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# NOONOMY: A PLATFORM FOR STRATEGIC DEVELOPMENT (REGIONAL ASPECT)[1]

**Abstract:** The article focuses on the need for uniformity of methodological approaches to strategic planning of regions. Recommendations from Russian and foreign scientists regarding improving the quality of strategic planning have been compiled. A new methodology for improving the strategic region planning is proposed, aiming at increasing the efficiency and optimizing the process of managing the strategic development of territories, improving the socio-economic situation and the quality of life of the population. The key platform of the proposed methodology reflected the main approaches of the theory of noonomy, i.e., a transition towards an increase in the knowledge intensity of production and its processes, and, on the other hand, towards decrease in material/capital/energy/resource intensity, etc. The author proposed to introduce a grouping of regional strategies in three areas: a strategy with a low, medium and high "knowledge-intensive component".
**Keywords:** noonomy, region, strategy, industrial system, institutional potential, innovations, platform, knowledge-intensity, knowledge intensivityty.

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# 智慧经济学是(地区)战略发展平台

**摘要:**文章重点论述了统一地区战略规划方法的必要性。文章汇集俄罗斯和外国科学家关于提高战略规划质量的建议。文章提出了改进地区战略规划的新方法,以提高地区战略发展管理过程的效率和优化程度并改善社会经济状况和居民生活质量。文章所提出方法的主要基础是智慧经济学理论阐述的基本方法:生产的知识含量增长潜力、生产过程的知识强度提高潜力、材料/资金/能源/资源的含量降低潜力等。作者建议将地区战略按发展方向划分为三种类型:"知识成分"含量低、中、高。
**关键词:**智慧经济学、地区、战略、工业体系、制度潜力、创新、平台、知识含量、知识强度。

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## Introduction

Currently, in the context of global transformations, geopolitical turbulence and unstable global socio-economic situation, close attention is paid to the unification of methodological approaches to effective strategic planning of territories (regions, municipalities), the search for new vectors and ways of development of the country.

In their monograph Bodrunov S.D. and Glaziev S.Y. note that "the increasing level of uncertainty in the world ... has led mankind to the need to actively search for ways and means to bring stability and ensure the sustainability of progressive socio-economic development ..." [Bodrunov, Glaziev, 2023, p. 9].

At the same time, as the scientists note, for example, Kolganov A. [Kolganov, 2021, p. 266]: "there is a clear lack of scientific concepts that would give us guidelines for making ambitious strategic decisions".

A scientist Dmitriev M.E. also emphasizes that "it is necessary to develop a unified methodology for all stages of strategic planning" [Dmitriev, 2009].

In this regard, the task of improving the efficiency of strategic development of territories becomes relevant.

The author in his article "Noonomy in Monotowns: Forming Trends of a new Industrial System and Improving Institutional Capacity" considered the issue of improving the quality of strategic planning of single-industry towns [Pyankova, 2022]. This study presents methodological approaches to more effective regional strategic planning.

## Research Methodology

At present, strategic documents should be formed in accordance with structural normative documents regulating the procedure for forming strategic planning documents[1,2] as well as conceptual approaches to creating a strategy for the development of territories, developed by scientists and researchers [Animitsa et al., 2010, p. 56; Zinchuk, 2012, p. 101; Pulyaevskaya, Khristoforov, 2021, p. 70].

As stated in the monographs of V.L. Kvint: "Strategic approach to national development implies, first of all, the use of strategic ideas..." [Kvint, 2015]; "In order to develop a strategy, as a first step it is necessary to orient national development projects on a long-term perspective..." [Kvint, 2020, p. 48].

In order to improve the quality of planning, scientists recommend a number of measures, in particular: "joint participation in the development of documents of the administration, business and population" [Kosarev, Vetrov, 2010, p. 37; Ilyina, 2012]; "development of normative-legal frameworks for regulating social standards" [Malchinov, et al. 2007, p. 69][3]; "linking the systems of strategic and territorial planning among themselves and with the budget process" [Dmitriev, 2009].

The methodology of improving strategic planning of regions is introduced for your consideration, aiming at increasing the efficiency and optimizing the process of managing the strategic

[1] On Strategic Planning in the Russian Federation (as amended and supplemented) (2014). Federal Law No. 172-FZ. URL: https://base.garant.ru/70684666/.

[2] On the Fundamentals of Strategic Planning in the Russian Federation (2009). RF Presidential Decree No. 536. URL: https://crystalbook.ru/wp-content/uploads/2021/06/Указ-президента-Об-основах-стратегического-планирования-в-рф.pdf.

[3] Malchinov A.S. (Ed.) (2007) Regional Dimension of State Economic Policy in Russia. Center for Problem Analysis and Public Management Design. Moscow: Nauchniy ekspert Publ. 200 p.

development of territories, improving the socio-economic situation and the quality of life of the population.

The author believes that the key platform of the new methodology of strategic planning of regions should be the main approaches of the theory of noonomy, the founder of which is Doctor of Economics, Professor S.D. Bodrunov: the trends towards the growth of knowledge-intensity of production, the growth of knowledge intensivity of its processes, the reduction of material/capital/energy/resource intensity, etc. [Bodrunov, 2018a, p. 57; 2018b, p. 72].

I should note that the monograph authored by V.L. Kvint and S.D. Bodrunov, has already presented the unification of unique concepts of strategy and the theory of noonomy [Kvint, Bodrunov, 2023, p.152]. Sharing the authors' views, a universal methodology of strategic planning of regions is proposed.

As S.D. Bodrunov pointed out in his monograph: "For the transition to new stages of technological progress it is necessary to master more and more new knowledge and find ways of their technological application. It is the most knowledge-intensive technologies that become the most advanced" [Bodrunov, 2020, p. 65]. It should be noted that under "knowledge intensivity of material production technologies" Bodrunov S., Desai R. and Freeman A. indicate "the process that critically synthesizes the achievements of industrial and information economy…". [Bodrunov, Desai, Freeman, 2022, p. 30]. The main features of "knowledge-intensive production" are presented in Bodrunov S.D. "Noonomy" [Bodrunov, 2018b, p. 70].

In one of his reports, S.D. Bodrunov [Bodrunov, 2021, p. 58] noted the main aspects of technology progress, among which are: "transformation of knowledge into the main source, resource and result of socio-economic development" and "transit to the sixth technological mode and so on". It is these aspects of technology progress that the author has included in the proposed methodology for the development of the industrial system and improvement of the institutional potential of the region.

Conventionally, the whole process of modelling the levelling of industrial voids of regions (Fig. 1) can be divided into three stages:

- The first stage is the identification of industrial and institutional voids of the regions and their assessment;
- The second stage is the formation of the Strategy for the Development of the Industrial System and Improvement of the Region's Institutional Potential;
- The third stage is the organization of monitoring of the effectiveness of the Industrial System Strategy and Improvement of the Region's Institutional Potential.

I will focus on each stage separately:

1. One of the key indicators for assessing the development of the territory is proposed to determine the following: labour productivity of the region, investment in fixed capital, investment in staff development, knowledge intensivity of production, knowledge-intensity of production, coefficient of digital development of production, coefficient of technological development of production, coefficients of reduction of material/capital/energy intensity of production. That is, these are indicators that are key in the theory of noonomy, which is undoubtedly a platform for the formation and implementation of strategic documents.

Analyzing these indicators in cities and comparing them with the region-wide value allows us to identify the acuteness of some specific indicators. Of course, in this case, it is appropriate to introduce a criteria-based assessment scale, as well as the introduction of an integral level of indicator for the region, characterizing the policy of leveling industrial voids.

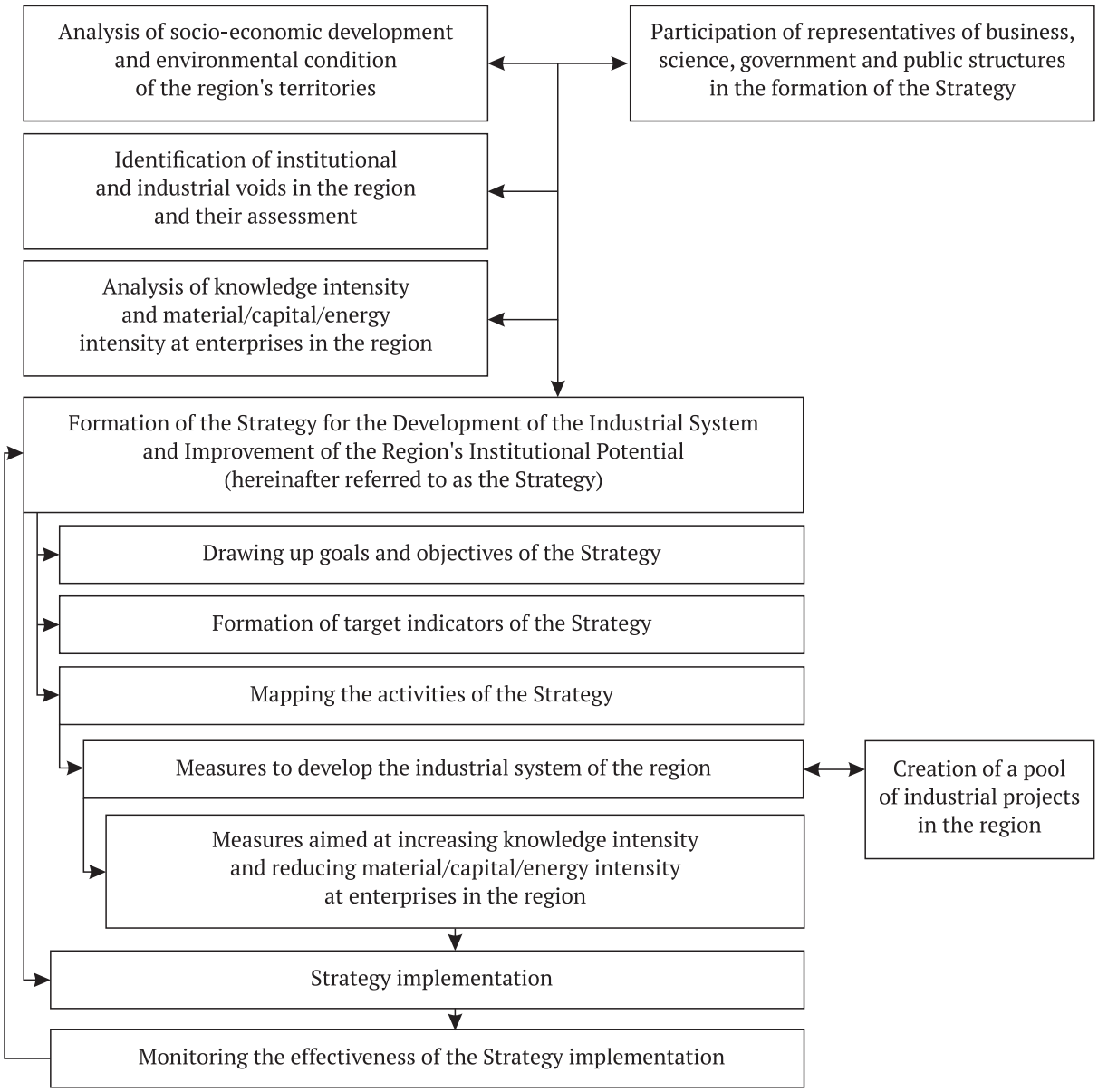


*Fig.1. Methodology of industrial system development and improvement of institutional potential of the region*

The analysis results in a cartogram of industrial renewal of the regions in the coordinates "acuteness of socio-economic problems" – "depth of industrial voids" (Fig. 2).

2. At the same time, among the important activities of the region's development it is proposed to approve two blocks of activities included in the "institutions of stabilization" and "institutions of strategic development".

The latter institute is proposed to include such innovative measures as: introduction of digital "twins" in enterprises, formation of continuous flow production cycles, establishment of robotic / automated technologies, introduction of nanotechnologies, establishment of intelligent robots and systems, introduction of virtual production assistants, development of alternative energy sources. And I emphasize the important point that it is necessary to monitor the correlation between the implemented activities and the achieved indicators.

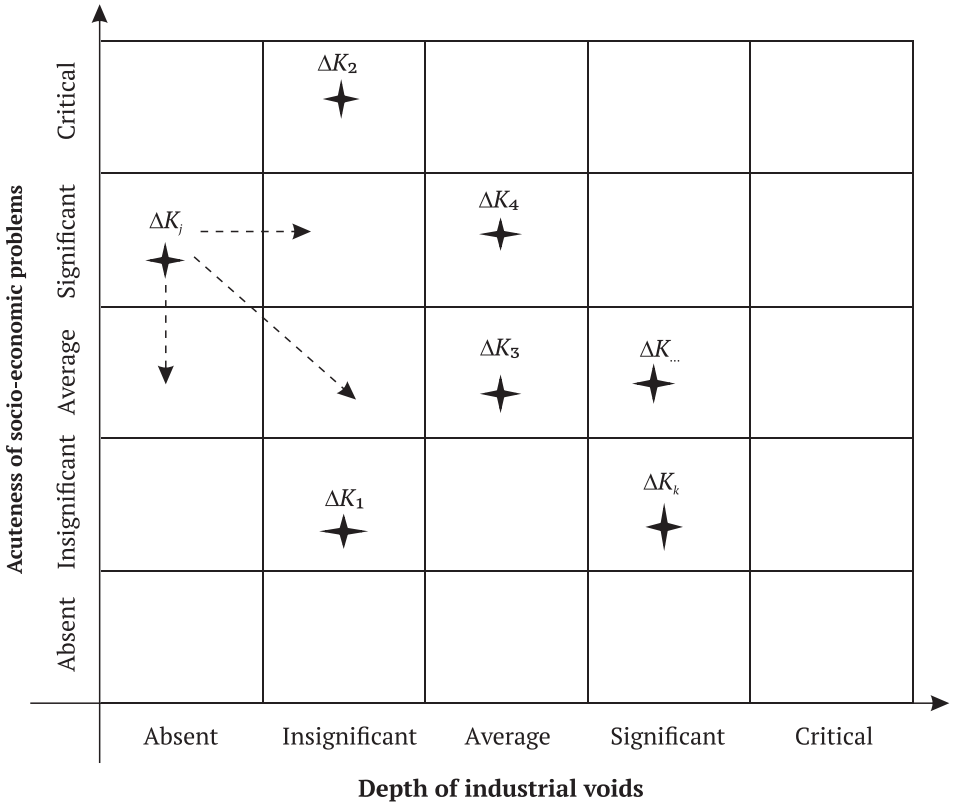


*Fig. 2. Cartogram of industrial renewal of the regions*

Nowadays, innovation is the source of more progressive development of regions: the installation of robots for recycling waste, robots controlled by signals coming from the human brain, the creation of AI scientists (AI – artificial intelligence)[1], the introduction of self-driving cars, nanorobots in medicine, the expansion of "green" technology [2], the automatic digitization of voice commands of controllers[3] – all these are already introduced technologies in the world. And, of course, the strategic documents being developed should take into account global developments. And here it is the continuous improvement of the "knowledge" of all participants of the process, who prepare strategies and participate in their implementation, that should be emphasized. On this basis, the emphasis on the acquisition of intellectual, innovative knowledge and in-depth knowledge of technological processes becomes important both for representatives of business, public authorities and scientific community. After all, today the requirements to the level of personnel knowledge are also transforming, as a particular example: must comply with the introduction of cross-industrial (inter-industry) technological processes [Akberdina, Smirnova, 2021].

The author proposed to introduce a grouping of regional strategies in three areas: a strategy with a low, medium and high “knowledge-intensive component”. The choice of strategy will depend on the development indicators of the region and its resource investment base for the

[1] 22 Technologies of the Future that Will Change the World. Science and Technology. Ferra. URL: https://www.ferra.ru/news/techlife/22-tekhnologii-budushego-kotorye-izmenyat-mir-02-02-2022.htm

[2] 10 Promising Innovations that Will Change the World.MoreThanDigital. URL: https://morethandigital.info/ru/10-pyerspyektivnikh-innovatziy-kotoriye-izmyenyat-nash-mir/

[3] TMK Implemented New Technologies in the Quality Control System. Finam. URL: https://www.finam.ru/publications/item/tmk-vnedrila-novye-tekhnologii-v-sistemu-kontrolya-kachestva-20221020-1006/

development of knowledge of employees of enterprises, state and municipal authorities and the population.

3. Further, quality control of production systems should be an important point in the strategies. In general, continuous automated quality control of the formation and implementation of strategic documents of the territories (indicators, implemented measures) is important, and it is open to the public.

In 2006, the author defended her PhD thesis on "Investment Strategy of an Industrial City-Forming Enterprise" [Pyankova, 2006]. The paper analyzed the strategic documents of 83 city-forming enterprises in the Sverdlovsk Region. It was found that over the period of 10 years of investment (from 2001 to 2015), 49.8 per cent of investment in fixed capital was attributed to iron and steel industry, 29.4 per cent to electric power, and 16.1 per cent to non-ferrous metallurgy. And if we further track the dynamics of the development indicators of city-forming enterprises from 2015 to the present, it is the enterprises that previously made significant investments in fixed capital and in improving the educational level of their employees that have more effective development, especially during the sanctions regimes and the pandemic period. In particular, on the example of the city-forming enterprise Seversky Pipe Plant, a direct correlation between the educational level of employees (employees' qualification) and the output of the enterprise was established (Fig. 3).

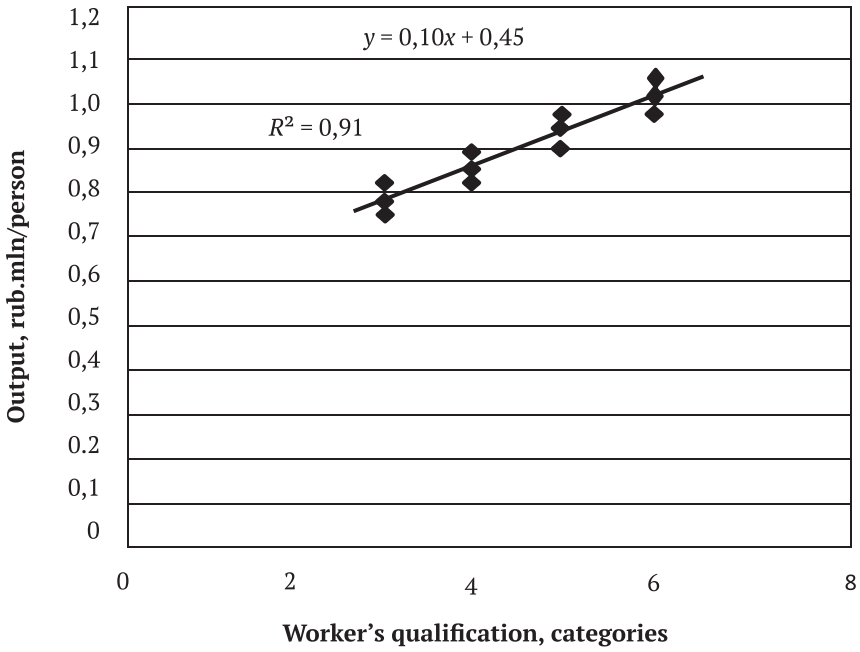


*Fig. 3. Relationship between the educational level of employees and their output*

The coefficient of determination, which characterizes the proportion of variation in the dependent variable explained by the regression equation, was 0.91. This practical case study also shows the importance of applying the theory of noonomy in the formation of strategic programs and concepts of industrial enterprises in the region.

The author also emphasizes that for more effective socio-economic development of the region it is important to apply an integrated approach to the formation and implementation of the strategy, including the consolidation of efforts of all actors of the territory (business, government, population, media and others) (Fig. 4).

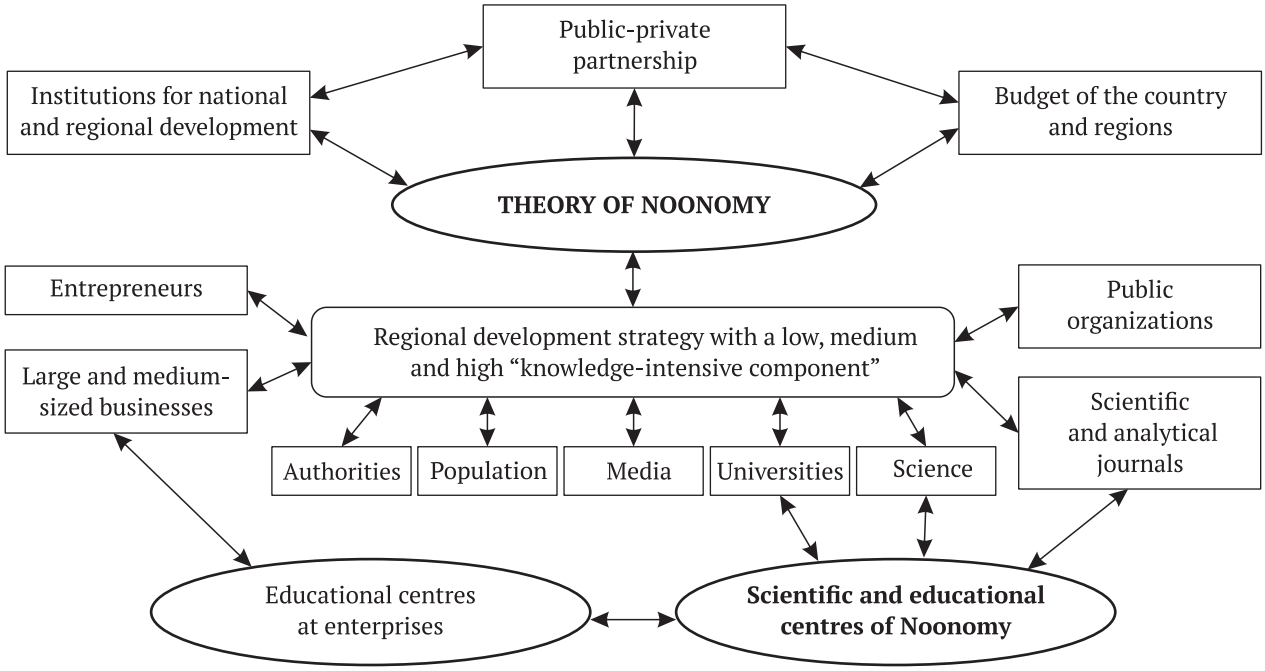


*Fig. 4. Key actors involved in the formation and implementation of the strategy of socio-economic development of the region*

In contrast to existing management approaches, the above proposed scheme takes into account such actors as entrepreneurs, media, scientific and analytical journals, universities and the scientific community.

The scheme takes into account a set of financial resources aimed at implementing the region's strategies: development institutions, the budget and funds from the business community.

The basic platform in the formation and implementation of the strategy is the theory of noonomy. The scheme takes into account the analytical, research, teaching and advisory activities of the educational centers at the enterprises of the region and scientific and educational centers of Noonomy.

These scientific-educational centers of Noonomy will be the sources of advanced training of personnel in the general theory part of Noonomy, the basic platform for research solutions for more effective socio-economic development of regions, the periphery of implementation of key parameters of the theory of Noonomy, the key to consolidation of efforts of all authors of the territory (business, government, population, media, universities, scientific community, public organizations and others), the analytical center for studying key indicators of the region (the level of knowledge-intensity of production, knowledge intensity of its processes, material/capital/energy resource intensity of production and others), the co-organizer of the key projects of the region, the consulting body of management decision making.

Also, the scheme presents an important relationship characterizing the presentation of scientific results of Noonomy research and education centers in Russian and foreign scientific and analytical journals.

The author believes that the assessment of the effectiveness of strategy implementation should be taken into account in the evaluation indicators of Governors and public authorities, included in the system of additional bonuses for regional leaders, considered at public councils, published and discussed in the media, and publicly presented to the population of the region.

Thus, the unification of unique concepts of regional strategy and the theory of Noonomy is an important, necessary step towards more effective socio-economic development of territories, improving the quality of their industrial development, improving the welfare of the population. Consolidation of the efforts of all actors in the territory will make it possible to take into account the positions of all stakeholders in order to avoid acute failures and include the necessary solutions.

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