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CLUSTERING DIRECTIONS OF INNOVATIVE DEVELOPMENT AND ITS PRIORITY DEVELOPMENT IN KYZYLORDA OBLAST

Abstract: In this article the prior directions of innovative development of Kazakhstan economy are identified, the study of present situation of innovative activity is examined and also the cluster directions of regional innovative development is thoroughly discussed.

Clusters are the agglomeration of the managing and controlling agencies in real economic space, research institutions, services and goods. clusters represent partnerships between companies and organizations in which they are interconnected, in a vertical and horizontal communications. In economic science the term "cluster" received the greatest popularity thanks to works of the author of the theory of competitiveness of professor of Harvard University Michael Porter. Also in article were noted the countries where clusters already successfully work and are given the reasons of creation of a cluster. The author gave the main directions of creation and development of a cluster in the Kyzylorda region. These include clusters such as the fish cluster, the rice cluster, the oil and gas cluster, the construction cluster and the tourism cluster.These spheres are the most priority for our region.

Keywords: innovation, know-how, cluster, competitiveness.

It is known that in the modern world there are three models of development: innovation, technological and raw materials. The goal of innovation is to get new knowledge (know-how). So the final product will be extraordinary and expensive. The technological model allows quick return, as the finished products of "others" are taken and money is invested in new progressive processes and products. At the same time, the technological model and, accordingly, the development of a particular national economy will depend on the know-how of other countries. Raw material exports focus on commodity exports, which leads to economy stabilization and poverty reduction [1].

At present many countries, which have turned into leaders of the world economy, which have shown vivid examples of the development of innovative systems and high technology. These countries have gone through all the industrial stages, which include the extraction of raw materials, its primary processing, and the receipt of finished products, and are now engaged in the formation of a post-industrial economy based on high technology and innovation. In other words, they completely formed a chain of a benefit and provided the market with knowledge-intensive and innovative products.

Countries have different ways of innovative development, depending on the level of socio-economic development and on national cultural peculiarities.

The global innovation index is a global study and the accompanying rating of the countries of the world according to 80 indicators of innovative development.

The Global Competitiveness Index (Global Competitiveness Index) is a global study and the accompanying rating of the countries of the world in terms of economic competitiveness. The competitiveness index assesses the ability of countries to ensure a high level of well-being of their citizens, which primarily depends on how effectively the country uses their resources. Common accessible statistic data is worked out using the results of global questionnaire of company managers, worldwide economic forum resolutions, cooperative collectives, scientific-research institutes and analytical organizations. At the same time, to maintain a standard of living in a free market, it is usually necessary to improve constantly labor productivity and quality of goods and services. Kazakhstan has been participating in these studies since 2012.

As a result of research conducted within the framework of the Global Competitiveness Index in 2017, Kazakhstan ranks 84th place in the rating of the innovation factor at 25 positions. This is one of the most

important indicators of the country's competitiveness. In my opinion, this case is connected with a reduction in the costs of research and development and practical works on the factor of innovation and a reduction in government purchases of high-tech products. In this regard, it is important to analyze the current state and prospects of innovative development of Kazakhstan. At present, Kazakhstan has left the raw material economy on the path of innovative development, and has moved to the stage of the formation of an industrial and innovative economy. For modern countries that seek to master the best practices of the world economy and rationally use it, the key issue is the formation of an industrial and innovative economy. We rely on several quantitative and qualitative indicators to determine how the state successful in innovation policy. Indicators of the current level of global innovations and technologies in Kazakhstan indicate that our country is much lower than the global level. However, considering that Kazakhstan has a relatively recent path of innovative development, these figures should be guided in the future. The following elements of industrial and innovation infrastructure in Kazakhstan are presented in accordance with the Law of the Republic of Kazakhstan "On State Support of Industrial and Innovative Activity" dated January 9, 2012 No. 534-IV:

- Special economic zones;
- Industrial zones;
- Techno parks;
- Joint-stock investment funds for risky investments;
- Centers for the commercialization of technologies;
- Branch design bureaus;
- International technology transfer centers;
- Innovative clusters.

As for the institutional structure, which is a key element of the innovation infrastructure, currently there are 8 oblast technology parks, 9 special economic zones, 4 industrial design bureaus, 4 international technology transfer centers, 21 commercialization offices, 18 international and 4 domestic venture funds [2].

In addition, on August 1, 2014, by the Resolution of the President of the Republic of Kazakhstan, the State Program "Industrial and Innovative Development of the Republic of Kazakhstan for 2015-2019" was adopted and implemented.

The program analyzed economic sectors using a two-factor model method. First, the market prospects of each sector in the private market, including the macroeconomic market, and the potential economic consequences of the sector development are taken into account. Secondly, the opportunities of this sector of the Republic of Kazakhstan are taken into account, including the current level and development prospects.

According to the analysis, six main manufacturing sectors were selected: metallurgy, chemistry, petro chemistry, engineering, building materials, food industry, which were divided into 14 sectors:

1) ferrous metallurgy;
2) non-ferrous metallurgy;
3) oil refining;
4) oil and gas chemistry;
5) food production;
6) agro chemistry;
7) production of chemicals for industry;
8) manufacture of motor vehicles, their parts, spare parts and engines;
9) production of electrical machines and electrical equipment;
10) production of agricultural machinery;
11) manufacture of railway equipment;
12) manufacture of machinery and equipment for the mining industry;
13) manufacture of machinery and equipment for the oil refining and oil industry;
14) production of building materials [3].

At present, the number of enterprises in the innovative sector of the Republic of Kazakhstan is growing. The following figure shows the level of innovative enterprises in the Republic of Kazakhstan (Figure 1).

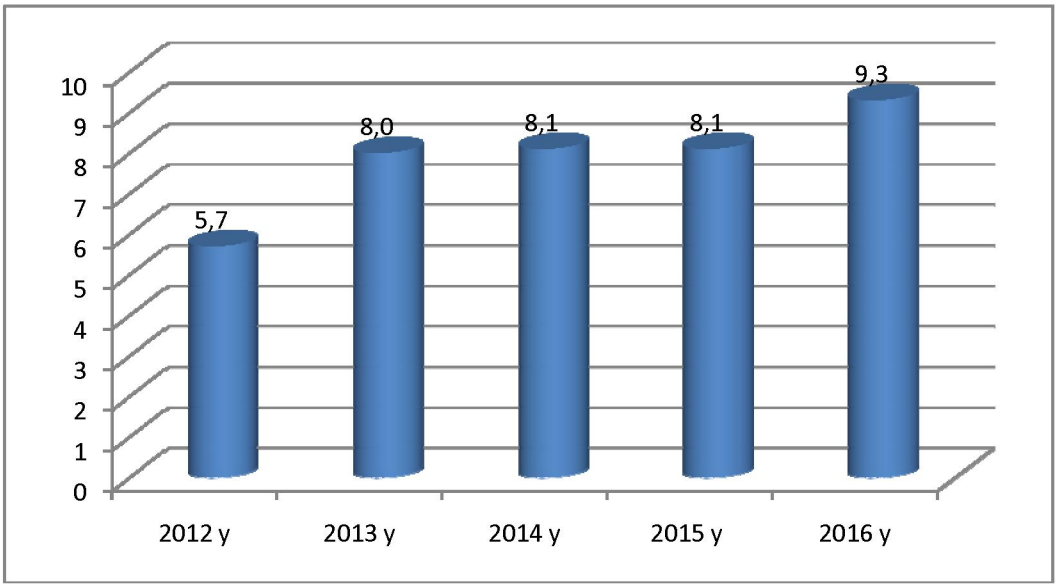

Figure 1 - The level of innovation-active enterprises in the Republic of Kazakhstan,%

As can be seen from the figure, in recent years the level of innovative enterprises in Kazakhstan has increased significantly. It should be noted that in 2012 the number of active innovation enterprises was only 5.7%, and in 2013 the growth was 9.3% in 2016.

The following table shows the level of innovation in the oblasts of the Republic of Kazakhstan (Table 1).

Table 1 - Level of innovative enterprises in the Republic of Kazakhstan by oblast, in%

Name of the oblast	**2012**	**2013**	**2014**	**2015**	**2016**
The Republic of Kazakhstan	**5,7**	**8,0**	**8,1**	**8,1**	**9,3**
Akmola oblast	4,6	7,1	7,3	6,8	7,0
Aktobe oblast	4,0	6,5	7,6	7,0	9,3
Alma-Ata's oblast	5,4	9,5	9,4	6,9	7,8
Atyrau oblast	4,4	5,1	8,1	8,0	8,5
West-Kazakhstan oblast	7,5	5,3	6,6	4,1	3,6
Jambyl Oblast	7,9	10,2	12,2	10,6	10,8
Karaganda oblast	3,8	7,6	8,4	9,2	10,6
Kostanay Oblast	7,1	11,8	13,6	14,5	11,2
Kyzylorda Oblast	5,3	12,0	10,1	11,7	11,2
Mangistau oblast	1,1	2,4	3,4	4,0	4,1
South-Kazakhstan oblast	5,0	6,4	7,0	6,9	6,6
Pavlodar oblast	4,1	6,4	6,9	4,8	6,5
North-Kazakhstan oblast	10,4	10,9	11,6	10,6	11,3
East Kazakhstan oblast	6,2	5,6	7,6	11,5	14,9
Astana city	6,8	11,1	10,7	13,2	13,6
Almaty city	6,7	8,0	5,0	4,7	7,6
Footnote - based on the data [4]					

When analyzing the table data, the share of innovatively active enterprises in Zhambyl, Kostanay, Kyzylorda, North Kazakhstan oblasts and Astana is constantly high. The share has increased over the past two years in East Kazakhstan and Karaganda oblasts. The smallest share of innovative active enterprises belonged to the West Kazakhstan and Mangistau oblasts.

The following figure shows the contribution of innovative products to GDP (Fig. 2).

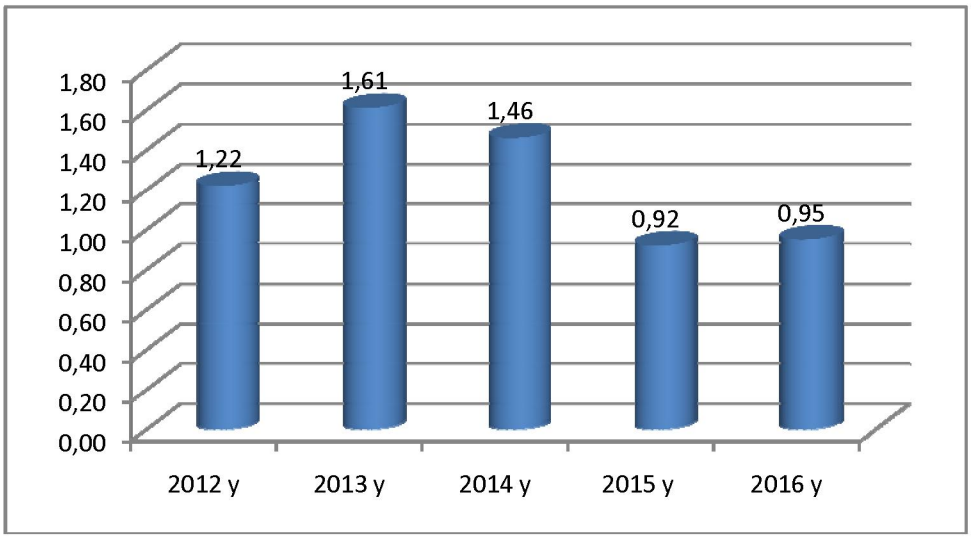

Figure 2 - Share of innovative products in GDP,%

As can be seen from the figure, the share of innovative products in GDP in the last two years of the analyzed period slightly decreased to 0.92% in 2015 and 0.95% in 2016.

The following figure shows the dynamics of internal costs for research and development (Figure 3).

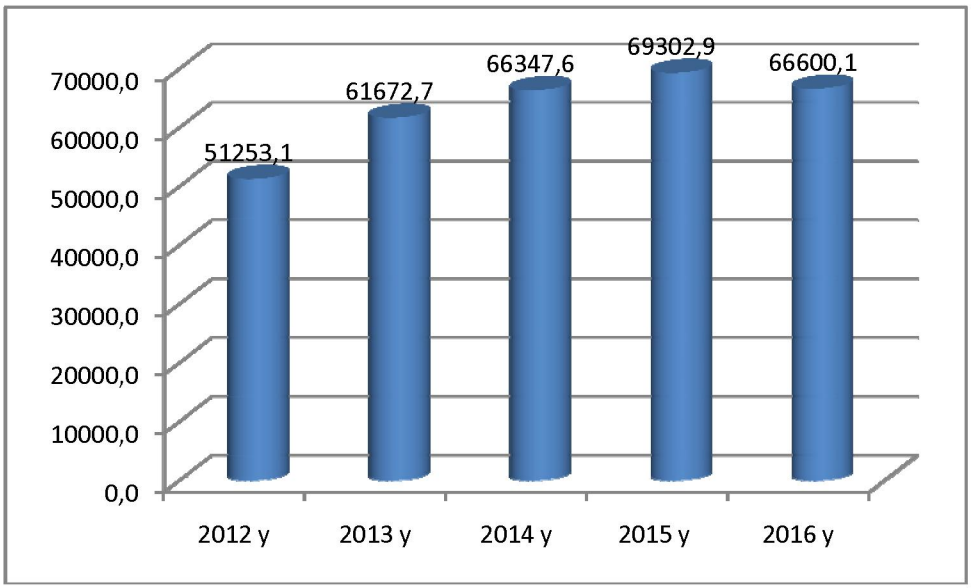

Figure 3 - Dynamics of internal costs for research and development, shown in million tenge.

Domestic spending on research and development in 2012 amounted to 51.2 billion dollars. In 2015, KZT 18.0 billion tenge of 69.3 billion tenge. In 2016, domestic expenses increased by 14.8 billion compared to 2012. 2,7 billion tenge in comparison with 2015, which is 66.6 billion tenge.

The following figure shows the dynamics of technological innovation in the industry (Figure 4.)

As can be seen from the figure, the cost of technological innovation in the industry over the reporting period has significantly increased compared to previous periods. In 2012, the volume of expenditures for this indicator was 168.5 billion KZT. In 2015, 503.4 billion KZT, gradually increasing in subsequent periods. In 2016 – 1390.5 billion tenge.

The following table shows the innovation performance of manufacturing enterprises in the field of technological innovation.

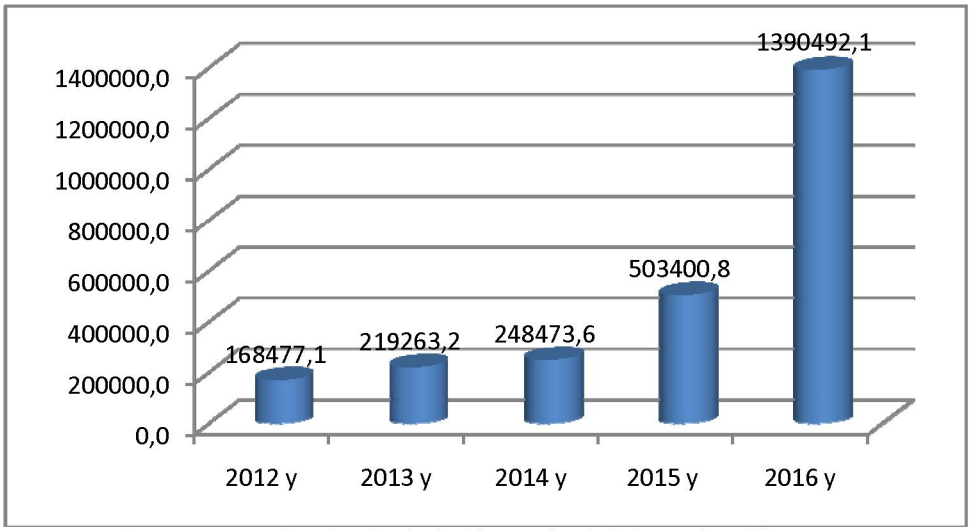

Figure 4 - Dynamics of technological innovation in industry, in million tenge.

Table 2 - Indicators of innovation activity of manufacturing enterprises on technological innovations

	Number of enterprises - total, in units	including innovations	Level of activity in innovation,%
Republic of Kazakhstan	4 367	460	10,5
Akmola oblast	189	20	10,6
Aktobe oblast	153	25	16,3
Almaty oblast	345	47	13,6
Atyrau oblast	80	10	12,5
West Kazakhstan oblast	116	13	11,2
Zhambyl oblast	138	16	11,6
Karaganda oblast	434	24	5,5
Kostanay oblast	218	24	11,0
Kyzylorda oblast	71	7	9,9
Mangystau oblast	104	5	4,8
North Kazakhstan oblast	375	49	13,1
Pavlodar oblast	262	23	8,8
South Kazakhstan oblast	129	23	17,8
East Kazakhstan oblast	359	59	16,4
Astana city	350	26	7,4
Almaty city	1 044	89	8,5
Footnote– based on data [4]			

If we analyze the data of the table, we will see that in the reporting period 10.5% or 460 companies from 4 367 enterprises are innovative. Almaty (89), East Kazakhstan (59), South Kazakhstan (49) and Almaty oblast (47), occupies leading positions.

According to the results of recent analyzes, the share of innovative products in GDP in recent years has decreased, and the level of innovative active enterprises is growing. This, of course, demonstrates the country's potential for innovative development.

In this regard, innovation development is important in the context of the country's economic development. One of the priorities of the innovation policy is the cluster principle. At the moment, it is important to consider the economy as a cluster rather than a traditional classification of companies in sectors or sectors.

Clusters are the agglomeration of the managing and controlling agencies in real economic space, research institutions, services and goods [5].

In the economy, the cluster concept includes a group of businesses and research centers, universities, and other organizations that have a regional affiliation with a particular industry. Also, businesses and

organizations owned by a particular cluster are in close contact. Thus, in general, clusters represent partnerships between companies and organizations in which they are interconnected, in a vertical (buyer-seller) and horizontal (technologies, services, knowledge) communications [6].

In the economic science, the term "cluster" is widely recognized by the work of Michael Porter, the author of the theory of competitiveness of Harvard University professor.

The cluster system of economic development is successfully developing in the following countries: Denmark, Germany, Great Britain, Japan, France, USA, Malaysia, Singapore, Ireland, Morocco and others.

According to Michael Porter, "Competitiveness is a productive one. Ability to produce high quality products. However, as no state can be productive in all spheres, it is necessary to find areas that are the strong points of the country. That is, find the industry where you can create a cluster. However, one cluster can not be considered as important than the other. Choosing the potential clusters is important. "

Close partnerships between cluster companies can be reflected in the exchange of resources, information and technology, and joint issues. This is primarily due to the fact that companies are encouraged to increase their productivity and improve product quality. As a result, they attract more customers and increase profits. World practice shows that cluster companies are successfully operating more than businesses that are truly isolated [7].

Clusters can be created by state-owned companies without the intervention of the cluster, or by government support. At the same time, the clusters are owned by the government, with the participation of or participation in government involvement. Government agencies are involved as business partners.

The following can be the pushed power to create clusters:

- Access to natural resources;
- access to qualified workforce;
- proximity to markets;
- availability of necessary infrastructure and supporting industries (suppliers);
- proximity to research centers.

State authorities, in turn, can encourage the creation of clusters by means of the following state measures [8]:

- creation of favorable conditions for general development of industry;
- creation of necessary infrastructure;
- development of research and development work;
- creating conditions for the development of information exchange;
- elimination of administrative barriers;
- to encourage the creation of clusters through financial and economic methods.

Cluster development is important. In our region, there are several possible ways to create and develop clusters. Among them are fish cluster, rice cluster, oil and gas cluster, construction cluster and tourism cluster. Cluster clusters are key areas for our region.

When creating a fishery cluster you can add the following components [9]:

- irrigation of lake systems;
- expansion of fishery places;
- protection and proper use of fish stocks;
- industrial fishery;
- production of glass boats;
- processing of fish products;
- network of finished products;
- development of scientific potential;
- Training of personnel.

Kyzylorda region is the main producer of rice in our country. The development of the rice cluster may include:

- machine-technological station, agricultural credit associations, subsidies;
- training of personnel;
- development of scientific potential;
- manufacturers of elite cereals;

- producers of rice products;
- rice processing industry;
- processing of basic waste;
- Network for the production of products [10].

The construction industry is dynamically developing due to the increase in the volume of housing construction in the private sector and the possible increase in loans for housing construction. In this regard, it is proposed to create a construction cluster in our region. For this purpose in the region there is a sufficient material and material base for the development of housing, natural resources (construction, glass sand, limestone, dolomite, etc.).

In addition, it is possible to propose creating a cluster of tourism in our region. In the creation of a tourism cluster in the region we can focus on the following preconditions:

- Rich and unique culture of the population;
- the location of historical objects of architecture and culture in our region;
- activity of the joint foreign companies in our region;
- Interstate relations and cultural exchange between countries.

There are a lot of historical monuments, cultural and historic buildings in the region that are of interest to tourists. The region has high natural potential, hunting and fishing. Baikonur cosmodrome, Kambash lake located in Kazaly district, memorial complex "Korkyt Ata" located in Karmakshy district, "Barsa zhere" nature reserve located in Aral district, Karatau slopes in Zhanakorgan region, and sanatorium healing with healing properties - all these are the tourist attributes of Kyzylorda region it's getting worse.

In conclusion, it can be said that the priorities of the creation and development of clusters in the above-mentioned Kyzylorda region are a positive change in the socio-economic development of our region.

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ИННОВАЦИЯЛЫҚ ДАМУДЫҢ КЛАСТЕРЛІК БАҒЫТЫ ЖӘНЕ ҚЫЗЫЛОРДА ОБЛЫСЫНДА ДАМЫТУДЫҢ БАСЫМДЫЛЫҚТАРЫ

Аннотация. Мақалада Қазақстан экономикасын дамыту тұрғысында инновациялық дамудың басымды бағыттары анықталып, инновациялық қызмет дамуының ағымдағы жағдайына талдау жасалған, сондай-ақ аймақты инновациялық дамытудың кластерлік бағытына толығырақ тоқталған. Кластерлер – нақты

экономикалық кеңістіктегі басқару агенттіктерінің, ғылыми – зерттеу мекемелерінің, қызметтер мен тауарларды жеткізуші және өндіруші компаниялардың агломерациясы. Кластерлер өзара тігінен және көлденең байланыстармен байланысқан, белгілі бір орында шоғырланған компаниялар мен ұйымдардың серіктестігін білдіреді. «Кластер» термині экономикалық әдебиеттерде ең үлкен танымалдығын Гарвард университетінің профессоры, бәсекегеқабілеттілік теориясының авторы Майкл Портердің еңбектерінің негізінде алды. Сондай-ақ кластерлер сәтті жұмыс жасап отырған елдер нақты аталып, кластерлерді құру себептері көрсетілген. Авторлар тарапынан Қызылорда облысында кластерлерді құру және дамытудың негізгі бағыттары келтірілген. Олардың қатарында балық кластерін, күріш кластерін, мұнайгаз кластерін, құрылыс кластерін және туризм кластерін айтуға болады. Кластерлер құру тұрғысында аталмыш кластерлер біздің аймағымыз үшін басымды салалар болып есептеледі.

Түйін сөздер: инновация, ноу-хау, кластер, бәсекегеқабілеттілік

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КЛАСТЕРНОЕ НАПРАВЛЕНИЕ ИННОВАЦИОННОГО РАЗВИТИЯ И ПРИОРИТЕТЫ РАЗВИТИЯ В КЫЗЫЛОРДИНСКОЙ ОБЛАСТИ

Аннотация. В статье определены основные направления инновационного развития экономики, проанализировано текущее состояние развития инновационной деятельности, также изучено кластерное направление инновационного развития региона. Кластеры - это агломерация управленческих агентств, научно-исследовательских учреждений, поставщиков товаров и услуг и компаний производителей на экономическом пространстве. Также кластеры это объединение компаний и организаций, которые взаимосвязаны между собой вертикально и горизонтально. Наибольшую популярность термин «кластер» в экономической науке получил благодаря трудам автора теории конкурентоспособности профессора Гарвардского университета Майкла Портера. Также были отмечены страны где кластеры уже успешно работают и причины создания кластера. Автором приведены основные направления создания и развития кластера в Кызылординской области. В их числе можно назвать такие кластеры, как рыбный кластер, рисовый кластер, нефтегазовый кластер, строительный кластер и кластер туризма.Эти сферы являются наиболее приоритетными для нашего региона.

Ключевые слова: инновация, ноу-хау, кластер, конкурентоспособность

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