sistemami/ pod.red.chl.-korr. RAND. A. Novikova. – M.: Limrpkom, 2009. – 264 p. [In Russian]

5. Cuzinov Dr.A. Novy tip peresechenii v odnom urovne s nepreryvnym transportnym potokom po glavnoi iz peresekaushikhsya dorog/ Internet-resurs.-Regim dostypa: http://www.2dxt/ de/contru.html. 17.08.19. [In Russian]

6. Kopylov G. A. Razrabotka osnov automotizi-rovannoi sistemy sboai obrabotki informazii o dvigenii transportnykh potokov po automobilnym dorogam// TrudyMADI. –M., 1972. - Вып. 44. — Pp. 60 – 67. [In Russian]

7. Otchet TOO NII travsporta b kommunikazii. 2017. [In Russian]

UDC 330:334.7
IRSTI 06.71.02

HISTORY AND ECONOMIC EFFICIENCY OF CLUSTER SYSTEM CREATION

E. ISSAKOV[1], K. KALIYEV[1], K. ZHOYA[1]

([1]Almaty Technological University, Kazakhstan, Almaty city)
E-mail: erlanchik-89@mail.ru

This article discusses the issues of obtaining information in countries where the cluster approach is applied, and the result of communication of cluster participants, interaction of enterprises within the value chain, innovative ties, a peculiar place and world history of the cluster. On the basis of the conducted research, the authors were convinced that the creation of a cluster requires constant participation in market adaptation and innovation.

Key words: economy, cluster, enterprise, market, development, historical, program, innovation, competition, system.

ИСТОРИЯ И ЭКОНОМИЧЕСКАЯ ЭФФЕКТИВНОСТЬ СОЗДАНИЯ КЛАСТЕРНОЙ СИСТЕМЫ

Е.Д. ИСАКОВ[1], К.Б. КАЛИЕВ[1], К. ЖОЯ[1]

([1]Алматинский технологический университет, Казахстан, г. Алматы)
E-mail: erlanchik-89@mail.ru

В данной статье рассмотрены вопросы получения информации в странах, где применен кластерный подход, и результат общения участников кластера, взаимодействия предприятий в рамках цепочки ценностей, инновационных связей, своеобразного места и мировой истории кластера. На основе проведенного исследования, авторы пришли к выводу, что создание кластера требует постоянного участия в адаптации рынка и инноваций.

Ключевые слова: экономика, кластер, предприятие, рынок, развитие, историческая, программа, инновация, конкуренция, система.

КЛАСТЕРЛІК ЖҮЙЕНІ ҚҰРУДЫҢ ТАРИХЫ МЕН ЭКОНОМИКАЛЫҚ ТИІМДІЛІГІ

Е.Д. ИСАКОВ[1], К.Б. КАЛИЕВ[1], Қ. ЖОЯ[1]

([1]Алматы технологиялық университеті, Қазақстан, Алматы қ.)
E-mail: erlanchik-89@mail.ru

Бұл мақалада кластерлік тәсіл қолданылған елдерде ақпаратты алу және кластерге қатысушылардың тіл табысу нәтижесі, құндылықтар тізбегі шеңберіндегі кәсіпорындар қарым-қатынасы, инновациялық байланыстар, кластердің өзіндік орны мен әлемдік тарихы

қарастырылған. Жүргізілген зерттеу негізінде авторлар кластер құру нарық пен инновацияның бейімделуіне тұрақты қатысуды талап етеді деген қорытындыға келді.

Негізгі сөздер: экономика, кластер, кәсіпорын, нарық, даму, тарихи, бағдарлама, инновация, бәсеке, жүйе.

Introduction

During the global economy of developed countries, clusters began to expand. They appeared in countries with developed markets such as the USA, Germany, Italy, Great Britain, Japan, and in developing countries such as Pakistan, Brazil, and India [1].

A number of recommendations have been developed to improve collaboration between the private sector and the regional government in developing and implementing cluster development programs. During this time, leading organizations studied the functional efficiency, technical equipment and methods of their pro-duction in Indonesia, Malaysia, India and Mexico.

Objects and research methods

To create a cluster system and increase its economic efficiency, which is the central point of economic development, enterprises use various historical data along with new innovations and cluster approaches, modern technical combinations.

Results and discussions

Cluster surveys at the global level are widely known in the economic literature as Third Italy. In the late 1970s, the rich northwest of Italy (the first Italy) and the south of Italy (the second Italy) experienced economic crises, while economic growth was observed in the north-eastern and central parts of the country.

Small enterprises concentrated in a particular area have shown that local and export markets are able to develop markets, grow progressively and provide employment. Although employment in the sectors is not related to agriculture, in third Italy there is particular growth, and value added is higher than in other parts of the country.

The rapid development of Third Italy, in particular, the rapid growth of industries based on small and medium-sized enterprises, is associated with the concentration of firms in real sectors and towns. The company showed that clusters are competitive in the global market for traditional goods, such as shoes, leather bags, knitwear, furniture, ceramic tiles, musical instruments, food, and the supply of equipment for these goods. Meanwhile, large companies in Germany and the UK were in decline, and small and medium enterprises in Third Italy were a period of production and export expansion [2].

The development of clusters in Italy is based on the role of the state: introducing management in the form of assistance, export discounts and guarantees, attracting and supporting investors, as well as consulting services.

Over the years, the World Economic Forum (WEF) has become a competitive leader in the United States, Japan, Britain and Finland, which has overtaken 102 other countries in the world. The fact that the main dynamic development of the Finnish economy is directly related to clusters has been proven by many scientists.

As part of a cluster analysis, Finland was late with the reorganization of the economic policy, which was carried out only in 1995, but the potential of national industry and information security was identified on the basis of the Finnish Benefits project implemented by the Finnish Institute of Economics. The Ministry of Trade and Industry has prepared and processed the National Industrial Strategy, which is able to move to industrial and technological, macroeconomic regulation, focused on the development of clusters.

The famous company Nokia is a manufacturer of telecommunications equipment, uniting 120 industrial clusters. Currently, this company has become a giant in Finland in the field of science and technology. Government funding for research is 3.6 percent of GDP, and Nokia accounts for 35 percent of all business investment.

The appearance of a very strong Finnish cluster on the market is explained by the availability of natural resources such as wood, fish, etc. The environmental protection cluster in the state of Finland was specially created as a result of environmental pollution by local developers.

Nine sectors (forestry, metallurgy, energy, business, information and telecommunications, engineering, food, construction, health) are important for the Finnish economy, according to experts from the Institute for Economic Research (IPLC), the clusters used in the Finnish state make up an important part of GDP countries [3].

Cluster policy in European countries has been operating since 1968. At the suggestion of the Danish government, a network program of

Denmark was implemented between 1988 and 1993. The reason for the development of this program was the lack of competitiveness of SMEs around the world. The purpose of creating networks is to demonstrate new business trends aimed at increasing competitiveness, introducing new agents to agents and distributors in new markets, using the strengths of private firms. One of the key clustering problems in Denmark is the lack of collaboration between companies with a dotted business culture. However, the program was implemented efficiently: over the course of five years, the program has become widespread and entered the formation of a five-thousandth network of 10-12 thousand target groups; a high level of the program contributed to the creation of a network of enterprises as part of Danish business culture. Network marketing is one of the only ways to solve business problems: 75% of the companies surveyed were involved in the network, which increased their competitiveness, and 90% of respondents intend to continue their activities on the network after the expiration of the program subsidy, Portugal, Spain, Great Britain, France, Norway, USA, Canada, Australia and the USA, as an example in the development of similar programs in other European countries. or New Zealand zones.

In Denmark, the program is funded by the government, while in the UK the costs are mainly covered by participating companies. The advantage of the Danish model is that its coverage and high development speeds, while the British model gives priority to tracking participating companies and achieving program viability and sustainability.

In Germany, they implemented their own programs for the development of the region at their own expense and, accordingly, the Federal Department of Land Independence. The state of Germany has done a great job to strengthen industry and research centers for the development of high technology. They were divided into three groups: scientific, technological, appearing in innovative firms, working in a competitive environment, combining research and production. Industrial clusters receive financial resources from federal and local sources. In Germany, seven clusters of high-tech clusters have won three of the world's leading clusters: the "Silicon Valley of the 21st Century" - these are Munich, Hamburg and Dresden. The basic principles of using clusters are based on the following market mechanisms: the ability of small and medium-sized businesses to act independently, without the ability of the state to work independently, stop the work of inefficient enterprises in the market and be a key condition for providing financial assistance to state micro and small businesses [4].

The transition of the European Union to a new form of economy, in comparison with other countries, was carried out in a more complex way, since the public sector, which employs 25% of the country's workforce and 30% of its production and part of exports, is centralized. In 1995, a program for the development and creation of the territory was adopted and the Fund for Regional Development and Improvement was created. A draft program for 1997-1998 was developed, 99 projects for the development of a single region using an industrial cluster system were approved.

As a result of this activity, 4300 enterprises were included in the system. Joint ventures were concentrated around 30 large companies. While the division of projects was proportional, some areas were actively developing: the Pyramids, the Rhine Alps, Frant-Conte, Auvergne, Champagne, the Ardennes, Paris, Toulouse, Marseille and Saint-Etienne.

In the French program for economic development, innovative programs through the technopolis system are important and are developing rapidly on the southern coast of the Mediterranean Sea. Today, Antipolis, Montpellier, Toulon, Marseille, Monnols are known clusters. An important factor was the opening of special state engineering research institutes, the foundations of high technology and entrepreneurship. These measures were aimed at strengthening the country's competitiveness and the emergence of a targeted economic strategy of the government: the formation and development of an innovative sector of the economy, the flexibility of the labor market, the protection of national capital from the threat of “swallowing” by foreign companies, and the development and implementation of a new tax policy.

The French government was the organizer, adjuster and key investor in the implementation of major national projects aimed at improving the country's international competitiveness [5].

Then in Korea, small and medium-sized businesses invested $ 3 million. about 99.5% of all companies. The share of small enterprises is 97%. In Korea, small business is the most important source of employment, as 87% of the economically active population (10 million people) work here. Small and medium enterprises account for half of the country's GDP and 43% of South Korea's exports.

Here are some examples of clusters:

Table 1 – Creating global clusters

Region	Cluster	Year of foundation	Initiator	Attractiveness	Development
Aalborg, Denmark	Mobile phone cations	1948	SP radio	Marine industry	Development, technology, communication with the university
Dalton, Georgia (USA)	Carpets	1918	Craft tufters	Edits	Competitors in the field of automation, processing
Castel Gofredo Italy	Knitting	1923	Factory in Noam	Markets	Closed factories, sale of workers and tools
Ibi Spain	toys	1915	Paya SCVI Hermanos	House	Recycling various products
California (USA)	Technology, Pharmaceutic als	1950	Hybritech	Marine base, climate	Marine base, climate
Sosolo Italy	Fine ceramics	1960	Rubbiani	Clay earth	Innovation, Competitors, Suppliers

Eastern Europe supports industrial clustering, while Hungary, Slovakia, the Czech Republic and Slovenia are protected by their modern software that provides comprehensive attractiveness, intensive development, integration, transparency and transparency. In this case, Hungary created a cluster of 75 clusters, and the park industry is the main cluster for its development.

For example, in the areas of cluster development: flower business in the Netherlands, cosmetics in France, in Switzerland - watches, petrochemicals in Singapore. From this we conclude that there is no one-sided and high-class cluster, because the cluster comes from different states at different levels of development and the availability of all types of resources and opportunities. Cluster models are different, but everywhere they give small and medium-sized businesses a powerful impetus for the development of the region.

Conclusion

Thus, we were convinced that the creation of a cluster requires constant participation in market adaptation and innovation. The cluster approach is associated with the results of communication with cluster members in countries where the cluster approach is based on relationships in the value chain, innovative relationships and place in the innovative cluster innovation system. It has been found that cluster surveys often have chain structures or different groups of industries that are related in different countries:

- interaction in trade;
- in innovative communication;
- education;
- in well-known or general factorial conditions.

Thus, studying the experience of cluster development, it becomes clear that in developed and developing countries the goal of their creation is to create a state-sponsored or geographically close location so that Finland, the USA, Italy, Germany and Denmark become “growth points” or “locomotives” in the economy can see.

REFERENCES

1. Vashchuk Ya.P., Silicon valley: history of origin and role in innovative development // Theory and practice of management. - 2004. - N5. – PP. 3-7 [in Russian]

2. Tursynbayeva M. Zh., Cluster model of economic development of the Republic of Kazakhstan: background and prospects (based on the materials of tourism) // Ekon. science. Cand. disk.- The work was carried out in Karaganda economic University of the Kazakh consumer Union. Karaganda, 2008. – PP. 125. [in Kazakh]

3. Usenov G.A., Nurmagambetulu Zh. World experience of cluster system development // Bulletin of KazNPU named after Abay, series "Natural and geographical Sciences", No 2 (28), 2010, - PP. 22-25. [in Kazakh]

4. Madiyarova E. S. Theoretical bases of clusters creation // Vestnik KazEU, theory and methodology, No. 1 (85), 2012. – PP. 16-18 [in Kazakh]

5. Adrianov N. State dirigism in France: history and modernity // Society and economy, 2005.- No. 12.- PP. 39-48. [in Russian]