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METHODICAL APPROACH TO DETERMINING THE STRATEGIC PRIORITIES OF REGIONAL INNOVATION POTENTIAL DEVELOPMENT

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Methodical approach to definition of strategic priorities of regional innovation potential development is examined and definite in the article. Analysis of the objectives of the regional innovation potential development using the analytic hierarchy process is conducted by the author.

Keywords: *region, strategic planning, regional innovation potential; analytic hierarchy process; development of region innovative potential.*

Introduction: Incomplete legislation for strategic planning of regional innovation development, significant bureaucratic obstacles to the development of innovative entrepreneurship, the inconsistency in the implementation of long-term national and regional strategies, due to the instability of the political situation, lack of foreign investment and venture capital is an important source of innovation potential in the developed market economies have caused the orientation of the regional innovation management on issues of medium-term and operational management [1]. Thus, up to date, the strategy of regional innovation potential development, as a comprehensive whole, hasn't built.

The strategy of regional innovation potential development should be implemented in accordance with the have formulated strategic development priorities. These goals are determined based on balancing the interests – national, regional, departmental, business, academic, public and private. Unbalancing of interests inevitably leads to the aggravation of contradictions between the entities that are capable of influencing the process of decision-making in the region. The balancing of interests is a necessary condition for the successful operation of the strategic management system in the region [2].

In Ukrainian economical literature the problem of forming regional strategy inadequately has surveyed in the aspect of expression that balance the interests and the extent of implementation its own interests in development strategy [3].

Strategic planning of regional innovation potential development should take into account the need to solve the problems faced by his subjects, by their approvals and permits. Difficulties in the developing mechanisms of long-term forecasting and planning are essential to the uncertainty of future environmental change and complexity to quantify these changes and the expected results of the regional development.

Determine and define the prospects and results of innovative changes, appears no less a challenge for the management of the region. This complexity is caused, first, the high value of the effectiveness of regional innovative development, in particular (especially those with limited natural resources), as well as Ukraine's economy as a whole because the state is imperative own innovative production.

Second, the majority of regions of Ukraine today is characterized by an imbalanced economic structure, high wear and tear of fixed assets of the local industrial complex; technological backwardness of strategic industries, low efficiency of use of available local resources potential [1].

Regional innovative potential development can serve as a perspective means of solving the regional problems. However, a necessary condition for its effective implementation should be the correct definition of the strategic priorities of regional innovative potential development.

Materials and Methods: To the region the strategy of innovative development that provides a stable rate of return, higher level of income to the regional budget and increase the level of social stability is an appropriate. Regional innovative potential development is an effective tool that allows simultaneous achieves several objectives:

- Form regional and interregional efficient production system of innovation types, providing a competitive advantage of the region over the long term;
- Strengthen internal motivation at regional (local) level to the socio-economic growth.

Considering the region as a complex economic system, it is appropriate to assume that it operates within the vector (multipurpose) criterion its effectiveness (quality). Therefore, from the perspective of system analysis, it is impossible to reduce the evaluation of a complex system to a single criterion. Because the other objectives of the system in various conditions, arising in the process of its activities, to require its unconditional highlighting. In the analysis of the regional innovative potential development are suggested to coordinate all of local policies using the analytic hierarchy process (AHP) [4].

The method of analytic hierarchy process is closed (iterative) logical construct that provides simple and well-established rules of problem solving assessment of innovation, incorporating both qualitative and quantitative factors. The essence of this method is, first, to decompose problems into simpler components, and secondly, to further processing by judgment sequence of pair wise comparisons. This quantitative method of system analysis is intended to justify the selection of optimal solutions in terms of substantial uncertainty and the presence of a large number of performance criteria to be met by a certain decision. To this end, an assessment of the significance criteria (size of their influence on the decision-making process), and is calculated to quantify the ratio of each of these weights. Using a systematic approach, the problem can be solved as a graph analysis of the properties of hierarchies allows us to formulate the concept of the AHP model (Figure 1) [5].

In our study, as the criteria is suggested to consider the direction of the regional innovative potential development, corresponding to the regional development priorities.

To substantiate strategic development priorities was chosen the method of analytic hierarchy process, because of its versatility in the analysis of complex problems and systems, ease of use. It is possible to use judgment regarding the status and prospects of the regional innovative potential development well-known scientists and experts in the field, using them as peer reviews.

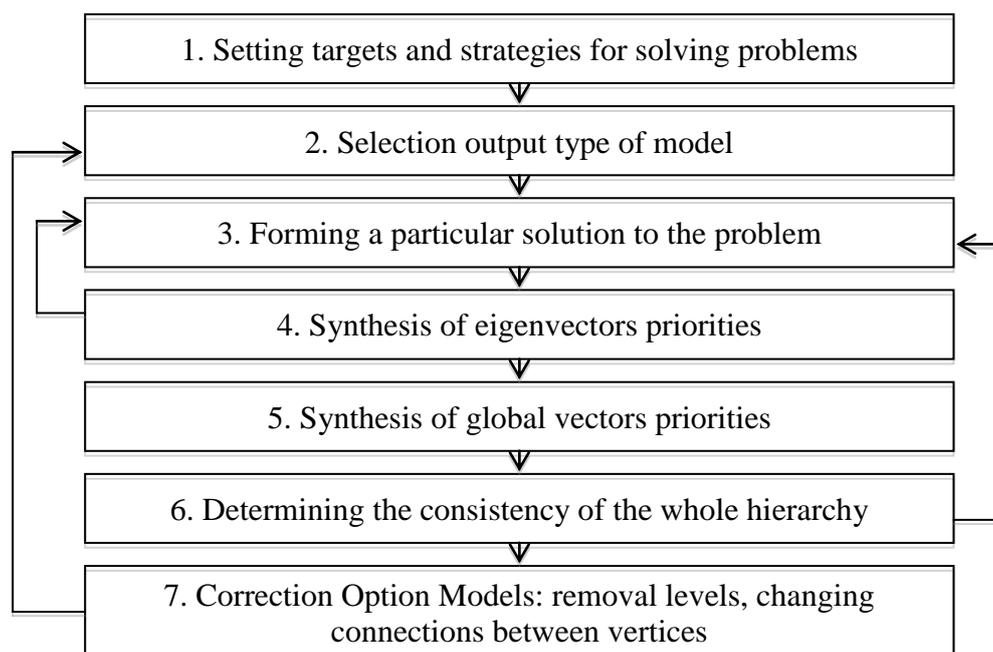


Figure 1: Structure of AHP model

The selection of the strategic objectives of the regional innovative potential development based on the analysis of authorities' publications and reports, leading experts in the field of innovation development of Ukraine.

The same problem data corresponded with the direction reflected in the National Strategy for Development "Ukraine – 2015", the Strategy for Economic and Social Development of Ukraine "By European integration" for 2004-2015, the State Regional Development Strategy for the period up to 2015, as well as strategy development regions up to 2015 [6, 7, 8]. This analysis identified the following priority tasks:

- Increasing the competitiveness of the region;
- Developing knowledge-based industries;
- Increasing GRP;
- Increasing the level of employment in the region;
- Increasing of local revenues;
- Ensuring social stability of the region;
- Implementation of environmental programs.

Thus, these goals are prioritized in the regional innovative potential development. That is innovation in the region should be directed first of all at achieving these priorities.

Comparison of strategic development priorities has been made taking into account the above criteria by using the tools of the analytic hierarchy.

Pair wise comparison of the studied strategic objectives of the regional innovative potential development based on three criteria:

- the frequency of references to these alternatives in different sources;
- degree of correspondence certain tasks innovative regional development priorities set in the National Strategy Development "Ukraine – 2015" and the State Regional Development Strategy for the period up to 2015 [6, 8];
- the value of the specified alternatives for the value of the specified alternatives for the development of innovative capacity of the region.

Results: Comparing the first of the selected alternatives "Increasing the competitiveness of the region", with other place in such objective conditions. First, this alternative is marked as a strategic priority in most scientific papers on regional innovative development.

Second, increasing competitiveness as a nation and the region in particular, is one of the objectives set out in the National Strategy for Development "Ukraine - 2015" and the State Regional Development Strategy for the period up to 2015.

Based on above conditions has been assigned to an alternative data medium importance. According to the pair "Increasing the competitiveness of the region, developing knowledge-based industries" has been set to 5, which means a significant or strong significance. This decision was based on the following assumptions.

First of all the development of knowledge-based industries is very expensive, as it requires significant investment in all stages of formation – from the renovation of fixed assets, technology base, providing highly skilled workers, ending the patenting and marketing of innovative products. Secondly, solutions for the development of either industry accepted at the state level, strategic priority are determined at the national level, and there is a realization of these priorities in the national framework at the regional level.

The third, the development of knowledge-based industries is one of the important prerequisites for improving the competitiveness of the region, but not the only one.

Thus increasing the competitiveness of the region in these economic conditions is a higher priority, but in the medium and long term measures should be taken at the regional level for the development of knowledge-based industries. Another point comparison, such as "Increasing GRP/Increasing the competitiveness of the region" has been set to 4, which is an intermediate value between the weak and the strong significance.

Also it shows that there is reliable information or data convincing arguments to show the superiority of one alternative (increasing GRP) over another (increasing the competitiveness of the region), these arguments are as follows:

1) GRP is one of the macro-economic indicators of the socio-economic development of the region and therefore the pace of economic growth, that is growth of GRP reflects the effective economic activity in the region, the development of business and the positive impact on the development of innovative;

2) the dynamic growth of the gross regional product as a consequence of vigorous activity of economic entities in the region contributes to the creation of competitive conditions that encourage companies to upgrade fixed assets, implementation of innovations and activate the potential of the region, strengthen existing and create new competitive advantages of the territorial unit;

3) Strategic analysis, intermediate and tactical challenges that are set to the government and the region allowed us to determine the problem "Increasing GRP" as a tactical problem. While "Increasing the competitiveness of the region" in most development programs is considered as a strategic task, respectively, defines this as an alternative to the difficult achievable in the short term. Thus in our view, the ratio of these strategic priorities as "Increasing GRP" and "Increasing the competitiveness of the region" relate to each other as the 4-to-1.

The next point comparison "Increasing the competitiveness of the region/Increasing the level of employment in the region" has been set to 6, which means that the prevalence of alternative "Increasing the competitiveness of the region" over the alternative "Increasing the level of employment in the region" at a level between the significant advantage of the importance and considerable advantage of the importance.

Arguments that guided the authors to determine the relation between the following alternatives:

1) as mentioned above the goal of "Increasing the competitiveness of the region" is a strategic objective of regional development, the achievement of which is a prerequisite for the implementation of the National Strategy for Regional Development, which in turn will enhance the efficiency of infrastructure development of entrepreneurship, creation of favorable conditions for attracting investment, the development of innovative infrastructure (business incubators, technology transfer centers);

2) Ensuring a high level of competitiveness in the region will contribute to the development of small business, as a foundation of market competition environment, so will increase the level of employment in the region.

That is why the comparison of alternatives "Increasing the competitiveness of the region" and "Increasing the level of employment in the region" it was fixed a 6 to 1 ratio.

Similarly, pair wise comparisons all seven of the above strategic objectives (alternatives) the regional innovative potential development were made.

To check the consistency of the results were calculated as the maximum eigenvalue of the matrix, and the consistency index and consistency ratio.

The calculated value of the maximum eigenvalue of the matrix is $\lambda_{\max} = 7,794$, consistency index $CI = 0.132$, the consistency ratio $CR = 0.10$.

These calculations allow us to assert that sufficient consistency in assessment matrix of pair wise comparisons. The resulting ratio is due to the consistency by comparing the seven alternatives are not quite typical for the method of Saaty.

However, in certain cases, the value of consistency CR can reach 0.2 for complex multi criterion problem, which include the tasks discussed in this paper.

That is, when $CR = 0.1$ and significantly less than 0.2, the level of reliability of the obtained result is quite satisfactory. The ranking results are shown in Table 1.

Relying on results of the calculations presented in Table 1, it is appropriate to conclude that the highest priorities to the regional innovative potential development are such strategic objectives:

Table 1

The priorities of the strategic objectives of the regional innovative potential development

Strategic objective	Specific weight (importance) objective, %
Increasing GRP	33,49%
Increasing of local revenues	32,50%
Increasing the competitiveness of the region	16,46%
Increasing the level of employment in the region	6,98%
Ensuring social stability of the region	5,67%
Developing knowledge-based industries	2,99%
Implementation of environmental programs	1,91%

Source: authorial computation

- Increasing gross regional product;
- Increasing of local revenues;
- Increasing the competitiveness of the region.

These priorities take up 82.45% of the total significance of priorities, making them the top priority for the development of the region.

Thus, the regional innovative potential development should be aimed, ultimately, to achieve these priorities.

Discussion and Conclusions: Conducted identification of priorities strategic objectives is a new systematic approach to the analysis of the regional innovation potential strategic priorities. Thus, the methodical approach to determining the strategic priorities of regional innovation potential development based on the analytic hierarchy process and the use of systems analysis is suggested. This approach gives opportunity to increase the validity of administrative decisions in formulating the strategy of regional innovation potential. These studies represent a necessary step, which justifies the determination of strategic directions of the regional innovation potential development of Ukraine. Definition of actors and primary objectives of regional innovation potential on the basis of the adduced analysis is the next stage of the study.

REFERENCES

1. *Інноваційні підходи до регіонального розвитку в Україні: аналіт. доп.* / С.О. Біла, Я.А. Жаліло, О.В. Шевченко, В.І. Жук [та ін.]; за ред. С.О. Білої. –К.: НІСД, 2011. – 80 с.
2. ПУТЯТИЙ Ю. *Тридід Стратегія розвитку підприємства* (Методи прийняття рішень в процесах формування і реалізації) / Ю. Путятій, А. Пушкарь //Бізнес Інформ. – 1998. – №23-24. – С.109-113.
3. ЗАВЛИН П.Н. *Основи інноваційного менеджмента: Теорія і практика: Учебное пособие для вузов* / Барютин Л.С., Валдайцев А.В. и др.; Под редакцией Завлина П.Н. и др. – М.: Экономика, 2000. – 475 с.
4. SAATY T.L. (1980): *The Analytic Hierarchy Process*, McGraw – Hill, 1980.
5. МУХИН В.И. *Інструментарій оцінки результатів інноваційної діяльності на основі когнітивного підходу* / В.И. Мухин // Креативная экономика. – 2007. – № 2 (2). – с. 46-51.
6. Україна – 2015: *Національна стратегія розвитку*. – Київ: “Український форум” – Режим доступу: <http://semynozhenko.com.ua/content/files/Ukraine-2015%20big.pdf>.
7. *Про Стратегію економічного та соціального розвитку України "Шляхом європейської інтеграції" на 2004-2015 роки*. Офіційний вісник України, 2004. – по. 18. – с. 17.
8. *Про затвердження Державної стратегії регіонального розвитку на період до 2015 року*. Офіційний вісник України, 2006. – по. 30. – с. 36.