Managment Model of Administering Territories with Special Entrepreneurial Treatment

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Abstract

The article proposes a model for managing territories with a special regime of doing business (25 special economic zones, 3 free economic zones, 166 industrial parks, 73 science cities, 25 innovation-territorial clusters, 199 technology parks, 21 Far Eastern territories of priority development, 89 territories of advanced social and economic development in single-industry towns, etc.). Experiments on their creation in the modern history of the country have been implemented since the 90s of the 20th century. Modern strategic management, ignoring large-scale unforeseen events (“black swans”), puts a priority on the analysis of the causes and consequences of the most frequently occurring events and their consideration in predicting the future. But it is precisely the factors of uncertainty and chaos that change reality, translate development into a new trend. These factors and mechanisms of self-organization of economic development take into account the institutional-synergetic approach, which emphasizes phase and structural transformations in the system and creates the conditions for the manifestation of various types of synergy in phase and structural dynamics. A feature of managing special territories based on an institutional-synergetic approach is the constant monitoring of the situation using two feedback channels. Building a positive feedback system is aimed at tracking the system-forming transformations of the external and internal environment of the control object, and based on this, plan and implement proactive management decisions. In a constantly changing external environment, periodically (usually for a short time after the transition to a new development trend), it is important to stabilize the system in order to maintain new trends at a given stage of transformation. This function is performed by the negative feedback channel. The management model of territories with a special business regime with positive and feedback channels is focused on the implementation of proactive management.

Keywords: Saprobity, Gene 18S rRNA, Next-generation sequencing, Freshwater lake, Ecology

1 Introduction

Currently, there is a tendency for the actual development of the territories to be inconsistent with the adopted programs in the medium and long term. Due to the gap in the evolutionary changes in territorial development and managerial influences, strategic goals remain unattainable, and the corresponding programs lose relevance. The weakness of the classical strategic programming approaches limits their practical application. In our research opinion, the reason for the current situation lies in the fact that with such approaches, territorial development is developed without taking into account the system-forming factors that are caused by non-linearity, development disequilibrium.

Synergetics is engaged in the study of developing systems in a constantly changing external environment. In our research opinion, it is the institutional-synergetic approach that can serve as the basis for the formation of theoretical and methodological aspects of the development of a territory management system with a special regime for doing business (hereinafter referred to as a special territory).

The results of the development of special territories fully show the backwardness of strategic planning based on classical approaches.

The first attempts to create territories with a special business regime in modern Russia were made in the early 90s of the last centuries. In 1990-1992, in order to attract foreign investment and technology, the promotion of Russian goods for export, 11 free economic zones were created (hereinafter - the FEZ). The creation of pilot territories with a special management regime was controversial: on the one hand, negative experience was gained in creating free economic zones in large territories (Yantar free economic zone in the Kaliningrad region, Nakhodka free economic zone in the Primorsky Territory and others), and on the other hand, in 1996, 18 FEZ were organized in the country. Currently, the country has three free economic zones - in Magadan, Kaliningrad, since 2014 in the territories of the Republic of Crimea and the city of
federal significance Sevastopol. Since that period, the state began to develop a new type of territory with a special type of entrepreneurial activity - special economic zones. Ten years of experience in their existence have shown that they have not become an effective tool to support the national economy. The process of their creation was characterized by formalism, irresponsibility and impunity, lack of executive discipline and demand for decisions made and their consequences. The real economic effect of special economic zones has not been achieved. (1)

In general, as of mid-2019, there are 14 types of special territories in the country, including more than 600 management objects, the effectiveness of many of which is being questioned by the scientific and business community. (2)

2 Methods

The fundamental principle of the institutional-synergetic approach to management is that it breaks through randomness for which suitable conditions have been consciously or unconsciously created (relevant institutions and institutional relations). This requires a special state of an open nonlinear system - a state of instability, chaos. This state is characterized by the sensitivity of the system to small fluctuations (it is amplified through a positive feedback channel). In a state of instability, in fact, something always lies that indicates the relationship of micro- and macroscales. (3)

In the context of chaos, coherent managerial influences, like small disturbances, can radically change the functioning of territories with a special regime of doing business (a macro picture of being), the image of the desired future territory (a kind of macrostructure).

In a state of instability, chaos, the system itself and the control subsystem must be flexible. A rigid system is a system of artificial decisions and actions when the benefits are small and visible, and the side effects are potentially huge and invisible. (4)

Finding a system in a state of chaos allows you to start the mechanism of self-organizing and sustainable development:

1. To reach the desired development attractor, to form the necessary structure of the system.
2. To establish the general rate of development of the process at the micro level in a complex structure.
3. Transfer various modes of system development from one relatively stable structure to another, since chaos closes the cycles (5) of switching opposite in meaning and complementing each other modes of rise-fall.

3 Results and Discussion

From the standpoint of the institutional-synergetic approach, a flexible system of territorial management with a special regime of doing business is presented in the form of a model with channels of positive and negative communication (Figure 1). Synergetic self-organization (choosing the direction of development at the bifurcation point and transferring the system to a new trend) is carried out by forming a positive feedback loop.

![Figure 1: Management model of administrating territories based on institutional-synergetic approach](image-url)
Cybernetic self-regulation through the negative feedback channel keeps the development of a special territory within the framework of a given trend (Table 1).

Table 1: Subsystems of the special territories management model based on the institutional-synergetic approach

<table>
<thead>
<tr>
<th>Subsystem of cybernetic self-regulation</th>
<th>Subsystem of synergetic self-organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basic constants of the special territory development strategy</td>
<td>I. Benchmarking special territories</td>
</tr>
<tr>
<td>2. Quantitative measurement of the territory's potential - assessment of the current state of the territory</td>
<td>II. Qualitative measurement of potential of the territory - the definition phase of the organizational development of key resident site</td>
</tr>
<tr>
<td>2. Key performance indicators - lagging indicators</td>
<td>III. Key performance indicators - Leading indicators</td>
</tr>
<tr>
<td>3. Evaluation, monitoring, comparing of actual results with performance indicators</td>
<td>IV. Monitoring of leading indicators and the development of proactive management decisions</td>
</tr>
<tr>
<td>5. Variance analysis, including the causes of deviations, the adjustment of system parameters, performance indicators</td>
<td>V. Adjustment of the strategic directions of activities of the desired image territory.</td>
</tr>
</tbody>
</table>

Function
- Stabilization and stability of the system, plays the role of a security in times of crisis, recession, decline and other undesirable tendencies that hinder socio-economic development of the territory
- Development of the territory through the formation of the desired image of the future, the choice of strategic directions of development and ways to achieve them

Tools
- Balance method, linear programming, game theory, SWOT-analysis, PEST-analysis, expert evaluation, statistical analysis, etc.
- Foresight analysis, analysis of hierarchies, methods of forecasting the development of non-linear systems (fractal geometry, nonlinear programming, etc.)

At the same time, development institutions are constantly improving, not only coherently adapting to the constantly changing internal and external environment, but they themselves form changes that allow to bring the system to the development trajectory of the required quality at the bifurcation points. (6)

Through a system of basic constants, it is possible to formalize the spectrum of system-forming characteristics, boundaries and variants of control models and present them in the form of a dichotomy design. (7, 22, 23)

When considering the image of the future of a special territory, it is important to pay attention to the concept of “development”. In our research view, it is precisely “development” in the current realities of the Russian economy that is the key definition. A natural development process is a periodically arising choice of possible options for moving towards a given goal. Moreover, development options are often radically opposite at first glance (externally), but with a deeper look, one can notice their interconnection and interaction (in their essence) - the action of the dialectical law of development “unity and struggle of opposites”.

Often, long-term adherence to one of the possible developmental options with the complete negation of the opposite leads to distortions and a halt to moving forward. Such examples are sufficient in the surrounding world, including in social development. The presence of only state property, with complete denial of private property, led to the abandonment of socialism and the difficult transition of Russia to capitalism with a drop in the income level of the country's population and other serious losses. At the same time, China is demonstrating a socio-political system with elements of two opposing forms of ownership with high annual rates of socio-economic development.

Resolution of the dilemma (the essence of the dichotomy) allows you to focus resources on selected areas of strategic development of the territory. This approach in strategic management is used both at the level of individual enterprises, and in the development of strategic guidelines for municipalities, regions, and the country.

A special territory, like an artificially created system, consists of specific elements whose work should be aimed exclusively at achieving the main goal (parts of the system that are not involved in achieving the main goal cease to exist). On the other hand, a territory, as a system, functions in a certain environment and interacts with other systems through established connections. Enterprises that become residents of a particular territory often do not find stable ties with the regional environment and other enterprises in the region. And this gives rise to risks: changes in the target settings of counterparties (primarily representatives of sales markets); changes in physical conditions for the movement of commodity, financial and labor resources between entities; sudden and unforeseen changes in the environment of the subject. (8, 14).

The development of basic constants in the formation of the concept should be carried out with the involvement of a wide range of researchers, active representatives of the business community. The result, enshrined in legislation at the federal level, will make the government’s policy (9) more open, consistent and transparent, which is not unimportant for both existing and potential investors.

Our approach to developing a model for managing special territories is based on a dialectical understanding of the development process. Initially, the fundamental and most acute issues are formulated in the form of a dichotomy space, and then the one from two opposite positions is chosen, the negation of which led to imbalances in the socio-economic development of the country / territory.

With limited time and resource possibilities, spraying them in different directions, trying in practice various options for creating a territory with a special regime, figuratively speaking, stretching of the “fabric” of the realization of opportunities occurs, which makes it “narrower” and can lead to possible “gaps” (that is, failure to achieve goals, squandering budget funds, poor controllability of the project, etc.).

A control model based on a dichotomy system will
allow to detect and ignore information noise, save time and resources when choosing development directions.

The first element of the synergetic self-organization subsystem is “Benchmarking of Special Territories”. The study of foreign and domestic practices in the field of managing special territories will make it possible to formulate a classification of territories by development potential, which will make it possible to develop appropriate models for their functioning. At the next stage, constant benchmarking, as a tool for proactive management, will be aimed at identifying potential risks of not achieving strategic goals due to changes in the internal and external environment, which will allow timely development of coherent management decisions.

For example, the initial diagnosis of the socio-economic situation of territories that have received the status of territories of leading socio-economic development, allowed to classify these territories according to the potential for priority development. (10, 17, 19).

A qualitative measurement of the potential of the territory is proposed to be carried out on the basis of determining the phase of organizational development of a key resident of the territory on the basis of the concept of organizational development, the main provisions of which are formulated by I. Ansoff. According to his theory, the evolution of the management system for special territories (Table 2) will depend on the type of environmental uncertainty and the corresponding type of organization of the key resident. (8, 20, 21).

Table 2: The Classification of Development Organizations (I. Ansoff)

<table>
<thead>
<tr>
<th>Levels of Environmental Turbulence</th>
<th>I. Ansoff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repetitive</td>
<td>Traditional</td>
</tr>
<tr>
<td>Expanding</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>Changing</td>
<td>Marketing</td>
</tr>
<tr>
<td>Discontinuous</td>
<td>Strategical</td>
</tr>
<tr>
<td>Surprising</td>
<td>Flexible</td>
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One of the principles of a proactive manager, which is based on the principles of an institutional-synergetic approach, is the timely monitoring of gaps in the development of the system, and based on this, the adoption of proactive management decisions (Table 3). An important element of the model of managing special territories based on the institutional-synergetic approach is the power of feedbacks. The value of this parameter affects the stability of the system (Table 4).

4 Summary

The development of the territory as an open system occurs during phase transitions, jumps, catastrophes under the influence of intra-systemic transformations, in states far from equilibrium, when there is a multiplicity (not uniqueness) of stationary states. Moreover, the instability of the system is considered as a potential source of development and the basis for obtaining synergistic effects. An important element of the institutional-synergetic approach is the concept of self-organization, which is understood as self-development of the system, self-development of consciousness, self-regulation of the system in movement along a conscious trajectory. (12, 15, 18). To create the conditions for the accelerated development of a special territory, appropriate institutional support of the process is necessary, which is considered as a set of socio-economic institutions, relations and tools.

Table 3: Possible gaps in the governance model

<table>
<thead>
<tr>
<th>Break type</th>
<th>Where evident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between planning and the actual incarnation of plans in effect.</td>
<td>IV. Monitoring of leading indicators and the development of proactive management decisions</td>
</tr>
<tr>
<td>Between the planned effect of the embodiment, and the effect that is produced actually</td>
<td></td>
</tr>
<tr>
<td>Between the variety of possible alternatives and the selection of one of them, which forms the basis of socio-economic development of the territory, and under which form the necessary resources.</td>
<td>V. Adjustment of the strategic directions of activities of the desired image area</td>
</tr>
</tbody>
</table>

Table 4: Multivarience management model with two feedback channels

<table>
<thead>
<tr>
<th>N</th>
<th>Possible options</th>
<th>Diagnosis of the situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power of positive feedback over the power of negative feedback</td>
<td>The system is developed, it is in a regime with peaking.</td>
</tr>
<tr>
<td>2</td>
<td>Power of positive feedback power less a negative feedback</td>
<td>The system is conserved in the development of</td>
</tr>
<tr>
<td>3</td>
<td>Equal power</td>
<td>The system is in the bifurcation (unstable) state</td>
</tr>
</tbody>
</table>

5 Conclusions

The institutional-synergetic approach is the art of managing complex systems that harmoniously combines chaos (freedom) and order. On the basis of this approach, a system for managing special territories is proposed, which is designed to create institutions and institutional relations in which territorial development will “continuously update, benefiting from unpredictable events, shocks, stressors and variability” rather than calculating losses (13, 16). From incorrect management decisions in a constantly changing external environment. The resulting multiplicative effect of the functioning of territories with a special regime of
conducting entrepreneurial activity will enable us to transfer the country's development to a higher level in the future. At the same time, it is important not only to transfer the managed system to a new trend, but also to choose the best possible development option, that is, to obtain a synergistic effect.

Acknowledgements

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Bibliography