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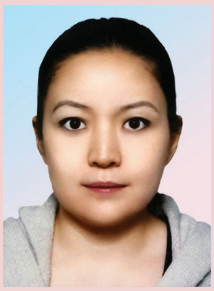
Differentiated organizational and economic mechanisms of industrial-innovation development of the regions of Kazakhstan



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Abstract. Kazakhstan is characterized by significant interregional differences in the provision with natural resources and economic capacity; this feature is reflected in the level of economic development, provision with social infrastructure, and investment opportunities. Specifics of spatial development in Kazakhstan, different potential of its individual territories, differences in the structure and specialization of economic entities, ambiguity in the severity and depth of the crisis processes in the years of market reforms, the pace and forms of their implementation put the regions of our country in unequal conditions that aggravated their differentiation. That is why the Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev to the People of Kazakhstan "The Strategy "Kazakhstan 2050": New Political Course of the Established State" sets out a very timely task of aligning the socio-economic conditions in the regions and forming new effective mechanisms of its implementation. In order to solve this problem under the conditions of economic growth, it is appropriate to implement a new approach to regional policy, which involves the alignment of the level of economic development in the regions, and also provides people's welfare throughout the country. This important shift in regional policy corresponds to the objectives of transition from resource-based development to industrial innovation development.

In this respect, special importance is attached to the comprehensive assessment of innovation processes and resources of the region for the purpose of their more efficient use and distribution in the interests of industrial-innovation modernization of territorial economy. The article proposes to use a differentiated approach when choosing effective organizational and economic mechanisms for territorial modernization. In particular, the author proposes to use the following components: legal, organizational, economic and

financial, research and informational. A new approach has been developed, which helps identify the main strategic directions of industrial-innovation development in the regions and choose the optimal mechanisms for implementation of these directions. The author proposes a model of "industrial-innovation modernization of the region" based on the rating values of the grouping indicators from "A" to "D" as a foundation for the elaboration of strategic directions of development of the territory.

Key words: modernization, innovation development, industrialization, region, Kazakhstan.

The early 21st century is characterized by a change in the regional policy and regional governance paradigm, search for the ways to improve efficiency of territorial development management and for new methods and mechanisms of dynamic development of territories. Currently, the economy of any region is influenced by new socio-economic and technological trends. Thus, in the context of globalization and increased competition sustainable development in the regions depends to a great extent on the use of specific internal factors that promote modernization and active involvement in the implementation of various innovations.

The regional aspect is quite strongly pronounced in many socio-economic processes in Kazakhstan with its large territory, diversity and heterogeneity of natural, geographic and economic conditions. Industrial modernization is no exception in this respect. On the one hand, industrialization opens up new opportunities for changes in production levels, for improvement of the regions' specialization, and for the use of natural resources as an important factor in the development of many areas [1]. New technology, being one of the main directions of industrialization, especially resource- and labor-saving, waste-free, and low water-consuming technology, advanced engineering tools help mitigate the influence of traditional factors in the location of economic activity.

On the other hand, undoubtedly, an impact on the pace and extent of industrialization is exerted by the set of regional factors such as the degree of technological development of the region's economy, provision with research facilities; provision with personnel, availability and characteristics of fuel, energy, mineral, land, water and recreational resources, and environmental constraints.

Thus, the President of the Republic of Kazakhstan Nursultan Nazarbayev in his Address to the People of Kazakhstan "The Kazakhstan Way – 2050": Common Goal, Common Interests, Common Future" from January 17, 2014, set out the task to **"adjust and strengthen innovation industrialization trend"** [2]. In this connection a special importance is attached to the development of effective organizational and economic mechanisms for industrial-innovation modernization of economy in the regions of Kazakhstan.

Modernization of the Kazakhstan economy requires solving a number of fundamental issues to provide industrial-innovation development of the national economic system. It is necessary to overcome the raw-materials orientation of the

economy, rejection of innovations by the real sector and consistent simplification of technological chains. It is also necessary to create institutions and tools to stimulate new knowledge implemented in the technologies and equipment based on it, and not only to provide them with financial resources, but also to create conditions for subsequent commercialization in Kazakhstan and abroad.

Therefore, the solution of industrial-innovation tasks is possible only with the use of a sound and conceptually substantiated regional policy.

Industrialization in Kazakhstan should be based on the target transition to modernization of economy in the regions, taking into account national specifics. If the regional factor in the implementation of industrial modernization is underestimated, then the disparities in the development of the Kazakhstan regions can be aggravated. This is evident from our past experience of industrialization in the framework of the "Soviet project". Soviet industrialization helped create a significant economic potential in many regions of Kazakhstan. But since it was carried out under the domination of the all-Union division of labor, the main regions of Kazakhstan became connected economically more to their adjacent territories of other Union republics than to each other: Northern Kazakhstan was integrated with the Urals and Siberia, Western Kazakhstan– with the Volga region and the Urals, Eastern Kazakhstan – with the Altai and Siberia, Southern Kazakhstan – with Central Asia. This caused a significant differentiation in the level of socio-economic development of the regions and made it difficult to integrate the national economy as a single complex at the stage of independent development.

Regional development of Kazakhstan should be considered the most important factor in its industrial modernization. Hence the necessity to solve problems of territorial development issues in their relation with industrialization objectives. For example, industrialization tasks require the concentration of resources in key regions promoting industrial development in the country, and the strategic priorities of territorial development make it necessary to support the regions that lag behind in their development. It necessitates the search for a balance between industrial and regional policy measures.

World experience shows that the catching-up development (currently observed in Kazakhstan) is not consistent with a uniform development of the whole territory. In the process of economic modernization in the catching-up countries industrial growth becomes focal, which results in the growth of regional differences in the level of development. The poles of growth under the conditions of catching-up industrialization emerge on the basis of regional advantages such as favorable geographic location, availability of natural resources, infrastructure and qualified human capital. The type of advantages determines the emergence of different types of growth poles. First of all, these are big cities, in which the most technologically advanced enterprises are located. It is the regions with developed potential in

the manufacturing sector, particularly in industries with high- and medium-high levels of technological development. These may be the regions with a favorable geographic and economic position: costal regions that have lower costs for transportation of export products, and cross-border regions, where free economic zones are often established; and regions with intensive development of resources.

First, we note that the **organizational-economic mechanism** is understood as a "combination of certain parts and elements that bring the system (mechanism) into action [3, p. 366]. Thus, industrial-innovation modernization should be implemented through a variety of organizational and economic mechanisms aimed not only at reduction of territorial disparities, but also at the promotion of people's well-being throughout the country. It is becoming a developing policy, i.e. it is focused on the development of promising economic structures, startup of new activities, modernization and formation of modern industrial-innovation infrastructures.

At the same time, regional policy in the field of industrial-and-innovation development requires, first of all, choosing such mechanisms and tools which, by using state support, should provide active investment and innovation, growth of production of competitive products, profitability of enterprises, and social protection of population [4], thereby establishing basic conditions for industrial-and-innovation modernization in the region.

We noted earlier in our research that the regions of Kazakhstan differ significantly according to the main socio-economic and innovative-technological parameters [5]. This differentiation does not only indicate the socio-economic heterogeneity of territories in Kazakhstan, but also causes a certain tension of industrial and innovative nature. The higher the country's regional heterogeneity, the more complicated its development, the more requirements to regional policy [6]. At that, large countries and many small ones with different inter-regional and inter-ethnic relations have to take this factor into account (for example, Spain, Italy, Belgium, etc.).

The growth of regional inequality has not been handled yet; economic activity is concentrated mostly in a small number of regions with special advantages: in Almaty (18.7% of the country's total GRP in 2012), the Atyrau Region (10.3%), the Karaganda Region (8.5%), Astana (9.0%), and also in the Mangystau Region in recent years. The four leading regions of Kazakhstan (the cities of Astana and Almaty, the Atyrau and Karaganda regions) account for almost half of GRP (46.5%), although the two latter show a decreasing trend in the share of total GRP [7].

Demographic resources are among the most important factors contributing to uneven development of the regions. In general, there is a continuing natural population growth in the Republic. Population growth rates are especially high in the southern regions (South Kazakhstan, Kyzylorda, the Jambyl Region), that represent the demographic reserve of the

country. At the same time, the two northern regions have stable natural population decline.

The need for fundamental changes in approaches to the formation of effective mechanisms of territorial development is linked to the influence of new factors – formation of "knowledge economy", strengthening of the role of science and science-intensive technology, information, emergence of new financial tools and methods of regulation, stock market development, expansion of transnational capital, etc.

Thus, in order to form an effective mechanism for the implementation of a new model of territorial development it is necessary to use a set of tools and methods of mobilization, accumulation, distribution and use of various resources [8]. In this regard it is advisable to use a **differentiated approach** due to the high degree of differentiation of the forms, ways and methods that ensure dynamic development in the region. This approach takes into account specific needs of the regions (investment-backed leading regions specializing in raw materials extraction; potential leaders that are industrialized and have high economic potential; developing regions specializing in agriculture and characterized by the intensification of industrial innovation activity; unstable depressed regions that have lost considerable potential for innovation, but still show signs of revival of innovation processes) for which it is elaborated, and the specifics of resources attracted (budget, loan, own funds, etc.).

The differentiated approach helps to implement the following activities:

a) to apply motivation techniques in order to improve the quality of investment, i.e., to stimulate the inflow of new high technology, knowledge, information, advanced management and marketing methods, etc.;

b) to ensure the wider use of new and advanced financial tools to regulate investment activity in the region;

c) to form adequate institutional conditions for efficient use of attracted and accumulated investment resources;

d) to improve investment processes management at the local level, to improve qualification and responsibilities of personnel engaged in investment management;

e) to identify opportunities for the development of regional economy based on the most efficient use of its resources, and to identify potential gaps and barriers in the implementation of management policy at the local level;

f) to assess the organizational and production infrastructure in the region with regard to the requirements of innovation, financial, intellectual and organizational technology sufficient to implement target regional projects and programs;

g) to create effective tools for implementing regional programs on the basis of attracting significant additional investment in regional programs and projects.

Therefore, as we noted earlier, it is advisable to apply the differentiated approach when choosing effective organizational and economic mechanisms for

territories' modernization. We propose to develop differentiated organizational-economic mechanisms, which not only set in motion the process of industrial-innovation modernization in the region, but also promote its further continuous and dynamic development.

We note that conceptual provisions of industrial-innovation modernization, regardless of the level of hierarchy of the space, should be implemented through the legal, organizational, financial, research and information components of organizational-economic mechanisms. These components can be classified according to this.

The *first component* is the institutional mechanism, which is a system of laws, documents and procedures that form the legal field of the region's development. It is the system of current legislation concerning the distribution of powers and responsibilities between the executive power and local government [4]. The system, which is represented by the Constitution of the Republic of Kazakhstan, by the laws "About local state administration and self-government in the Republic of Kazakhstan", "About taxes and other obligatory payments to the budget", "About banks and banking activity in the Republic of Kazakhstan" and other normative legal acts, regulates the solution of various economic, social and environmental issues at the regional level.

The *second component* is the organizational and structural mechanism, which is a system of interaction between institutions, organizations and services that provide the main functions of effective regional management. In addition, this mechanism includes the state strategy for regional development, development strategies for the Republic, individual cities and territories, policy documents, various forecasts and development plans.

The *third component* is the financial-economic mechanism, which is a system of financial and economic leverages that influence the organization of the different departments. This mechanism determines the possibility of financial support and promotion of the territory's development, as well as the complex ratio of market services production to their consumption. The main tool of this system in the context of this mechanism should be the development of production capacity, attraction of investments in the regional economy and efficient replenishment of the budget.

The *fourth component* is the research mechanism, i.e. the system that includes cooperation between relevant research and educational institutions and units that generate new knowledge and ideas, and that are engaged in personnel training, implementation of the strategy of the territory's dynamic development. It also provides for the most complete and efficient use of research, innovation, production and intellectual potential in the region.

The *fifth component* is the information mechanism, which includes the interaction between organizations engaged in the collection, processing and flow of information, special services and institutions that characterize the state, dynamics and performance efficiency in the implementation of the strategy for the territory's

dynamic development. The information provided should not only reflect the dynamics of economic growth and demographic trends, but also inform the authorities about the possible problem situations and the consequences of the ongoing changes. It makes possible the use of social network service, which will create an information environment that meets the needs of all sectors of society in obtaining electronic services, and will also contribute to the formation of the necessary conditions for the adoption of advanced information technologies in the region [9].

In light of the above, we conclude that effective modernization requires a new vector of industrial-innovation interaction between organizational and economic mechanisms capable of self-organization and self-improvement.

Successful development of any region depends to a great extent on the use of specific internal factors for creation of values in global markets; that is why there is no single universal strategy for all regions, because each territory has different potential and its own opportunities for implementation of industrial-innovation modernization.

Therefore, the implementation of a new model of innovation modernization in the regions should be focused not only on the appropriateness and correctness of formation and use of resources, but also on the ultimate goals of public resources management and on the quality of socio-economic development strategies developed for the regions, their performance efficiency and prospects.

Despite the fact that in different periods of economic development there were different development strategies for the regions, their purpose was to provide economic and social prosperity of the population of a certain territory [10]. As noted previously, an effective strategy for the development of regions should be selected with the use of the differentiated approach, which depends on territorial imbalances in the existing level of development and in development potential of the regions of Kazakhstan.

Therefore, we have developed a new approach that makes it possible to identify the main strategic directions of industrial-innovation development of the regions to choose optimal mechanisms for the implementation of these directions.

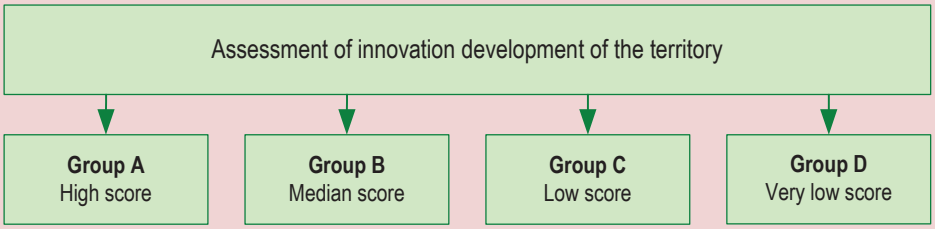
We propose a model of industrial-innovation development of the region as a basis for elaboration of strategic directions of development of the territory *(figure)*.

This model represents the dependence on the level of innovation development of the region. In accordance with this, each region is assigned a score (high, medium, low, very low), which reflects the degree of its development. After that, all the regions are divided into four groups: from group "A" (leading regions) to group "D" (outsider regions).

This model is based on two hypotheses.

First, a region with the high score according to the level of innovation development is the leader in relation to other regions. This means that the competitive position of the region is strengthening, because the commercial

Model of industrial-innovation development of the region*



* Compiled by the author.

effect of modernization and introduction of new technologies is multiplied by the number of enterprises in the region that have achieved success in their implementation and promotion in the market. As a result, the level of socio-economic development of the region is improving. That is why one of the most important elements of industrial innovation policy is the creation of conditions for the most rapid diffusion of technology within a particular specialization.

Second, under the conditions of tough competition, the regions have to choose a policy aimed to achieve high rates of innovation development and to search for funding sources. As a result, certain industries are selected, and new industries emerge; they help to determine the specialization of industrial policy in terms of comparative advantage (that differ in some regions).

The proposed model will be incorrect if it is not used in practice. Thus, the innovation processes structuring can start with an analysis of the innovation sphere and then it is possible to move on to the rating of the regions of Kazakhstan.

The rating procedure determines a linear series of objects, in which they are equally distant from each other by the combination of selected characteristics. Each of them is assigned a serial number or class corresponding to its place in the series.

The most preferred object, as a rule, is assigned the first grade "A". The regions are grouped on the basis of the ratings and absolute values of the indicators. In this case, each region belongs to a certain class of objects allocated by experts according to the combination of conditions of investment and the level of preference for the investor [11].

This ranking of the regions aims to identify their potential; the analysis will be focused mainly on identifying innovative advantages of the regions. As is known, the regions of Kazakhstan are characterized by high heterogeneity. Geographical location and natural resources have great influence on the competitiveness of the regions.

So, the innovation sphere, represented mostly by research and development (hereafter R&D), is the main driving force of economic growth at the present stage of

Table 1. Number of enterprises engaged in R&D in the regions of Kazakhstan, 2009–2013, %

Region, city	2009	2010	2011	2012	2013	2013 to 2009, %
Republic of Kazakhstan	*416*	*424*	*412*	*345*	*341*	81.97
Akmola Region	7	7	8	9	12	171.43
Aktobe Region	15	16	18	16	13	86.67
Almaty Region	7	10	8	7	10	142.86
Atyrau Region	12	12	9	9	8	66.67
East Kazakhstan Region	34	33	36	34	29	85.29
Jambyl Region	12	10	7	8	9	75.00
West Kazakhstan Region	10	10	9	15	9	90.00
Karaganda Region	29	28	29	26	23	79.31
Kostanay Region	14	15	13	14	13	92.86
Kyzylorda Region	9	14	23	7	6	66.67
Mangystau Region	6	8	8	7	7	116.67
Pavlodar Region	10	9	11	11	10	100.00
North Kazakhstan Region	5	5	3	3	3	60.00
South Kazakhstan Region	10	9	9	11	15	150.00
city of Astana	43	42	41	49	52	120.93
city of Almaty	195	196	180	119	122	62.56

Source: calculated by the author on the basis of [12].

development. Let us refer to the statistics on the Republic of Kazakhstan in order to make a full and objective assessment of innovative potential established in 2013 and its further dynamics. *Table 1* shows the dynamics of the number of enterprises in Kazakhstan that are engaged in R&D for each region.

There is a noticeable reduction in the number of enterprises engaged in R&D (almost by 18%) in Kazakhstan on the whole for the analyzed period (2009–2013). Reduction in organizational structures engaged in R&D means that an important link between production and science has been lost, as well as the shortest way to implement research results into production.

Moreover, during this period the largest decline in the number of organizations involved in R&D is observed in the North-Kazakhstan Region (60%) and Almaty (62.56%). There are *objective reasons* for such a significant reduction in the number of scientific enterprises: the financial situation of many industrial enterprises does not allow them to support scientific research and design developments, although their importance for maintaining the competitiveness of the production is unquestionable.

However, some regions of Kazakhstan for the period under review demonstrate a high level of scientific potential due to the increase in the number of enterprises engaged in R&D. In particular, the increase in the number of such enterprises amounted

to 171.43% in the Akmola Region, to 150% in South Kazakhstan, to 142.86% in Almaty, and to 120.93%. in Astana. The number of scientific organizations in the city of Astana has increased due to preparations for the forthcoming international exhibition "Astana EXPO-2017".

The rating is based on the set of parameters that define the level of innovation development of the regions and that are monitored by the state statistics (Statistics Agency for the Republic of Kazakhstan), and the mathematical tools were also elaborated in order to obtain aggregate ranking scores. The criteria of innovative development of the territory taken into account in the ranking are divided into two groups: factors that describe the level of susceptibility to innovation in the region, and the parameters of innovation activity in the region.

Taking into account many methods of initial data processing and the transition from the set of values of the primary indicators to the aggregate estimates, we propose to use the rating scale of innovation development of the regions at the stage of structuring the methods of analysis *(tab. 2)*.

The rating shows that in 2012 none of the regions of Kazakhstan was able to get into zone "A". The regions with rating class "B" are characterized by low economic efficiency of expenditure on R&D: the share of produced innovation products is several times smaller than the share of domestic expenditures on research and development in their total amount.

We should pay special attention to the group of regions of class "C", because it comprises most of the regions of Kazakhstan,

Table 2. Final indexes of regional innovation development in the regions of Kazakhstan for 2012

Region, city	Assessment	Score	Class
city of Almaty	Above medium	60.10	B
city of Astana	Medium	55.22	B
Atyrau Region	Medium	40.08	B
Pavlodar Region	Low	35.61	C
Mangystau Region	Low	35.25	C
East Kazakhstan Region	Low	33.22	C
Karaganda Region	Low	28.14	C
Aktobe Region	Low	26.79	C
Jambyl Region	Low	24.31	C
Kostanay Region	Low	22.91	C
North Kazakhstan Region	Low	22.87	C
West Kazakhstan Region	Low	22.06	C
South Kazakhstan Region	Low	21.43	C
Kyzylorda Region	Low	21.16	C
Akmola Region	Very low	18.90	D
Almaty Region	Very low	18.51	D

Source: calculated by the author on the basis of [12].

which, in turn, proves the low level of innovation development in the Republic.

There is a clear pattern, which is manifested in the fact that the central and eastern areas of Kazakhstan are the most industrialized regions, because they have a large number of large enterprises of heavy industry, in particular, coal industry, ferrous and nonferrous metallurgy.

In addition, these regions have a more developed electric power infrastructure. As for the regions of the southern zone, they have a relatively low level of innovation development due to the smaller number of large industrial enterprises and a weak resource base.

In general, the cities of Almaty (60.10) and Astana (55.22) are the most competitive regions in terms of innovation development. Other regions of the group specialize mainly in agriculture, mining and manufacturing industries. Akmola (18.90) and Almaty (18.51) regions are outsiders in the rating according to statistical indicators.

Thus, the city of Almaty confirms its status as leader in terms of innovation development. The city has the most powerful innovative, labor, consumer, transport and infrastructure potential, and it is the financial capital of Kazakhstan. However, it should be pointed out that an excellent financial performance of Almaty is largely based on the fact that the central offices of major companies are located there.

In this regard, we note that science and technology, the elements which form the innovation system and define the characteristics of modernization, are distri-buted unevenly throughout the regions of Kazakhstan [13]. The region's innovativeness is its ability to self-upgrade, to adapt to changes and to generate products of scientific and technological progress [14].

Practice shows that modernization is going on faster in the regions that have better conditions for the "diffusion of innovations": more population of higher quality, more developed infrastructure and short economic distances, lower institutional barriers [15].

Space is very inertial, that is why the choice of directions that promote industrial-and-innovation modernization for Kazakhstan is limited to a fairly narrow range of opportunities, especially given the worsening world economic situation and the growth of problems in the economy.

After arranging the regions by level of innovation development, we can conclude that *there are external barriers to the innovation development of the regions; we can highlight the following ones:*

– absence of technology transfer;

– prevalence of traditional and outdated technology;

– high cost of innovation implementation;

– shortage of investment and lack of interest of large corporations in the implementation of innovation.

The main *internal barriers to innovation development of the regions are as follows:*

– lack of financial resources of enterprises;

– low innovation potential of enterprises;

– lack of information on new technology;

– lack of qualified personnel.

All of the above can help to choose an appropriate strategy of industrial-innovation development for any region, depending on its affiliation to any of the following three groups.

Regions of group B – this group comprises regions with considerable innovation potential. That is why it is necessary to elaborate and search for new models of construction and development of the future generation regions. The establishment of new requirements to the development of regions and promotion of their competitiveness was followed by the emergence of the "Smart city" concept, which highlights the increasing role of human capital and the increasing importance of information, communication and intelligent technology in urban environment. The "Smart city" concept brings together various driving forces of regional development in a single mechanism, the main objective of which is to maintain leadership and provide further dynamic development.

Such cities should conduct continuous monitoring of the most important infrastructure objects (roads, bridges, tunnels, railways, subways, airports, seaports, communication systems, power grids) and even some strategic buildings in order to optimize the allocation of resources and security. Consequently, "smart cities" constantly increase the number of services available to the public and enhance their quality, providing a stable environment that promotes well-being and improve people's lives. The infrastructure of information, communication and intelligent technology is the foundation of these services.

At present, many countries are creating "smart cities". But we should not forget that the development and dissemination of technology, and the progress in the construction of "smart cities" are still relatively modest. The main problem lies in the limited capacity of local governments. The majority of municipal authorities do not have sufficient resources or power to implement full-scale information, communication and intelligent projects. For example, municipal authorities in France, Spain and the USA have the right to shape their policies within their geographic boundaries. And in the UK the authorities have virtually no opportunity to influence urban planning directly [16].

Kazakhstan is also involved in world trend of regional development – the concept of "Smart city". Currently, the city of Astana is implementing the concept of the project "Smart Astana" [17]; it aims to promote innovation in the city and to ensure the high quality of life through the use of the latest economical and environmentally friendly technology in urban infrastructure and utilities. It is necessary to point out that the project "Smart Astana" is based on the development model of European "smart cities", based on the interaction of six characteristics:

- Smart Governance;
- Smart Economy;
- Smart Mobility;
- Smart Environment;
- Smart People;
- Smart Living.

The main goal of the project "Smart Astana" is to establish and develop innovation and socio-economic environment for promoting intensive development of innovation and technological entrepreneurship in the future innovation city "Smart Astana". The concept envisages that the project "Smart Astana" will become a laboratory and an experimental platform for developing and testing new technologies that can then be replicated and implemented in other regions of Kazakhstan and abroad.

In general, the concept of "Smart city" will help to create favorable conditions for the development of regional innovation business. Therefore, it is possible to regulate industrial innovation process by using the latest management technology that improves the overall quality of life, and also by forming a creative environment that promotes free and intensive scientific research in the region. In particular, in connection to the formation of regional infrastructure of the "smart city" it is planned to use non-volatile and energy-saving technology, environmentally friendly technology that reduce the amount of harmful emissions, resource-saving technology, computer technology for centralized management and systems for automated control and regulation of traffic.

Thus, modernization in the regions is possible through the development of innovative business by using the concept of "Smart city", since one of the most important trends in innovation industries consists in the development of large cities not by extending the center, but by using satellite towns – an integrated solution for new, self-sufficient urban constructions with their centers of gravity and with their own economy. "Smart cities" in innovation and socio-economic aspects are oriented toward the future. Thus, these projects will be unified by a *synergistic approach focused on creating the infrastructure that has a high potential for sustainable long-term development and creation of comfortable living for the population*.

Regions of group C – these regions are characterized by low rates of innovation development. However, such regions can, in fact, be promising for the development of innovation business in the future. The regions of this group have the following common feature: they reach a certain peak of development, after which they face shortage of labor, technological, financial and other resources. Therefore, it is necessary to determine specialization industries in these regions and substantiate the directions of effective specialization.

The region's specialization stems from territorial division of labor, it is conditioned by the territory's ability to produce (by using favorable historical, economic, natural and other conditions) certain types of products in quantities greatly exceeding local needs, with relatively low labor costs, i.e. the ability to develop such industries whose products are competitive on the external market and are mainly export-oriented.

The large scale (volume) and efficiency of production, and participation in territorial exchange (export) of products are the main characteristics and distinctive features of the branches of specialization. Specialization industries perform a decisive role not only in production and export, but

also in their impact on the allocation of productive forces (region-forming function of the industry), because these industries in single-industry towns are like nucleus that attracts auxiliary services and other supporting productions.

Therefore, the definition of sectoral specialization of the regions makes it possible to concentrate effort and resources on such activities that produce the greatest benefits. This involves the creation of new sites for development of innovative business, which, on the basis of legal acts, will give the local authorities an opportunity to implement a set of measures to promote entrepreneurship: tax incentives, provision of land for new construction, the lease of old premises for reconstruction on favorable terms, etc. These measures will help to create new jobs, to transfer capital to depressed regions, to optimize the costs of various resources in such a way as to provide the desired rate of development of the types of activity and introduction of new technology, which give the greatest yield.

But the main point is that regional policy aimed to identify regional specialization is *the policy of encouraging innovation and interaction, and not just the planned allocation of industries (e.g., petrochemical, metallurgical, textile, etc.) and enterprises, the development of which will be supported by the state*. Thus, one should not forget that it has nothing to do with the "construction" of structural technological chains, as in the creation of territorial-industrial complexes in the planned economy.

In this regard, the implementation of regional policy should promote industrial-innovative modernization and business competitiveness through the implementation of effective interaction in the region, including increased access to innovation, technology, specialized services and highly qualified personnel; it should also help to reduce transaction costs that create preconditions for the implementation of joint projects and for productive competition.

Regions of group D – this group of regions is in a disadvantageous position with regard to innovation. The regions in this category are in a state of lingering stagnation; they are characterized by a lack of diversity in the sectoral structure of industry, by weak innovation capacity and by an underdeveloped social sphere. In fact, the preservation of these regions is associated with significant financial investments and little chance that the situation can be improved. In fact, these regions, which have significant constraints on resources for their economic development, are greatly interested in the industrial-innovative modernization of their economy, given the importance of dynamic development in the regions of Kazakhstan due to the positive synergistic effect under geo-economic competition.

Therefore, the state may provide support to these regions by developing their industrial infrastructure, promoting the inflow of private investment, providing certain tax and loan privileges and preferences, selective subsidies for enterprises, etc. But the extent of such financial and economic support in the coming years cannot be significant due to the limited financial resources.

In general, the regions of Kazakhstan differ significantly according to the main innovation indicators. This indicates their socio-economic heterogeneity and causes a certain tension of industrial-innovation nature. Regional policy should be implemented with the use of several organizational and economic mechanisms aimed not only to reduce territorial disparities, but also to provide people's welfare throughout the country.

Thus, industrial-innovation deve-lopment as the basis for modernization of the society acts as an independent direction of regional policy, which determines their close relationship and mutual influence. The need for fundamental changes in approaches to the formation of industrial-innovation modernization mechanisms in the regions is connected with the influence of new factors – the strengthening of the role of science and science-intensive technology, information, and the emergence of new financial tools and regulation methods. At the same time there is no single universal strategy for all the regions, because each territory has different potential and its own ability to implement industrial-innovation activity.

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