

## DIAGNOSIS OF THE IMPACT OF EUROPEAN INTEGRATION VECTORS IN INTENSIFYING THE PROCESSES OF INNOVATIVE DEVELOPMENT OF ENTREPRENEURSHIP IN UKRAINE



**Olena Ganushchak**

*Ph.D. Student,*

*Department Economics and Entrepreneurship,  
Uzhhorod National University, Uzhhorod, Ukraine*

*ORCID ID: <https://orcid.org/0000-0002-5824-9656>*

**Abstract.** Innovative economy requires the creation of effective mechanisms for industrial restructuring in order to increase the overall innovation activity of the business sector in all industries.

There are many directions and concepts in the world theory and practice of organization of territorial socio-economic development. The choice of specific provisions depends on the circumstances and

factors affecting the regional economy. Today the country's economy is in crisis, its economic potential is not enough to support the dynamic pace of development of all areas simultaneously. The novelty of the approach is that by choosing the key European integration areas of innovative business development, which should be emphasized, it is possible to achieve a positive effect in the national economy. The cluster approach to the formation of innovation policy for business development corresponds to this specificity to the greatest extent.

**Keywords:** *Innovative economy, innovation policy innovative business development, industrial enterprises, economic potential, cluster.*

### Introduction

The cluster principle of state regulation of industries can also become a rational tool for increasing the innovative activity of the business sector in all sectors of Ukraine. The proposed principle assumes the concentration of state resources on the support not of individual enterprises within industries, but industry clusters as a whole. The task of creating and developing sectoral clusters of territories can be solved by forming a territorial network of innovation and technology centers (Yermoshenko, Hanushchak-Iefimenko, 2010).

**Literature review.** In Western Europe, elements of the innovation infrastructure of applied research focused on promoting innovation include cluster projects that strengthen the interaction of firms of different profiles, and later different organizations of the knowledge industry, such as research institutes.

**Research methodology.** There are three most well-known definitions of the cluster.

1. Regionally limited forms of economic activity within related sectors (technological affinity, such as a biotechnology cluster), usually tied to certain institutions of the knowledge industry (research institutes, universities, etc.).

2. Vertical production chains: rather narrowly defined sectors in which adjacent stages of the production process form the core of the cluster (for example, the chain "supplier – producer – intermediary – consumer"), the same category includes networks formed around major firms (focus clusters).

3. Industries identified at a high level of aggregation (chemical cluster) or a set of sectors at an even higher level of aggregation (agro-industrial cluster). They are usually called metaclusters with scales that vary widely, from just local (for example, gardening in the Netherlands) to truly global (aerospace) (Hanushchak-Iefimenko, 2014; Shcherbak, Arabuli, 2021; Rosenberg, 1996).

**Discussion of research result** Of course, the above types of clusters in their pure form are not found either abroad or in Ukraine. Most often, the industry cluster is a geographically localized set of innovation-active economic entities with motivated and stable cooperative relations, forming a continuous synergistic set of elements of production, innovation in production, industrial production

and marketing of a market product in a particular industry segment. An industry segment is an industry direction or a spectrum of adjacent industry areas specific to a particular industry cluster.

The causes of clusters are related to the determinants of national competitive advantage and are a manifestation of their systematic nature (Fig. 1). Among them: the list of necessary determinants (tangible and intangible conditions necessary for the formation of competitive advantage in the production process of the firm – labor, natural resources, etc.), firm strategy, their structure and competition, demand parameters (consumer demand for product quality, the degree of awareness of social groups of the relevance of a particular need), related industries (consumer industries and suppliers). M. Porter introduces two more determinants that affect development within clusters: random events and government actions (Hanushchak-Iefimenko, 2014).

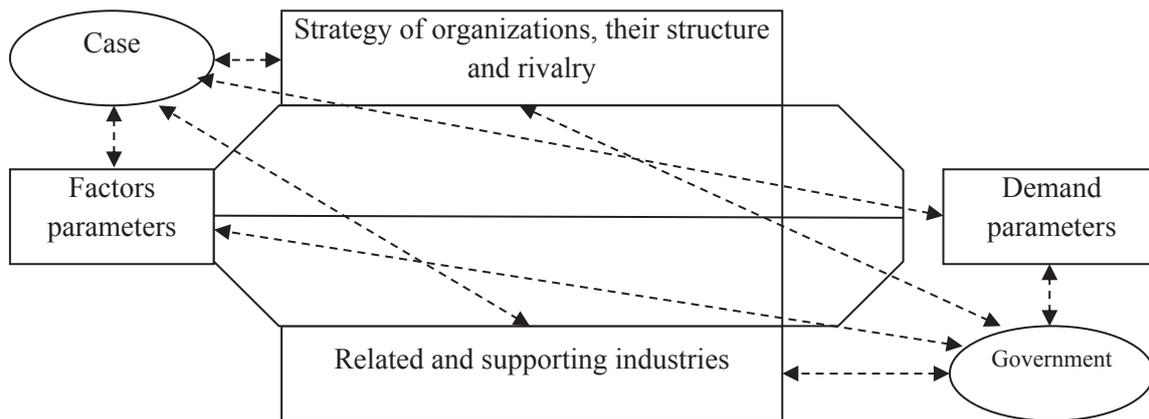


Figure 1. The general system of determinants of competitive advantage of the country (Hanushchak-Iefimenko, 2014).

Having a whole cluster of industries accelerates the process of implementing conditions where there is a group of domestic competitors. All firms from the cluster of interconnected industries invest in specialized but related technologies, information, infrastructure, human resources, which leads to the mass emergence of new firms. The cluster of competitive industries forms within itself the property of integrity and thus becomes a system, rather than a set of interacting elements.

The geographical location of the industry cluster is determined by the principle of maximum synergy: within the industry cluster the concentration of innovation carriers, human resources carriers, industrial enterprises, innovation infrastructure facilities and related industry organizations is proportionally balanced. Groups of domestic competitors are often surrounded by suppliers and are located in areas with the most significant and demanding consumers. The concentration of competitors, their customers and suppliers contributes to the growth of efficiency and specialization of production. Thus, the influence of the determinants of the country's competitive advantage is exacerbated by the influence of geographical

proximity. Universities close to a group of competitors often interact with it. Competitors support and fund the activities of local universities, and neighboring suppliers have the advantage of opportunities for exchange and cooperation in R&D. Demanding neighbors offer affordable opportunities for information transfer, participating in the processes of formation of the level of demand and exchange of technologies and making higher demands on the level of service and product quality. (Hanushchak-Iefimenko, 2014; Rosenberg, 1996).

The geographical proximity of the cluster elements increases the concentration of information and its exchange among firms. Information exchange allows to optimize the relationship in the chain "producer – consumer". Firms find it easier to receive information about changes in the characteristics of needs, and accordingly respond faster and more adequately. The speed of information flows and the rate of diffusion of innovations throughout the industry is growing.

Thus, the processes of cluster creation and exchange of industries in the cluster are more active in the presence of geographical concentration. Geographical proximity

combines all the disparate influences of the determinants of the country's competitive advantage in the system.

Depending on the geographical location, industry clusters can be divided into regional and territorial. The expediency of the cluster approach is confirmed by world experience. Sectoral clusters are the basis of the economy of almost all industrialized countries. A striking example of a foreign industry cluster is Silicon Valley in the United States, where the potential of the world's leading manufacturers of microelectronics is concentrated in a limited area.

In the Netherlands, the country's economy can be divided into 10 metaclusters: assembly production by industry, chemical industry, energy, agro-industrial complex, construction, media, health care, commercial service industries, non-commercial service industries, transport.

The members of the cluster operate in conditions of normal market competition, but at the same time they are in a favorable business environment, which promotes the initiation of joint projects, including those aimed at optimizing supply chains in the common interest. In other words, cluster companies compete with each other and join forces at the industry level (Yermoshenko, Hanushchak-Iefimenko, 2010).

**Research result.** The cluster approach makes the economy more transparent and manageable. Industrial potential is concentrated in an orderly sector of industry clusters, and the clusters themselves, as they develop, become centers of attraction for investment, better human resources and related services.

In the process of implementing the policy of clustering of the domestic economy it is necessary to take into account the domestic specifics, in particular the positive interaction of competitive determinants that create the impetus needed for economic development, deepening and expanding the cluster. But the same impulse works in the opposite direction. The process of losing competitiveness that has begun will inevitably spread to the entire economy for a while. The loss of positions in advanced industries leads to the release of resources, reducing costs, which creates benefits for other industries. The problem is that the latter use resources with lower productivity, thus slowing down its growth rate. The development of the negative spiral

can be stopped only if the country has the opportunity to create advantages in new, highly productive industries.

Based on the analysis of foreign and domestic experience, the author identified a number of methods to promote the formation of clusters that can be used in the development of Ukrainian innovation policy, in particular:

- programs aimed at uniting business people (in a particular field of technology or production) with the expectation that this will lead to increased cooperation;
- Partner selection initiatives: for example, the creation of databases that can be accessed by firms looking for partners in their field. At the European level, an example is the theme of Eureka;
- funding of intermediary (agency) initiatives: an example is a program organized by DTI in Denmark and subsequently extended to other countries;
- Patronage initiatives: payment for the services of consultants who monitor the process of cluster formation from the first steps of cooperation. And in this case, as an example, the initiative of DTI. According to the Flemish Plato project, created in Belgium and distributed to some regions of the Netherlands, large companies are allocated public funds to sponsor a group of smaller companies;
- financing of some cluster projects on a competitive basis. In this case, applications for subsidies can be submitted from various cooperation projects, and only the best projects receive partial public funds. Theoretically, in such competition, the net innovative result of subsidies can be very high.

Taking into account the analysis, it is proposed for the innovative development of the state economy to develop a cluster model of management of innovative development of entrepreneurship with the formation of a set of specific measures for its implementation.

The cluster model should take into account the specifics of the innovation path of development, which involves the implementation of innovations as the main tool, as well as gaining their market niches in the world market and gaining significant competitive advantages for Ukraine's economic development.

To effectively manage the innovative development of entrepreneurship in Ukraine,

first of all, a developed innovation infrastructure is needed. Such an infrastructure presupposes the existence of a market of innovations (innovations), a market of investments in innovative activities and a market of competition of innovations, ie competition of economic entities that introduce innovations, new technologies, etc. at their own production facilities.

Active innovation throughout the country will be supported only if the innovation market is constantly updated. This is due to the fact that the capital market and competition of economic entities to some extent already exist. However, with all the potential available, we cannot say that we have a large arsenal of competitive and promising innovations. In the development of innovation infrastructure, special attention should be paid to the formation and support of research teams aimed at creating "sowing" innovation enterprises. This challenge can only be effectively addressed by structures such as innovation centers, which can monitor and assist start-ups at the regional level, as is the case in Cambridge, a leader in science parks and innovation centers.

Thus, at the state level it is necessary first of all to create institutions for the development of innovation infrastructure, the most appropriate are innovation and technology centers that can serve as points of support, growth or similar functional properties of institutions for development of national innovation infrastructure, around which in different industry segments.

The general goal of state management of the formation and development of sectoral

clusters is to create an innovative economy and solve regional socio-economic problems. The degree of its achievement is difficult to quantify. But this goal has a pronounced active character in the cognition of the object, because having reached a certain stage of its implementation, it practically does not change. Thus the system of strategic purposes developed on the basis of this general purpose has temporary character and having reached a planned stage of knowledge and development of object is subject to adjustment.

The main provisions of state regulation of the formation and development of industry clusters can be formed as follows:

- focus on maximizing synergetic effects, ie the focus of development strategies and technologies on the emergence as a result of their implementation of qualitatively new functional properties of the system;
- ensuring maximum integrativity, ie a sufficient level of potential of system-forming factors;
- sufficiency of diversity of elements of clusters, ie the desire to achieve the necessary for the proper functioning and adequate response to changes in the external environment diversity of elements, which leads to increased economic sustainability of self-development;
- optimization of the scale and diversity of material and information exchange with the external environment;
- purposefulness;
- continuity of operation and hierarchy.

## Conclusions

In the process of modeling it is proved that the formation of sectoral clusters, which are open socio-economic systems that have all the basic system-wide and specific properties of organizational systems, is based on a systems approach. This provision confirms the correctness of the choice of this approach for the analysis and development of principles and methods of industry cluster management, evaluation of the effectiveness of the cluster model of management of innovative business development in Ukraine.

## References

1. Yermoshenko, M. M., Hanushchak-Iefimenko, L. M. (2010). Mekhanizm rozvytku innovatsiinoho potentsialu klasteroob'iednanykh pidpriemstv: nauk. Monohrafiia [Mechanism of development of innovative potential of cluster-related enterprises: science monograph]. Kyiv: National Academy of Management. 236 p. [in Ukrainian].
2. Hanushchak-Iefimenko, L. M. (2014). Innovatsiinyi rozvytok pidpriemnytstva v Ukraini: stratehichni oriientyry: monohrafiia [Innovative development of entrepreneurship in Ukraine: strategy orientations: monograph].

- strategic guidelines: monograph]. Kyiv: National Academy of Management. 400 p. [in Ukrainian].
3. Shcherbak, V., Arabuli, S. (2021). Methodology and technology of hackathon ecosystem to engage university faculty and students in innovation and entrepreneurship in the context of reducing the impact of the COVID-19 pandemic. *Management*, 1(33): 105–114. <https://doi.org/10.30857/2415-3206.2021.1.10>.
  4. Shcherbak, V., Puzyrova, P. (2020). The forecasting the level of development of innovative potential of textile enterprises. *Management*, 2(32): 65–83. <https://doi.org/10.30857/2415-3206.2020.2.5>.
  5. Kanter, R. M. (1983). *The Change Masters: Corporate Entrepreneurs at Work*. London: Allen and Unwin. P. 20.
  6. Rosenberg, P. (1996). An Overview of innovation. *The Positive Sum Strategy: Harnessing Technology for Economic Growth*. Washington DC: National Academy Press. 289 p.
  7. Rothwell, R. (1992). Successful industrial innovation: Critical success factors for the 1990 s. *RED Management*, 22 (3): 221–239.
  8. Gryshchenko, I. M. (2018). *Suchasne pidpriemnytstvo v khutrovii biznes-industrii: navch. posibnyk [Modern entrepreneurship in the fur business industry]*. kyiv: svit uspiyku. 312 p. [in ukrainian].
  9. Gryshchenko, I. M. (2016). *Pidpriemnytskyi biznes: pidruchnyk [Entrepreneurial business: a textbook]*. Kyiv: Hramota. 520 p. [in Ukrainian].
  10. Nifatova, O. M., Shkoda, M. S. (2017). Aktyvizatsiia polityky innovatsiinoho rozvytku cherez utvorennia innovatsiinykh klasteriv yak formy derzhavno-pryvatnoho partnerstva [Intensification of innovation development policy through the formation of innovation clusters as a form of public-private partnership]. *Visnyk Kyivskoho natsionalnoho universytetu tekhnologii ta dyzainu. Seriya Ekonomichni nauky = Bulletin of Kyiv National University of Technologies and Design. Economic Sciences Series*, 6 (117): 110–120 [in Ukrainian].
  11. Nifatova, O. M., Sviatetskyi, V. V. (2021). Analiz mizhnarodnoho dosvidu peredachi innovatsiinykh tekhnologii vid universytetiv do pidpriemnytskoho seredovyshcha [Analysis of international experience in the transfer of innovative technologies from universities to the business environment]. *Visnyk Kyivskoho natsionalnoho universytetu tekhnologii ta dyzainu. Seriya Ekonomichni nauky = Bulletin of Kyiv National University of Technologies and Design. Economic Sciences Series*, 1 (155): 67–77 [in Ukrainian].