through their efforts that regions are provided with jobs and tax revenues, social stability is stimulated, and local markets are supported. In addressing the problems of infrastructure destruction, staffing constraints, a radical restructuring of demand, a general decline in consumer spending and solvency, limited access to credit, rising logistics and export costs, and the impossibility of long-term partnerships, market players are trying to plan for business scaling and regional development. However, it is possible to solve problems and mitigate the effects of multiple risks through conceptual economic renewal and innovative reform, which must be decisive and unifying for the country, reasonable and achievable in conditions of uncertainty and limitations on further regional recovery.

In scientific discourse, the concept of innovation is defined as the result of innovative activity or the process of introducing scientific developments, new technologies, methods, and tools in management, organization of labor and production, and the application of new products [5]. The presence of signs of the economy based on the flow of innovation, continuous technological improvement, the production and export of technologies and high-tech products with significant added value indicates the application of the innovation economy model [9], which is recognized worldwide as the dominant model and a key factor in competitiveness. Its implementation enables the full utilization of human capital, information technologies, and factors of production, the increase in the role of which is a characteristic feature of anticipatory regional development, a component of restoring sustainable functioning.

The innovative economy in small and medium-sized businesses is a model in which enterprises introduce new technologies, processes, and products to achieve competitive advantages and sustainable growth, encompassing activities from idea generation to commercialization. Scientists identify resource potential, favorable conditions, and a culture of innovation in society as the main determinants and prerequisites for its development in the region [2, 4, 21]. Despite the significant intellectual resources available for innovation in the regions of the country, experts identify the unpreparedness of the economy for rapid changes in external and internal factors, as well as lagging macroeconomic criteria and assessments [15, 22]. The resource potential for creating innovative structures in small and medium-sized businesses in the regions should be considered in terms of the availability of technology, production capacity, natural and intellectual resources, as the lack of

material support can lead to brain drain, which in turn devalues the former. In addition, it is crucial to create a set of favorable conditions at the micro and macro levels, including mechanisms to stimulate research and development activities, establish technology companies, define state priorities, develop a legislative framework, and encourage and disseminate innovation from society itself. An innovative culture, cultivated over hundreds of years, embodies the essence of embracing new perspectives, characterized by creativity, a willingness to implement ideas, and accountability for results and risks.

In addition to the objective complexity and unpredictability of the environment, weak market incentives for the development of knowledge-intensive production, combined with the lack of demand for innovation on the part of industry, are currently the primary obstacles to the spread of an innovative economic model in the regions. Given the key role of small and medium-sized businesses in generating demand for innovation, a shift in the focus of enterprises will be crucial for economic recovery.

The worldview of business leaders and owners must shift from focusing on short-term, individualized tasks to a system of setting specific, measurable, achievable, relevant, and time-bound goals – smart goals. Applying this goal-setting methodology helps businesses formulate clear, realistic and achievable tasks, increasing the likelihood of their achievement [1] in priority areas of commercial use of innovation potential, development of the information sphere and human capital skills, comprehensive implementation of digital technologies, optimization of management and production processes, environmental protection, social protection of the population, and minimization of the negative consequences of digitalization. It is important for management in small and medium-sized businesses to view the realities of functioning not as a threat of loss, but as an opportunity for growth and a significant strengthening of competitive advantages. This is more than just a difficult task; it is almost the only concept for the survival and recovery of the regional economy. First of all, due to the lack of conceptual foundations and an effective system of economic incentives for innovative activity as complex, time-consuming, risky processes of long-term interaction between entities with complementary functions and capabilities [25], since no single entity possesses all the necessary skills and resources. Expanding the circle of entities to include suppliers and consumers, research institutions, universities, and financial and credit institutions through joint action, mutual interdependence, and changes in each other's status can be effective. This is facilitated by the fact that the current system of financing research and development does not provide for the commercial application of scientific developments, the science intensity of the aggregate market value of all final goods and services produced in the country has been minimal over the last thirty years, confirming the vulnerability of the regional economy to fluctuations in external raw material markets and the lack of appropriate mechanisms for state promotion and infrastructure to support innovation.

A new impetus for the conceptual renewal of the innovative economy of small and medium-sized businesses in the regions can be provided by methodological approaches and the achievement of goals in a smart, cluster-based format. The advantages include certainty, which makes it possible to see the result of the planned work even at the start of any planning with precisely defined steps, time, and budget calculations, specific tasks and functions assigned to specific performers to create an integrated ecosystem that promotes the exchange of knowledge, technologies, and resources for the development of innovative, knowledge-intensive products [23]. The list of disadvantages can be mitigated by following the entire algorithm of actions with maximum detail, including all relevant factors and potential force majeure influences on the region's development. One of the key areas of development in the smart economy is the intensification of clustering processes to ensure synergy between companies and sectors of the regional economy, promoting the transfer of knowledge and experience. This refers to a geographically localized cluster of interconnected organizations, scientific institutions, training centers, and other companies united by a common goal of creating and implementing innovations to achieve competitive advantages [20] − an innovation cluster, in effect, as an effective form of integration among production, science, and the state. The genesis of the cluster approach evolved along sectoral and territorial lines, in line with the development of the information paradigm and globalization as a comprehensive, objective process, following a non-linear trend. The advantage of cluster formations for small and medium-sized businesses lies in their focus on regional interaction among participants, based on the principles of cooperation, subjectivity, openness, and long-term relationships. This approach takes into account internal systemic contradictions and the dynamic balance between competition for resources and their collaborative use [16]. The intensification of public-private partnership mechanisms in small and medium-sized businesses through the formation and development of innovative clusters is a powerful catalyst for increasing the competitiveness of the regional economy, involving all levels of legislative and executive power, as well as the most mature forms of international participation. The geographical proximity of participants, close cooperation, communication, and exchange of information, focus on a specific industry or technological direction, constant creation and implementation of new ideas, products, and technologies to strengthen the competitive positions of participants in the market, are the main characteristics of an innovation cluster in the regional economy.

Innovation clusters are among the most effective tools for developing a smart economy in regions, ensuring synergy between small and medium-sized businesses to achieve sustainable development and competitiveness. The concept, which is the result of the evolution of economic thinking, combines modern technologies, social and management tools to improve efficiency, well-being, and sustainable development. It is based on knowledge and innovation as the foundation for growth, information technologies for process optimization, the priority of social protection and environmental conservation, with the involvement of enterprises in new institutional forms of interaction. The conceptual potential is linked to economic activity enabled by digital technologies, which utilize artificial intelligence, machine learning, and big data analysis to create 'smart' systems and processes, as well as the formation of an interactive educational space with broad access to knowledge. According to the fundamental idea and guiding principle of the start-up economy, regional development should be defined in terms of non-linear thinking, and the professional management system requires the development of highly intellectual, innovative, creative, and inventive approaches to effective activity [4], taking into account the reality of the transformation processes of socio-economic systems. The smart economy is an environment that promotes the development of e-business and opens up new opportunities for small and medium-sized market players [8], defined as an approach combining innovation, digital transformation and sustainable development in regional economic policy, aimed at effective resource management [20] with a rethinking of economic growth through the prism of sustainable development and the efficient use of raw materials and energy [7].

The innovative nature of the smart economy is a significant advantage that enhances the competitiveness of small and medium-sized businesses in the regional market by creating personalized products tailored to individual consumer needs, promoting the development of new business models as a tool for ensuring sustainable development, reducing negative impact on the environment, and using natural resources more efficiently. The tasks of the innovative economy are to scale up small and medium-sized businesses, promote financial transparency, and create new opportunities for the development of educational processes through digital tools, especially in the fields of innovation and technology [4, 10].

A practical approach to implementing the smart economy in the practice of small and medium-sized businesses in the country is smart specialization, whose conceptual potential can direct the use of unique regional opportunities to achieve competitive advantages, as opposed to focusing activities on a narrow direction within a specific industry or production, which allows certain products to be manufactured in accordance with the essence of general specialization processes [7, 18] (table 1).

Table 1. **Conceptual evolution of smart specialization in regional development**

Authors	Conceptions	Contribution
B. Asheim	Theory of the Information Society	Accumulation of knowledge, promotion of comprehensive and sustainable industrialization and innovation
M. Olson	Theory of Collective Action	The formation of a collective involves the satisfaction of collective goods that will benefit all members; the realization of its common goal occurs provided that each individual is effectively motivated
P. Romer	Theory of Endogenous Change in the Economy	Focus on internal factors and mechanisms of technological progress: human capital and new technologies
R. Florida	Theory of the Creative Class	Relocation of technologies, companies, and resources to places where talented and creative people are concentrated
E. Williams	The Theory of Wikinomics	Maximum openness to society and accessibility of information about business activities, sharing and functioning worldwide
R. Martin	Theory of Regional Innovation Systems	Innovative regional development and economic growth are stimulated by processes of interaction between neighbouring businesses and institutions that generate and disseminate knowledge
J. M. Buchanan	An Economic Theory of Clubs	The existence of a single result typical to all participants in joint activities, the unified spatio-temporal functioning of participants, and the priority of satisfying social and economic needs within the group rather than individually.

Source: Systematized by the author based on [7, 18]

This is a strategy and key tool for stimulating sustainable economic growth in regions by concentrating resources, introducing smart technologies, and implementing innovations in clusters [17, 24], developed by the European Commission as part of the Innovation Union initiative to identify sectors of the regional economy with innovative potential, build mutually beneficial cooperation, and increase competitiveness [6].

The innovative specialization platform is a space for regions and countries to develop local approaches to identifying strategic sectors. The smart specialization community of practice provides comprehensive guidance, a network of contacts, and implementation support, offering strategic management services and promoting cooperation among all stakeholders. Their positive experience includes 180 strategies, 222 registered regions, 350,000 jobs created, and a budget of €67 billion across the EU [11, 12].

Regions implementing smart specialization are presented on a convenient map, showing the tools they use, their priorities, organized events, and contacts of regional coordinators. Conceptual and methodological guidance is provided in the main methodological reference book, which is constantly updated with useful

information for stakeholders at national and regional levels who wish to move towards creating smart specialization strategies (design stage) their development (implementation stage) with the provision of special tools for identifying potential economic areas for smart specialization and cooperation, and helpful information on all priority areas of smart specialization: Agri Food, Energy, Education and Skills for S3, Blue Growth, Industrial Modernization, Sustainable Development Goals, Digital Innovation for Industry, Industrial Transition, Targeted support. The platform regularly organizes seminars for individual regions, aimed at training and exchanging experiences, and conducts interdisciplinary research to support the implementation of smart specialization. Digital Innovation Hubs is a smart specialization tool with an online catalogue of digital innovation centres in Europe, helping you access the competencies needed to digitize your products. Regional Benchmarking is an interactive tool for regional comparative analysis of structurally similar regions across Europe. Cohesion policy is one of the trends proposed by the European Commission for the period 2028-2034, encompassing the construction of transport and energy infrastructure, as well as support for innovative small and medium-sized businesses and sustainable development initiatives [11,12]. The specificity of start-up specialization lies in the fact that regional authorities encourage and motivate small and medium-sized businesses, science, and developers to cooperate as a means of implementing this strategy and identifying sectors of specialization within its main components. The basis of smart specialization is the creation of 'smart' products and processes that run on computer systems and sensors, focusing on areas that are priorities for the region and have significant potential for innovative development and the creation of new products, technologies, and services [14, 19].

Smart specialization, rather than spreading resources thinly, involves identifying the most important goals and objectives of small and medium-sized businesses to allocate time and resources effectively. This approach focuses on a limited number of strategically important areas with innovative potential. To this end, priorities are established using various methods, adhering to a realistic schedule, and focusing on a single task to achieve the best results. Another key aspect of smart specialization is its focus on creating new smart products and technologies in specific sectors of the economy, i.e., stimulating innovation. At the same time, entrepreneurial discovery occurs – adapting the innovative potential of a business to its needs and utilizing the results of scientific research. The success of implementing the conceptual potential of smart specialization for small and medium-sized market players depends on effective cooperation between four key stakeholders: government, business, science, and the public, as well as their cross-sectoral links that enhance the synergy of the results. Ensuring the security and preservation of a holistic innovation space depends on regional development policy, changes in its institutional framework, and the updating of tools. In the regions of the country, the problems of isolation of the authorities from business and numerous imbalances in the smart specialization project at the state level, lack of communication and coordination on the part of the Ministry of Economy, the Ministry of Regional Development, and other ministries [12, 13], and lack of coordination between them are being intensively addressed.

Conclusions. Empirical analysis of initial data makes it possible to draw certain conclusions. The integrated economic system of the smart economy is based on the large-scale implementation of digital technologies to increase efficiency, productivity, and innovation in all areas of economic activity in the regions, ensuring sustainable development and competitiveness at the regional level as a dynamic concept that is acquiring new characteristics in the context of changes in the ecosystem of small and medium-sized businesses. Smart specialization is an effective tool for developing an innovative economy, with the conceptual potential to increase the competitiveness of regions in extreme environments and stimulate the transition from technological change to innovation, taking into account their social and environmental context. This study highlights the significant role of small and medium-sized businesses in driving regional innovation, offering flexibility, generating new jobs, saturating markets, fostering competition, and promoting scientific and technological advancements. At the same time, the study shows that significant limitations in the application of the start-specialization concept include the uneven readiness of small and medium-sized businesses in the country's regions to operate on the principles of smart specialization, resource constraints, lack of strategic vision, and lack of potential to focus on innovation-oriented areas to strengthen competitive advantages. Confirms the need not only to promote the conceptual development of regional innovative economies but also to create appropriate conditions for an integrated environment that supports unique local advantages, transforms the weaknesses of cooperation participants into strengths, and attracts sufficient funding sources. This study reveals smart specialization as a tool for determining sectoral development priorities, which can be achieved by combining science, business, and education into innovative clusters, where joint work concentrates resources, stimulates change, and long-term development.

Prospects for further research on the chosen topic are related to identifying and assessing the shortcomings of the cluster form of smart specialization in terms of risk concentration, increased competition, the possibility of participant dominance, and dependence on partners, which will help justify the decision to create it.

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Shuklina V. Conceptual potential of smart specialization in the development of the innovative economy of small and medium-sized businesses in the regions

The interpenetration of global challenges and local threats accelerates the transition to more innovative and digital economic models, adopting a balanced approach that prioritizes economic growth, environmental protection, and equal access to resources, benefits, and opportunities for all members of society. In the extreme conditions of war, with limited resources and an urgent need for accelerated production, business plays a crucial role in supporting the economy and stability, demonstrating resilience, adapting to the external environment, retaining employees, and even planning for further development. Critically important for the regions is the small and medium scale of its operation, which stimulates economic growth, mitigates social tensions, and contributes to market saturation,

supporting their livelihoods. Dynamic changes in the processes of forming a competitive environment, ensuring market flexibility, and introducing sought-after technologies focus the attention of small and medium-sized businesses, in addition to the need for state support for the regional economy, simplifying access to financing, improving infrastructure, the search for significant, yet unrealized opportunities, hidden strengths and prospects inherent in the chosen economic concept, which can be used to achieve specific goals or solve tasks of implementation and development or change. In this context, decision-making should be linked to regional demand from small and medium-sized businesses for 'smart tools' with the potential to promote comprehensive modernization, innovative development of competitive advantages in priority sectors in synergy with an integrated environment for knowledge generation, development of new technologies and products in various forms of partnership and joint management. For empirical analysis, the article uses official statistical reports from international organizations (EPC, CEPS, European Business Association, EU Science Hub − JRC, ICDT), analytical reviews of business publications (NV Business, Interfax-Ukraine, Stock World, UA-Region), scientific publications by leading authors, and the results of surveys and expert interviews conducted in different regions of the country. The study conducts a comparative analysis of the conceptual capabilities of the innovative and smart economy in ensuring the recovery and further development of regions in extreme external conditions. The article utilizes data systematization and visualization to clearly reflect the regional features of smart specialization in small and medium-sized enterprises. The results show that the application of the conceptual principles of start-specialization in the country's regions is becoming an effective tool for accelerating innovative development and increasing competitiveness, which contributes to the growth of small and medium-sized businesses with potential technological, social, and environmental advantages. The success of implementation depends on the level of partnership between the government, business, and science, with the main challenges related to resource constraints and the extreme conditions of a dynamic environment. Significant advantages of the innovation cluster as an effective form of integrating production, science, and the state, based on the principles of specialization, were also identified. The study demonstrated that the primary characteristics of an innovation cluster in the region include regional concentration of enterprises, scientific centers, and institutions related to the industry, characterized by intensive information exchange, a common specialized infrastructure, and innovative production with long-term competitive advantages.

Keywords: smart specialization, innovative economy, smart economy, regional development, innovation cluster, small business, medium-sized business, information.

Шукліна В. Концептуальний потенціал смарт-спеціалізації у розвитку інноваційної економіки малого та середнього бізнесу регіонів

Взаємопроникнення елементів глобальних викликів і локальних загроз прискорює перехід до більш інноваційних та цифрових моделей економіки з компонентним балансуванням економічного зростання, охорони довкілля, рівності доступу членів суспільства до ресурсів, благ, можливостей. В екстремальних умовах війни з обмеженістю ресурсів і гострою потребою у прискореному виробництві бізнес відіграє ключову роль в підтримці економіки та стабільності, демонструючи стійкість, адаптацію до зовнішнього середовища, збереження співробітників і навіть плануючи подальший розвиток. Критично важливим для регіонів є малий і середній масштаб його ведення, який стимулює економічне зростання, пом'якшує соціальну напругу та сприяє товарному насиченню ринку, підтримуючи їх життєдіяльність. Динамічні зміни в процесах формування конкурентного середовища, забезпечення гнучкості ринку, впровадження затребуваних технологій фокусують увагу малого і середнього бізнесу, крім потреби в державній підтримці регіональної економіки, спрощенні доступу до фінансування, покращенні інфраструктури, на пошуку суттєвих, ще не реалізованих можливостей, прихованих сил і перспектив, які закладені в обраній економічній концепції, що можуть бути використані для досягнення певних цілей чи вирішення завдань втілення та розвитку або на її зміну. В даному контексті прийняття рішення має пов’язуватися з регіональним запитом малого і середнього бізнесу на «розумні інструменти» з можливостями сприяння комплексній модернізації, інноваційному розвитку конкурентних переваг пріоритетних галузей в синергії інтегрованого середовища в різних формах партнерства й спільного управління. Метою статті є виявлення можливостей концепції смарт-спеціалізації в розвитку інноваційної моделі економіки та обґрунтування переваги їх застосування в екстремальних умовах ведення малого та середнього бізнесу регіонів із зосередженням на технологічному, соціальному й екологічному аспектах спрямування змін. Визначення впливу малого та середнього бізнесу на генерування попиту на інновації, зміну акцентів у вирішенні проблем розвитку, адаптації до екстремальних умов через концентрацію ресурсів на підтримку унікальних секторів економіки або видів економічної діяльності, що становлять власне спеціалізацію тих чи інших регіонів та кластеризацію взаємодії стейкхолдерів. Для емпіричного аналізу у статті використано офіційні статистичні звіти міжнародних організацій EPC, CEPS, Європейська бізнес-асоціація, EU Science Hub − JRC, ICDT, аналітичні огляди бізнес-видань NV Бізнес, Interfax-Україна, Stock World, UA-Region, наукові публікації провідних авторів, результати опитувань та експертних інтерв'ю серед регіонів країни. У дослідженні проведено порівняльний аналіз концептуальних можливостей інноваційної та смарт-економіки в забезпеченні відновлення та подальшого розвитку регіонів в екстремальних умовах зовнішнього середовища. Розкрито специфіку входження смарт-спеціалізації в умови малого та середнього бізнесу через гнучкість інноваційних кластерних партнерств і унікальні стратегії використання локального потенціалу учасників. У статті застосовано систематизацію та візуалізацію даних, відображено регіональні особливості смарт-спеціалізації в малому та середньому бізнесі. Доведено, що застосування концептуальних засад старт-спеціалізації в регіонах набуває ознак дієвого інструменту прискорення інноваційного розвитку та підвищення рівня конкурентоспроможності, що сприяє розвитку малого та середнього бізнесу з потенціалом технологічних, соціальних і екологічних переваг, успішність впровадження залежить від рівня партнерства між владою, бізнесом та наукою, основні виклики пов’язані з обмеженням ресурсів і екстремальними умовами динамічного середовища. Визначено значні переваги інноваційного кластеру як результативної форми інтеграції виробництва, науки й держави на принципах старт-спеціалізації. У дослідженні розглянуто регіональну концентрацію підприємств, наукових центрів і установ суміжних галузей з інтенсивним інформаційним обміном, наявність спільної спеціалізованої інфраструктури, інноваційне виробництво з довгостроковими конкурентними перевагами основними характеристиками інноваційного кластеру в регіоні.

Ключові слова: смарт-спеціалізація, інноваційна економіка, смарт-економіка, розвиток регіону, інноваційний кластер, малий бізнес, середній бізнес, інформація.