

## ECONOMIC ANALYSIS IN DEVELOPMENT OF CLUSTER ACTIVITY MONITORING MAPS

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#### Abstract:

In this article, a study was carried out on the subject of economic analysis in the production of maps monitoring the activity of clustering. Clusters are organizational units in geographical areas that are a composition of economic subjects located in unity. This article focuses on how maps can be used to monitor cluster activity and key words for performing economic analyzes derived from these maps.

**Key words**: cluster, monitoring, map, economic analysis, geographical area, composition, production.

## KLASTERLIK FAOLIYATINI MONITORING QILUVCHI XARITALARINI ISHLAB CHIQARISHDA IQTISODIY TAHLILLAR

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Abstract: Bu maqolada klasterlik faoliyatini monitoring qiluvchi xaritalarini ishlab chiqarishda iqtisodiy tahlillar mavzusida o'rganish amalga oshirildi. Klasterlar, birlikda joylashgan iqtisodiy subjektlarning tarkibi bo'lgan geografik hududlardagi tashkiliy birliklardir. Bu maqolada, klasterlarining faoliyatini monitoring qilishda xaritalarni qanday ishlatish mumkinligi va bu xaritalardan kelib chiqadigan iqtisodiy tahlillarni amalga oshirish uchun kalit so'zlarga e'tibor qaratildi.

**Kalit so'zlar:** klaster, monitoring, xarita, iqtisodiy tahlil, geografik hudud, tarkib, ishlab chiqarish.

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## Introduction

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Cluster activity is an organizational system that is united by several interrelated enterprises, carried out in a cooperative state. The main goal of this system is to enable enterprises to develop through interdependence and cooperation. Clusters are designed for different sectors and there are different types of clusters such as business, economy and innovation clusters. Each enterprise in the cluster implements a defined line of activity and expects future expansion and development from them [1, 3].

#### Importance of cluster activity:

Cooperation: Cooperation of enterprises in the cluster expands their capabilities and allows additional benefits. By influencing each other, they can develop further.

Resources: The resources of the enterprises in the cluster (such as materials, technologies, personnel) can be used efficiently through mutual exchange. Using these resources helps all members in the cluster.

Market: The interaction and complementary access of businesses in the cluster supports their development across the market. Spreading in a cluster creates opportunities to open new markets and increase their contribution in existing markets [8].

#### Specific appearance of monitoring in cluster activity:

Information exchange: The monitoring process includes information exchange between enterprises in the cluster. Information exchange between them is important in evaluating the efficiency of the cluster.

Evaluation of results: Each enterprise in the cluster evaluates the results of its activities with an evaluation. It shows how important the indicators are in ensuring the achievement of the objectives.

Assessing the level of cooperation: The monitoring process assesses how well cluster members cooperate with each other and work within their framework. This is important for the efficiency of clustering activities and the expansion of enterprises [2].

Issues and Suggestions: The monitoring process helps identify issues and suggestions in the cluster. This is important for the implementation of measures in the activity of the cluster and its further development [6, 7].

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Monitoring of the cluster activity allows to strengthen the cooperation of the enterprises in the cluster, to continue their development and to increase their efficiency. In this case, it is recommended to organize monitoring as a support to ensure efficiency.

## Analysis:

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The following are the aspects that must be taken into account first of all when talking about the methods of production of maps monitoring cluster activity.

- Data collection: The first step for monitoring cluster activity is data collection. This data may consist of activities and indicators that are included in the cluster. Data can be obtained from questionnaires, statistics, focus groups and other methods [9-11].

- Data analysis: The analysis process helps to study all aspects of clustering performance. This analysis may include statistical analysis of data, trends and trends, causal and casual relationships.

- Development of maps: As a result of data analysis, maps are developed. Maps can be related to cluster geographic location, demographics, economic information, and other indicators.

- Visualization of maps: The developed maps should be visualized so that they can easily help those who can monitor the clustering activities. These visualization techniques usually involve the use of maps, graphs, charts, and other visual elements.

- Allocation maps: Allocation maps are very important for monitoring clustering activity. This distribution helps to compare between clusters, identify trends and define new activities [12-15].

- Change of maps: Change of maps is required to continue monitoring the clustering activity. New information, events and indicators can be added to the maps.

- Distribution of maps: Distribution of maps is required to monitor cluster activity. This distribution may include specialized clustering activities, strategies, and outcomes. In general, cluster activity monitoring mapping methods can include data collection, analysis, mapping, visualization, distribution, transformation, and dissemination.

## Mapping software:

a) GIS programs: GIS (Geographic Information System) programs provide the ability to create and monitor maps for processing land data. Data can be viewed, analyzed, and mapped using these programs.

b) Applicable map platforms: There are several online map platforms such as Google Maps, OpenStreetMap, Mapbox, etc. Through these platforms, users can create their own maps and monitor their activity.

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c) Mapping APIs: APIs (Application Programming Interfaces) that allow developers to access proprietary mapping functions. Through this method, it is possible to integrate activity monitoring maps.

d) Mobile applications: Mobile applications can also have suitable capabilities to generate activity monitoring maps. In this, users can monitor their activities using an application on their mobile devices or smartphones.

e) Earth Data Sensors: Data such as traffic, temperature, temperature, fluctuations etc. can be obtained through sensors. This data can be mapped and used for monitoring.

The methods listed above are some of the most commonly used programs for developing activity monitoring maps. Other methods may also exist, and it is also possible to monitor maps using proprietary programs created by specialized organizations.

Basically, there is a great importance of economic analysis in the creation of maps of scientific innovations and their application to life. This analysis requires the training and investment of financial resources necessary to create the maps. Economic analysis is primarily based on the collection of enumerative data when creating new types of maps [10]. These data should consist of demographics (population size, gender, age), economic activities (counting, transport, tariffs), environmental data (natural resources, state of the environment) and other key factors. possible The second part of the economic analysis [11] is related to the assessment of the financial resources spent on the creation of maps [12] and its level of inefficiency. A further clarification of relationships in relationships is also seen during this assessment process. For example, when large investments are made in transport sectors in a region, it is necessary to analyze the interactions that multiply it. This allows you to determine the completeness of the invested amount and the degree of inefficiency of the relationship. The third part of economic analysis focuses on variability and perspective in creating new types of maps. The perspective of the maps is related to the financial resources necessary for the continuation of the processes of data generation and investment in them. It is also necessary to have accurate and clear information about the place and role of various sectors in the current and future economic spheres to ensure the implementation of new information [14].

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In addition, economic analysis requires the absolute accuracy of enumerator data when creating new types of maps. It is important to collect, store and analyze accurate enumerator data. It also provides an analysis of interactions, along with the main results of creating new types of maps. Along with these, the economic analysis helps to determine the necessary financial resources and investment in the creation of new types of maps. This analysis, together with the degree of inefficiency and perspective of mapping, ensures accuracy and accuracy of enumerator data [16].

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**Impact of cluster activity monitoring maps and economic analyzes on practice:** Cluster performance monitoring charts and economic analyzes are tools used to monitor and analyze cluster performance. These maps and analyzes increase our ability to understand the economic impact of clusters and measure their contribution to the local economy.

Cluster activity monitoring maps are graphical representations showing the location and activity of firms in a cluster. These maps help determine a region's economic strength by showing the cluster's size, diversity, and potential growth areas. Also, using these maps, we can evaluate the possibilities of cooperation between firms in a certain field.

Cluster activity analyzes are analytical tools used to examine the economic impact of a cluster. These analyzes help measure economic factors such as the total production value of the cluster, its employment generation potential and export volume. Furthermore, through these analyses, we can try to understand the connections and synergies between different sectors.

The objectives of cluster activity monitoring schemes and economic analyzes are as follows:

Determining the economic impact of a cluster: With these tools, we can measure the economic size of a cluster, its employment generation potential, and other economic factors. Thus, we can determine the contribution of the cluster to the local economy. Determining the growth potential of the cluster: Monitoring charts and economic analyzes can be used to make strategic decisions by showing the growth areas and potential of the cluster. These tools also help to assess collaboration opportunities between firms in the class.

Use in policy making: Cluster performance monitoring tables and economic analyzes are important sources of information used in regional policy making. With these tools, policy makers can make strategic decisions by assessing the impact of clusters on the local economy.

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As a result, cluster performance monitoring charts and organic analysis are important tools for monitoring and analyzing cluster performance. These tools enhance our ability to understand the economic impact of clusters and measure their contribution to the local economy (fig.1).

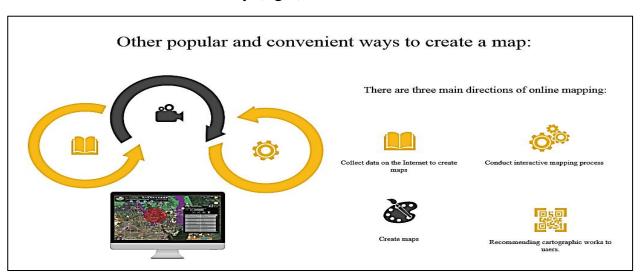


Figure 1. procces of creating web maps.

Create a card stages	Dividing work into stages	Work in each stage result
Designing	<ul> <li>determining the requirements to be placed on the card and creating its outline program;</li> <li>collection, analysis and evaluation of sources;</li> <li>study the events and events depicted on the card;</li> <li>creating a card program (project)</li> </ul>	Card program (or project)
Compilation	<ul> <li>source preparation and processing;</li> <li>creating the first original of the card (creating a mathematical model, transferring its content from sources, generalizing it and enacting it)</li> </ul>	Original of the card (initial copy)
Preparation of the card for publication	<ul> <li>development of the publication model (or originals);</li> <li>auxiliary work on service of polygraphy processes;</li> <li>development of line and color samples.</li> </ul>	Publishing originals and auxiliary layouts
Publishing	<ul> <li>development of printing forms and taking samples;</li> <li>clicking (publishing) the card.</li> </ul>	Card printed stickers

## Table 1. Designing, designing and publishing cards (basic steps)

## Conclusion

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- It is very important to carry out economic analyzes for the production of maps monitoring cluster activities. These analyzes will help to gather information on business activity in the cluster and its economic flows.

- Economic analyzes allow to understand the current state of the cluster along with information on the quality of industries in the cluster, the number of companies and employees working in them, the quality of products and services, prices, and export potential.

- As a result of the analysis, it will be possible to determine the strength and weaknesses of the cluster. It will be possible to determine what measures should be taken to strengthen the weak areas.

- It will be possible to show the development and growth of sectors in the cluster through economic analysis. This allows the state to determine the strategic direction for the proper direction of the invested resources.

- As a result of the analysis, it will be possible to define cooperation opportunities between different companies in the cluster and their strong development path. This can help increase cooperation and innovation processes between companies in the cluster.

- Monitoring of economic activity in the cluster through analysis allows to determine the export potential in the cluster. This makes it possible to set strategic costs and attract investment for the development of export potential.

## **Recommendations:**

In the production of maps monitoring cluster activity, it is necessary to collect data related to the business sector in order to collect data. The support of state institutions is very important in this (1). You can use statistical data, questionnaires and other scientific methods to perform economic analysis. Proper use of these methods will result in quality and accuracy (2). It is very important to carry out constant monitoring of the cluster to base the analysis. This highlights the importance of collaboration, data collection and learning with companies and employees in the cluster (3). You can share this information with companies in the cluster, government institutions and other persons to support the results of the analysis. They can help you understand the economic situation of the cluster (4). Based on the results of economic analysis, you can use them to define business strategies and attract investment. This makes it possible to determine the strategic direction for the development and development of cluster activities (5).

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