

SYSTEMIC FORESIGHT AS A STRATEGIC PLANNING TOOL

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Abstract: The article presents the concept and distinctive characteristics of the Foresight technology. Special attention is paid to the possibility of using Foresight in the framework of strategic planning taking into account the specific situation in the Republic of Moldova.

Keywords: systemic foresight; macroeconomic planning; investment projects; project management.

The use of foresight research involves the formation of expert assessment methods to identify strategic directions of socio-economic and innovative development [1, 3, 5-7].

Foresight is a systematic attempt to assess the prospects for the development of science, technology, economy and society, undertaken in order to identify strategic directions that can have a positive impact on the economic and social spheres in the medium and long term [5].

Foresight research at the macro level should be focused on the following issues:

- identifying key areas of scientific and technological progress;
- adjusting investment priorities;
- dynamic development of the national innovation system.

The fundamental difference between foresight and traditional forecasting is the active involvement of experts in the discussion process.

Together with decision makers, the expert community has the opportunity to form a comprehensive forecast for the implementation of project objectives from various positions: technological, commercial, social, environmental. Accordingly, the expansion of the circle of experts (decision-makers) allows harmonizing the interests of the state, business units and society [5].

It is very important to note that foresight has a variety of undeniable advantages:

- stimulates cooperation between business, government and scientific community;
- develops the ability and culture of strategic planning;
- provides for the possibility of choosing an action course depending on the "vision" of the future.

An essential characteristic of foresight is its focus on finding ways to actively influence the future in the following ways:

- by identifying research areas and analyzing technologies that can bring the greatest economic and social benefits;
- through the early concentration of resources in these areas.

The aspects that distinguish foresight from classical forecasting methods used in traditional project management are shown in the figure 1.

Common features of Foresight and Traditional Forecasting	analysis of objective trends, internal and external factors affecting the dynamics of the development of processes and their interconnections
	the use of general, universal forecasting methods: <i>Delphi method (expert assessments), scenario planning, expert discussions (focus groups, brainstorming, expert panels)</i>
Distinctive characteristics of Foresight	the use of the <i>critical technology method</i>
	increasing the composition of the expert community
	development of maximum cooperation between business structures, government, scientific community and society
	elaboration of ways to active influence on the future

Figure 1. Comparative characteristics of foresight and traditional forecasting

Source: developed by the author

Originally developed for the scientific and technical fields, foresight has over time been extended to more general tasks of economic development. Foresight types were modified in three stages (Figure 2).



Figure 2. Stages of Foresight Technology development

Source: developed by the author

The methods used in foresight technology can be grouped into three categories: diagnostic, prognostic, and regulatory [4].

Diagnostic methods are applied when performing scanning of the external environment and are based on extrapolation, SWOT analysis, and industry structuring.

Predictive methods involve the use of brainstorming results, the Delphi method, expert panels, and scenario simulations.

Regulatory methods integrate cross-impact analysis, critical research, and road-mapping technologies.

Some of these methods were used even before the appearance of foresight as a unified methodology. For example, extrapolation has been widely used in the planned economy, and SWOT analysis has been a strategic management tool since the 1970s.

According to the author, for the conditions of the Republic of Moldova, the necessity and urgency of using the foresight technology is confirmed by the following specific characteristics of the economic and social situation in the republic [2]:

- lack of intersectoral and territorial balance;
- deepening of the systemic economic and geopolitical crisis;
- the priority importance of innovative projects associated with the influence of uncertainty and risk factors;
- increasing the role of scientific and technological competence.

Application of Foresight Technology as a tool for macro investment strategy

Evaluation, ranking and implementation of effective investment projects by enterprises are impossible without creating adequate macroeconomic conditions that determine the possibilities of increasing investment attractiveness at the level of industries, regions and the state.

In this regard, the author considers it necessary to create a state program to improve the conditions for the development of real investment using a systemic foresight. According to the author, the implementation of such a program will contribute to the optimization of the project's efficiency assessing, as well as the formation of a favorable investment climate [2].

As a strategic goal of the foresight project, it is proposed to establish a justification of the project choice and increasing the efficiency of the investment projects implementation, taking into account the economic conditions and regional characteristics of the territory of Moldova [2].

The sequence of the foresight project implementation (in accordance with classical project management methods) will include the following processes: initiation, project development, planning, execution, evaluation and control, project completion.

The following factors should be considered in the analysis of economic conditions:

- the imbalance in the development of the republic regions and their different levels of investment attractiveness: (central, northern, southern regions, ATU Gagauzia, Chisinau);
- lack of clear sectoral development priorities;

- limited and unstable sources of investment financing;
- high level of both systematic and diversified (non-systematic) risks.

The use of the foresight technology includes a set of the following activities:

1. Selecting the target setting (technological, socio-economic or environmental focus of the project);
2. Formation of a circle of basic and related industries that constitute a potential basis for strategic development, and an assessment of the prospects for their development;
3. Forecast of the results of fundamental scientific research in the selected areas;
4. Comparison of forecast results with real or expertly established data, research and innovation;
5. Making a decision to support the most promising areas of research and development;
6. Discussion of the forecasting results with the participation of business structures, state and society in order to include the most important social problems in the research priorities.

Conclusions and recommendations

The application of systemic foresight technology to the strategic investment planning process will allow achieving the following goals:

1. Improving the efficiency of decision-making in strategic investment planning;
2. Increasing the correspondence between pre-investment forecast calculations and real project results;
3. Stimulating the development of innovative projects;
4. Motivation of business structures, state and society towards active modeling of the future;
5. Management of uncertainty and risk factors;
6. Possibility of comprehensive accounting of the investment project consequences: economic, social, environmental.

Systemic foresight should be considered as one of the most effective methods for identifying innovative potential, determining priorities for the scientific, technological and industrial development of the country and / or industry and aligning them with socio-economic interests.

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