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## Development Of A Methodology For Assessing The Clustering Potential Of Regions In The United States And Western Europe

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ABSTRACT: This article is devoted to the study and analysis of the development of the clustering capacity assessment methodology of the regions in the USA and Western European countries. The article describes the research conducted by scientists from various organizations and research institutions in these countries and their results. Important aspects of clustering capacity assessment, evaluation methods, and indicators were discussed. The use of the analyzed methods in the context of Uzbekistan is studied.

**KEYWORDS:** cluster, clustering potential, evaluation, quantitative indicators, quality indicators, evaluation method

## **INTRODUCTION**

The successful implementation of cluster policy in the country depends on an accurate assessment of the clustering potential of the regions. Justifying the appropriateness of using a cluster approach in achieving economic policy goals and selecting the optimal methods to stimulate cluster activities requires an assessment of the clustering potential of regions. The lack of a single definition of the concept of the cluster in economics, the fact that cluster theory is still in its infancy, and the lack of a single, universally accepted methodological approach to assessing clustering potential at the regional level hinder the implementation of cluster policy in Uzbekistan. The problem is exacerbated by a lack of understanding of the essence of the idea of clustering and the lack of official statistics on the sector.

It is important to determine the potential for clustering:

 Quantitative assessment of clusters, measuring the level of their impact on the regional economy; Published: October 15, 2021 | Pages: 150-153

- Ensuring the integration of the cluster approach to the country's innovation policy to manage the process of regional development and the formation of development strategies in priority areas;
- Reduce the risk of ineffective implementation of cluster policy and the choice of the wrong direction in the financing of clusters from the budget in the absence of conditions for the development of clusters in the region;
- Assessment of the regulatory impact of clustering policy measures;
- Coordinating the views of government, business, and the scientific and educational community on the existing and emerging clusters in the region and the country.

Researches aimed at assessing the clustering potential of regions and sectors focus on assessment based on quantitative and qualitative indicators. Research that combines both approaches is flawed. In the scientific justification of cluster policy, it is necessary to study the existing approaches to assessing the cluster potential of regions and sectors, as well as to identify potential clusters.

The first US Cluster mapping project, a comprehensive assessment of cluster formation potential, was conducted in the early 2000s by experts at the Institute for Strategy and Competitiveness at Harvard Business School. Made under the direction of Porter. [1] The project was implemented in two stages, which included the selection of industry groups based on the nature and level of development of inter-sectoral relations and the formation of a system of indicators that measure the dynamics and competitiveness of clusters. [2]

The European Cluster Observatory conducted the first phase of the assessment in 10 new EU member states in 2004 and all European countries in 2007, as well as in Iceland, Norway, Switzerland, Turkey, and Israel. According to the NACE (European Classification of Economic Activities) classification, trade-oriented clusters were identified in 38 categories in 302 industries. At the same time, the number of networks per cluster ranged from 1 to 37 on average. These sectors employed 25% of the entire European population.

In 2014, scientists at Harvard Business School and the Massachusetts Institute of Technology proposed an improved methodology for determining clustering potential. [3] For this study, M. relied on the classical methodology developed by Porter (2003) and its adaptations proposed by the European Cluster Observatory. The improved methodology involves the use of an expanded system of indicators to identify potential clusters, which reduces the importance of monographic

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and expert evaluation methods. Excluding intra-network flows, supplier-consumer cross-sectoral relationships are studied bilaterally, and relationships that are equally important to both parties are identified. If it is found that there are strong links in both supply and procurement between the two networks, they will be combined into a single cluster.[4]

Under this methodology, the Standardized Industrial Classification (CIS) system was replaced by the North American Industrial Classification System (NAICS), which is relatively flexible, takes into account changes in the global economy, and provides detailed data on the most important sectors (information technology, telecommunications, biotechnology, etc.). As a result of the study, the number of cluster categories increased from 31 to 51.

As a result of research conducted by experts of the European Cluster Observatory in 2014, the works "Methodology and results of mapping cluster categories in interconnected networks" and "Methodology and results of correlation analysis of cluster activity and regional competitiveness" were presented. These research papers presented updated cluster groups, described in detail the cluster categories in the new fast-growing networks, and highlighted the 10 fast-growing networks with the highest potential to form competitive clusters. [5]

It should be noted that the methods developed in the developed countries of the United States and Western Europe for a comprehensive assessment of the potential for the formation of clusters in the conditions of Uzbekistan can not be used in their original form. This is because not all of the indicators used in these studies can be generalized in Uzbekistan at the national and regional economic levels. For example, the practice of defining a group of interconnected sectors using cost-benefit tables cannot be used in Uzbekistan due to the lack of cross-sectoral balances at the national and regional levels. The structure of clusters also differs from country to country. Therefore, the cluster categories developed by Porter and his successors should be adjusted based on the characteristics of each country.

In general, the level of economic development of the above-mentioned countries, long-term experience in the practice of clustering sectors of the economy complicates the direct use of the results of research conducted by them. Clusters that meet the requirements of the potential cluster detection method developed by the European Cluster Observatory do not yet exist in Uzbekistan, which has 3-4 years of experience in this area. The network structure of the economies of post-industrial countries such as the United States and Europe is also radically different from ours, and in these countries, there is a clear advantage of high-tech industries.

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Therefore, in the context of Uzbekistan, given that clusters are still in the process of formation, it is necessary to develop a comprehensive method that includes several criteria.

## **REFERENCES**

- U.S. Cluster Mapping Project // Institute For Strategy & Competitiveness: [website]. URL: https://www.isc.hbs.edu/about-michael-porter/affiliated-organizations-institutions/pages/us-cluster-mapping-project.aspx.
- 2. Porter M.E. (2003), "The Economic Performance of Regions", Regional Studies, Vol. 37, P. 563.
- 3. Delgado M., Stern S. US Cluster Mapping Project: A New Tool for Regional Economic Development. 2014.
- 4. Markov L.S., Markova V.M. Identification of reference clusters: methodological issues and practical application to the domestic industry // Vestnik NSU. Series: Socio-economic sciences. 2012. T. 12. Iss. 1, p. 101.
- 5. European Cluster Panorama URL: https://ec.europa.eu/growth/smes/cluster/observatory/cluster-mapping-services/cluster-panorama\_en.