

Modern Technologies of Developing and Implementing Regional Strategies of Socio-Economic Development*

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Abstract—The article studies the current conditions for developing and implementing strategies at the regional level. By the example of the strategies of the Republics of Tatarstan and Krasnodar Krai, the authors analyse the experience of applying the “AV Galaxy Model” — a new technology of strategic planning proposed by the Leontief Centre — AV Group Consortium and the proposed approach to strategy implementation at the regional level.

Keywords: *strategic planning, regional and local socio-economic development, regional strategy*

I. INTRODUCTION

In recent years, encouraged by the development and adoption of the Federal Law 172-FZ, dated June 28, 2014 “On Strategic Planning in the Russian Federation” [1], Russian regions have demonstrated an increased interest in strategic planning. It is considered one of the most effective ways of local territories development and an attempt by the authorities to implement new tools of development management in order to resolve the existing socio-economic problems in a timely manner.

Negative experience of past years and the lack of direct strategic planning experience pose a problem of selecting new technologies and approaches, both to strategy development and strategy implementation.

In this respect, the technology of regional strategic

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planning developed by B. S. Zhikharevich and implemented in the Leontief Center-AV Group Consortium, the largest Russian strategic development consulting centre, is of particular interest [2].

II. METHODOLOGICAL APPROACH OF THE "GALAXY" MODEL FOR STRATEGIC PLANNING

In the “Galaxy” technology of strategic planning (“Fig. 1”) a region is approached on two levels: the external one, reflecting the competitive position of the region as compared with other regions in seven aspects of interregional competition (markets of development factors); and the internal one, describing the structure of six basic economic complexes (with clusters and development projects) in relation with economic zones shaped around urban agglomerations [3].

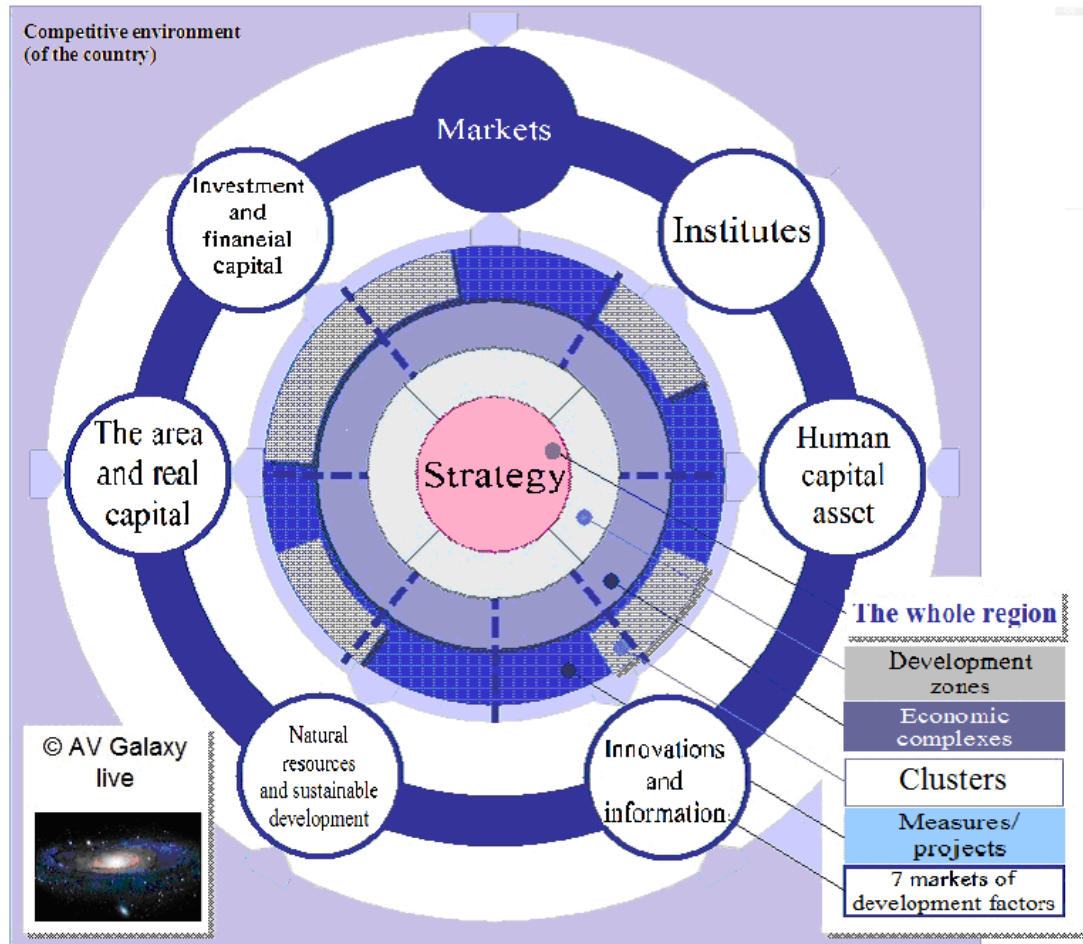


Fig. 1. The “Galaxy” model of regional strategic positioning.

The presented “Galaxy” model is a specification of a more general “AV Region Galaxy Model” methodology, purposely developed by the AV Group for the strategic planning of regional development. “AV Region Galaxy Model” is built upon the approach by the classics of the theory of inter-regional and global competition and territory development: F. Perroux [4], M. Porter [5], and J. Schumpeter [6].

According to the researchers of the Leontief Center-AV Group Consortium, there are seven areas of competition (markets of development factors), which can be applied to the region in terms of the competition for different resources (the region-enterprise fighting for competitive positions); it makes the model a convenient tool for researching regional competition (“Table I”) [3].

TABLE I. THE OBJECTIVES OF THE SEVEN AREAS OF REGIONAL COMPETITION

Areas of competition (markets of development factors)	Regional level
Markets	Competitiveness of regional fields of specialization in the corresponding markets Better conditions for promoting local products in external markets
Institutes	Quality of private, public and public-private institutions and government mechanisms Effective entrepreneurship User-friendly access to administrative resources
Human capital	Better conditions for attracting and retaining human capital High quality social services
Innovations and information/Technologies	Better innovation ecosystem High quality telecommunications infrastructure
Natural resources/Raw materials	Providing better conditions for accessing natural resources when maintaining ecological well-being
Real capital/ Fixed assets	High quality physical infrastructure, attracting people and businesses
Financial capital	Conditions for financial institutions development Better tools for attracting foreign investment Effective federal and regional investment

Meanwhile, since measuring and comparing regions' performance in the areas of inter-regional competition is often rather challenging, based on the hypothesis that enterprise performance and achievements are the result of the general conditions established in the region [3], AV-Group proposed applying enterprise (economic complexes) performance indicators.

In fact, the above-mentioned approach implies analysing a region from the perspective of its competition with other regions for limited development resources, but only the external ones. According to the model, the region providing more favourable terms (based on regional development potential) for the inflow of investments, people, and enterprises, fights off the competition.

This approach is quite new to Russian practice and requires profound research. Taking into account the fact that in recent years this approach has been widely adopted by Russian regions when developing their strategies, its scientific understanding is essential from the standpoint of assessing the prospects for its further application.

III. EXPERIENCE OF STRATEGIC PLANNING IN RUSSIAN REGIONS

In 2014, the Leontief Center-AV Group Consortium launched the development of the Strategy for the socio-economic development of the Republic of Tatarstan [7].

According to the strategy developers' view, the internal structure of the socio-economic complex of the Republic of Tatarstan described by the "Tatarstan 7 + 6 + 3" model and reflected in the corresponding statistical indicators, is as follows:

- the republic as a whole;
- three economic zones: Kazan, Kama and Almetyevsk;
- six basic economic complexes: production (petrochemical, energy complex, machine-building and manufacturing, agriculture) and service (infrastructure and services), which are divided into 17 and further up to 60 sub-complexes and industries;
- inter-industry clusters;
- measures and projects that ensure reaching economic and social goals [7].

The approach to strategy development proposed by the authors has a similar structure. It is based on the spatial approach, the essence of which lies in establishing regional economic zones, identifying development zones and studying the influence of seven areas of competition in the established regional economic zones in the context of six basic economic complexes. Consequently, the regional strategy is further developed into strategies of regional zones development and comprises their complex.

According to A. Krylovsky, the head of AV-Group, such an approach better demonstrates regional specifics and allows a thorough analysis of the problems and resources of regional development [2].

The strategy of socio-economic development of the Republic of Tatarstan establishes three economic zones:

- Kazan economic zone;
- Kama economic zone;
- Almetyevsk economic zone [7].

Accordingly, in the establishes economic zones, six basic economic complexes were identified and studied:

- oil and gas complex;
- energy complex;
- machine-building complex;
- agro-industrial complex;
- infrastructure;
- services [7].

Meanwhile, the research of the economic complexes was carried out in the context of their influence on the seven areas of competition:

- competition for markets;
- competition for financial capital;
- competition for institutions;
- competition for human capital;
- competition for information and innovation;
- competition for natural resources;
- competition for the area and real capital [7].

That means that the ability of all six complexes to compete for resources is assessed for each established zone.

It should be highlighted that developers implemented zones identification earlier and tested the approach to their establishment, description and development when carrying out the early Leontief Center research projects “Volga-Kama Metropolis” and “SMART City”. In fact, the strategy is the two projects, previously completed for Almetьевsk, but expanded for three zones [7].

Thus, a characteristic property of the “SMART City” project was the identification of new techno-economic paradigm zones. Initially, it concerned creating modern information spaces in the districts of Almetьевsk and Kazan, aimed at driving urban economy development. The “Volga-Kama Metropolis” project implied identifying and studying the resettlement and distribution systems, and specifying the main parameters for territory development in order to develop an integrated approach to managing the entire cluster. The project was distinguished by shaping development zones around large regional agglomerations: Kazan, Nizhnekamsk and Almetьевsk [7].

The described projects significantly affected the approach, which the developers selected to identify and develop the economic zones of the Republic of Tatarstan.

The details on the economic zones can be found in the section “The concept of spatial development” of the Strategy 2030 [7].

Analysing economic zones goes as follows:

- identifying zones of new techno-economic paradigms;

- designing development strategies and measures for each zone;
- designing strategies and measures for urban agglomerations.

The modern, information technology-based fifth techno-economic paradigm zones include the central business areas of the cities of Kazan (including educational organizations zones), Naberezhnye Chelny, Almetьевsk, and “Innopolis” and “SMART City” (being designed). The emerging national parks and the restoring zones of historical development are also defined as elements of the fifth techno-economic paradigm zones.

Having considered these facts, developers propose their own approach to the development of new techno-economic paradigm zones, which is outlined in the section “Goals and tasks of spatial development” of the Strategy [7].

Consequently, each zone has its own development prospects: the third techno-economic paradigm tends towards the fourth; the fourth techno-economic paradigm tends towards the fifth one, etc.

The proposed by the developers method of zone shifting is of particular concern. It implies that informatization is the stimulus to development, by analogy with the 2011 SMART City project. That means that developers design telecommunication development sites within the region and presume it will stimulate economic development [7].

Development strategies for the Kazan, Almetьевsk and Kama economic zones are presented in the section “Measures of spatial development”. Thereby, the development strategy is differentiated by three economic zones - Kazan, Kama and Almetьевsk. In the Strategy 2030, an economic zone is defined as “a part of the republic’s territory shaped within natural and administrative boundaries, which is characterised with socio-economic and spatial specificity and is relatively isolated from other zones” [7].

What is more, it should be mentioned that in the Strategy 2030, zone boundaries are similar to the boundaries of municipal entities. Each economic zone comprises urban agglomerations that form zone development centres, whereas zones themselves form agglomeration belts, which is rather controversial.

According to the developers’ view, the internal structure of the socio-economic complex of Krasnodar Krai, described by the “Galaxy” model and reflected in the corresponding statistical indicators, is as follows:

- Krasnodar Krai as a whole;
- seven economic zones;
- seven basic economic complexes: production (petrochemical, energy complex, machine-building and manufacturing, agriculture) and service (infrastructure and services), which are divided into 17 and further up to 60 sub-complexes and industries [3].

The authors propose quite a similar strategy development approach. It is grounded on the spatial approach, that presupposes establishing economic zones of the region, identifying development zones and analysing how they are influenced by seven competition areas in the context of six basic economic complexes. Accordingly, the regional strategy is virtually decomposed into development strategies of regional zones. Thus, with respect to the strategy of socio-economic development of Krasnodar Krai, the following economic zones have been identified [3]:

- I. Northern economic zone: Kushchevskiy, Krylovskiy, Pavlovskiy, Starominskiy, Leningradskiy, Kanevskoy, Scherbinovski, Yeiskiy districts;
- II. Central economic zone: Krasnoarmeyskiy, Slavyanskiy, Kalininskiy, Primorsko-Akhtarskiy, Bryukhovetskiy, Timashevskiy, Korenovskiy, Vyselkovskiy, Ust-Labinskiy, Krymskiy, Abinskiy districts, the cities of Krymsk, Slavyansk-on-Kuban, Timashevsk, Korenovsk, Ust-Labinsk;
- III. Eastern economic zone: Beloglinskiy, Novopokrovskiy, Tikhoretskiy, Kavkazskiy, Tbilisskiy, Gulkevichskiy, Novokubanskiy, Kurganinskiy, Uspenskiy districts and the city of Armavir;

- IV. The Black Sea economic zone: the cities of Anapa, Novorossiysk, Gelendzhik, and Tuapsinskiy and Temryukskiy districts;
- V. Krasnodar agglomeration;
- VI. Piedmont economic zone: Labinskiy, Otradnenskiy, Mostovskiy, Belorechenskiy and Absheronskiy districts;
- VII. Sochi agglomeration.

Correspondingly, in the described economic zones, seven basic economic complexes have been identified and further analysed from the perspective of their ability to compete for resources ("Fig. 2"):

- sanatorium-resort and tourist complex
- agro-industrial complex;
- fuel and energy complex;
- social and innovative services complex;
- trade, transport and logistics complex;
- productive industry complex;
- construction, housing and public utility complex [3].



Fig. 2. Seven economic zones of Krasnodar Krai in the Strategy 2030.

Analysing economic zones goes as follows:

- identifying zones of new techno-economic paradigms, notably predetermined by the “Galaxy” model, with the prioritized identification of new techno-economic paradigm zones, which generally discounts the possibility of detecting special local economic features;
- designing development strategies and measures for each zone, with respect to the predetermined transition to the sixth techno-economic paradigm (post-industrial economy);
- designing strategies and measures for urban agglomerations focused on the transition from industrialization to new post-industrial forms: technopolises, innovation centres, etc.

"Fig. 2" illustrates how zones are identified, the zones of new techno-economic paradigms, in particular. They are urban areas where the current level of telecommunications development allows carrying out new business projects (the SMART City concept); other economic zones are identified according to the rule of geographical distribution, however, neither the connections between these territories, nor the features of their economy are taken into account. Thereby, the industrial city of Timashevsk here falls into the agricultural zone, while agro-industrial Temryukskiy and Yeiskiy districts belong to the recreation zone [8] – such examples are numerous.

IV. THE DOWNSIDES OF THE "GALAXY" MODEL

As can be seen, the essence of the methodological approach proposed by the developers is in studying the ability of regions to compete for resources (primarily investment resources). A region itself is considered an enterprise, which produces certain resources and in its turn requires different resources (energy, finance, human resources, goods, etc.).

By the contrast with the classical understanding of a strategy as a modification program aimed at reaching the desired future with the primarily focus on the internal development resources, the “Galaxy” model is more focused on reaching a possible future with the focus on attracting external development sources. Internal sources of development (change) are also important, but have only a secondary role if compared to the external ones.

The approach by the AV Group to designing the socio-economic development strategy of the Republic of Tatarstan is definitely a new approach to strategic planning, especially in the Russian strategic planning practice.

The main distinctive feature of this approach is the “Galaxy” model [5], which implies gradual development of a regional strategy based on the analysis of competitive factors and identification of economic complexes and spatial zones of regional economic development.

Within this approach, a region is compared to an enterprise competing for external resources, whereas its ability to attract resources is considered an essential condition for surviving in the competitive environment.

However, the approach is not new; it is present in the model of seven competition factors by M. Potter [5] and J. Schumpeter [6], though it was initially developed to be applied to commercial firms. Accordingly, the main expected result in this case was profit, the ability to strengthen the presence in a certain goods and services market.

A region, however, is a more complicated economic and social system. Its “product” is not always mobile, and the key objective of regional development is in creating conditions that ensure increased life quality for this region’s residents. Therefore, the analysis of the “Galaxy” methodology leaves the question whether its action points are aimed at maintaining living standards.

As a strategy for competing on resources in itself, the “Galaxy” model concentrates on the changes that are likely to result in investments, entrepreneurs and workers influx to the region, while improving life quality of the population is a secondary concern. In fact, the developers deliberately give life quality no focus, being convinced that economic growth unavoidably leads to improved living standards.

The second controversial point of the approach is the disregard for internal development resources, their creation and application in economic activity. The “Galaxy” model is based on positioning the region from the perspective of seven aspects: products and services markets; management; human capital; innovation and information/technology; natural resources/raw materials; real capital/tangible assets; financial capital.

Meanwhile, the following goals of strategic development are proclaimed: competitive capacity of regional industries in the corresponding markets; better conditions for promoting local products to external markets; the quality of private, state and public-private institutions and managerial mechanisms; efficient entrepreneurship, etc. [5].

The commonly arising issues concern the region’s position in the global differentiation of labour, its role in the global economy, its performance in comparison with the results world’s centres of economic development.

Despite the fact that the approach is undoubtedly relevant in terms of integrating the economy of Russia and its regions into the global economy, it is not comprehensive. It is illustrated by the fact that the intent of entrepreneurs, residents and even authorities to be integrated into the global economic space is not accounted for, as well as most local issues not related to competition: medicine, educational infrastructure (i.e. the number of schools and their condition, etc.), leisure opportunities for the population, retail development and the availability of goods and services for the population, etc.

Arguably, regional interests are considered from the perspective of global economy and competition for external

resources. Internal regional interests and issues are considered only through the prism of global competition.

As the emphasis is actually shifting towards promoting the interests of large regional companies and assisting them in competing in the national and world markets, ordinary individuals and entrepreneurs seem to be underestimated. Even the authorities' interests of achieving socio-political goals are not that significant.

The concept of territorial development, based on economic zones identification is an issue of particular concern. In the approach proposed and implemented by the developers, zones are identified by urban agglomerations: Almet'yevsk, Kazan, Kama, Krasnodar, Sochi and formed by large cities that group smaller territories: towns and rural territories.

In this context, strategies for economic zones development equal the strategies for the development of agglomerations' suburbs, which, in fact, reduces possible strategic solutions and does not allow considering the potential and challenges of internal development of numerous municipal entities of the region.

Binding the strategies of remote rural areas development to the development of the neighbouring economic zones and orientation towards urban development is rather strange as well. Nevertheless, the strategies Tatarstan-2030 [7] and Kuban-2030 [3] abound in such projects as relocating production from cities to rural areas, housing programmes for citizens, rural areas as transport corridors to cities, etc.

A particular downside of the "Galaxy" model is that it practically disregards for the interests of municipal entities. Developers conduct strategic sessions with municipalities' representatives, but they are always aimed at developing regional strategies and serve municipal interest just as long as the regional development goals are concerned. Generally, the strategies do not account for the ideas, challenges and strategic development opportunities of the municipal entities. For instance, focusing on agglomeration centres (Kazan, Almetevsk, Nizhnekamsk, Krasnodar and Sochi), the wording of the strategies does not cover designing strategies for municipal entities development, even though the requirements of the Federal Law 131-FZ, "On the General Organizational Principles of Local Self-Government in the Russian Federation" dated October 6, 2003 [9] expect municipalities to carry out independent regional socio-economic policies.

Moreover, when municipal entities eventually decide on developing their own strategies, they face the restrictions defined by the regional strategy.

V. CONCLUSION

Despite these downsides, the approach proposed by the authors has a number of considerable advantages, the main of which being the region's focus on the competition for new development resources, primarily investment and human resources. The approach is mostly justified, since without

external resources influx, any region is highly likely to demonstrate low economic growth rates or even stagnate.

It is critical to integrate the region into the national economy, create attractive working conditions and favourable entrepreneurial environment, improve the conditions for cargo flows, etc. The issue of attracting investments has been developed particularly well in the "Galaxy" model: the measures of the Strategy are directly related to regional and municipal investment projects. These issues have been competently implemented in the Strategy Tatarstan-2030 and the Strategy Kuban-2030.

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