



Approaches to Modeling Management and Control Processes in Foresight Management System Taking into Account Representativeness Conditions

Enfoques para la modelización de los procesos de gestión y control en el sistema de gestión de la prospectiva teniendo en cuenta las condiciones de representatividad

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ABSTRACT:

Conditions of representativeness generated by turbulence in economy define the necessity to model management process in order to neutralize a lot of risks. The article defines the role of searching for an optimal approach to modeling management and control processes in the system of foresight management taking into account conditions of representativeness. It defines the goal, tasks, and areas of the work. It represents the general plan of works on the offered developments. It supposes results of the research and practical novelty and importance.

Key words: optimal models, management and control processes, foresight management system, representativeness, parameters, controlling map, risks.

RESUMEN:

Las condiciones de expresividad generadas por la turbulencia económica definen la necesidad de modelar el proceso de gestión para neutralizar muchos riesgos. El artículo define el papel de la búsqueda de un enfoque óptimo para modelar los procesos de gestión y control en el sistema de gestión de la previsión teniendo en cuenta las condiciones de exposición. Define el objetivo, las tareas y las áreas del trabajo. Representa el plan general de obras sobre los desarrollos ofrecidos. Supone resultados de la investigación y novedad práctica e importancia.

Palabras clave: modelos óptimos, procesos de gestión y control, sistema de gestión de previsión, experiencia, parámetros, mapa de control, riesgos.

1. Introduction

The impact of system, specific, and aggregated risks is destroyable for strategic goals and tasks of management. The need to reconstruct systems of forecasting both in the short and long-term periods actualizes modeling by methods of the non-numeric mathematics of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness (Sidunova, G.I., Sidunov A.A., 2015).

Approaches to modeling management and control processes in the foresight management system taking into account conditions of expresentness must develop optimal areas for 1) forming theoretical basics of concepts, paradigms of the foresight management system as a strategic tool of neutralizing risks under conditions of expresentness (Sidunova G.I., 2014), 2) formation of methodology to model management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by using methods of the non-numeric mathematics, 3) formation of the monitoring system (O.S. Glinskaya, O.N. Golubiatnikova, A.V. Shokhnekh, 2010), 4) formation of the informational control resource for revealing efficiency and performance, 5) forming "the feedback controlling map" to improve the process of modeling methods of non-numeric mathematics of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness; 6) alternative calculation of the economic effect of the offered models (Smirnova N.A., Sizeneva L.A., Vasiliev E.S., Gushchina E.G., Alimova E.A., 2016); (Karaulova, N. M. and L. A., Sizeneva, 2014), 7) forming the system of collecting, synthesis and analysis of the informational base (SSSAIBE) of priorities and reasonability of management development in Russia taking into account the current turbulent impacts of the internal and external environment, and 8) revealing sample models of management processes in the foresight management system to neutralize risks under conditions of expresentness as a comprehensive dynamic system on the micro-level by the cellular automation method.

2. Methods

In order to form a new system of modeling, it is necessary to monitor, range, classify the revealed problems, to apply system of foresight management, to model management and control processes in the foresight management system by methods of non-numeric mathematics, to classify processes of the neutralized risks (O.N. Golubiatnikova, A.N. Ustinova, O.S. Glinskaya, A.V. Shokhnekh, 2010), to classify conditions of expresentness, to form a lot of indicators for the hypothetic estimation of their existence by the method of sequential analysis and synthesis, to apply binary and balance methods of estimating the obtain information in the foresight management system as an opportunity to neutralize risks under conditions of expresentness, and to apply cellular automation methods (Matveenko V.P., Shokhnekh A.V., 2014).

Results of the Research

In order to choose the optimal approach to modeling management and control processes in the foresight management system taking into account conditions of expresentness, it is necessary to develop a master plan of works that will include 2-3 variants of possible research areas. The master plan of the development of specific theoretical provisions, methodology, economic mechanisms and tools in the process of applying a new approach (that has not be used before) when modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics includes the following:

1) Formation of theoretical basics, modern concepts, paradigms of foresight management system as an opportunity to neutralize risks under conditions of expresentness, including:

- New definitions, key elements, terms, classification of the foresight management of risks neutralizing,

- Ranging the actuality of the development of the foresight management system as a strategic tool to neutralize under conditions of expresentness,
- Classification of risks under conditions of expresentness,
- Classification of processes of neutralizing risks of the foresight management under conditions of expresentness,
- Formation of conceptual principles and functional basics of management processes in the foresight management system as an opportunity of neutralizing risks under conditions of expresentness, and
- Formation of the theory of the management processes model in the foresight management system as an opportunity of neutralizing risks under conditions of expresentness,

2) Formation of the methodology of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics, including:

- Formation of a number of indicators for ranging according to the level of essentiality of opportunities to neutralize risks under conditions of expresentness,
- Formation of the mechanism of collecting, synthesis and analysis of the informational system when modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics,
- Formation of alternative methodologies to efficiently model management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics, and
- Formation of the mechanism of practical adaptation of the model of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness,

3) Formation of the system of monitoring processes related to modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics to control efficiency and performance, including:

- Monitoring of ranging the actuality of the area related to using the foresight management system as a strategic tool to neutralize risks under conditions of expresentness,
- Monitoring of the classification of risks of the area of applying the foresight management system under conditions of expresentness,
- Monitoring of the classification of processes related to neutralizing risks of applying the foresight management system under conditions of expresentness, and
- Monitoring of priorities of principles and functional basics in the foresight management system as an opportunity to neutralize risks under conditions of expresentness,

4) Formation of the informational controlling resource to reveal the efficiency and performance of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics,

5) Formation of the "feedback controlling map" to improve the process of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics,

- 6) Formation of alternative methods to calculate economic effect from using modeling of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics,
 - 7) Formation of the system of collecting, synthesis and analysis of the informational base (SSSAIBE) of priorities of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics and by applying the SWOT-BALANCE analysis, reasonability of the management development in Russia taking into account the current turbulent impacts of the internal and external environment, and
 - 8) Revealing sample models of management processes in the foresight management system to neutralize risks under conditions of expresentness as a dynamic system on the micro-level by the cellular automation method.
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3. Discussion of Results

Choosing an optimal model when analyzing a number of approaches to modeling management and control processes in the foresight management system taking into account conditions of expresentness allows to obtain new theoretical basics that include the scholarly apparatus of new terms, goal, tasks, principles, and functional basics; to develop methodology, methods, mechanisms, and indicators that have not been applied earlier; to form the system of control over modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by using methods of the non-numeric mathematics in order to define the basic level of promising long-term areas of strategies, and level of their implementation in the area of applying (Matveenkov V.P., Shokhnekh A.V., 2014); (Khasbulatov R.I., 2012).

This process includes multistage sequential actions.

1. Formation of new theoretical basics, modern concepts, paradigms of foresight management system as a strategic tool to neutralize risks under conditions of expresentness, namely new definitions, key elements, terms, classification of the foresight management of risks neutralizing, system of ranging the actuality of the development of the foresight management system as a strategic tool to neutralize under conditions of expresentness, system of classifying risks under conditions of expresentness, system of classifying processes of neutralizing risks of the foresight management under conditions of expresentness, formation of conceptual principles and functional basics of management processes in the foresight management system as an opportunity of neutralizing risks under conditions of expresentness, and formation of a new theory "Modeling Management Processes Model in the Foresight Management System as an Opportunity of Neutralizing Risks under Conditions of Expresentness".
2. Development of the methodology to model management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics, namely formation of a number of indicators for ranging according to the level of essentiality of opportunities to neutralize risks under conditions of expresentness, formation of the mechanism of collecting, synthesis and analysis of the informational system when modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics, formation of methodologies to efficiently model management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness by methods of the non-numeric mathematics, and formation of the mechanism of practical adaptation of the model of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expresentness,
3. Formation of the system of monitoring processes related to modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of

expressiveness by methods of the non-numeric mathematics to control efficiency and performance, namely monitoring of ranging the actuality of the area related to using the foresight management system as a strategic tool to neutralize risks under conditions of expressiveness, monitoring of the classification of risks of the area of applying the foresight management system under conditions of expressiveness, monitoring of the classification of processes related to neutralizing risks of applying the foresight management system under conditions of expressiveness, and monitoring of priorities of principles and functional basics in the foresight management system as an opportunity to neutralize risks under conditions of expressiveness,

4. Formation of the informational controlling resource to reveal the efficiency and performance of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expressiveness by methods of the non-numeric mathematics,

5. Formation of the "feedback controlling map" to improve the process of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expressiveness by methods of the non-numeric mathematics,

6. Calculation of the economic effect from applying modeling of management processes in the foresight management system as an opportunity to neutralize risks under conditions of expressiveness by methods of the non-numeric mathematics,

7. Formation of the system of collecting, synthesis and analysis of the informational base (SSSAIBE) of priorities of modeling management processes in the foresight management system as an opportunity to neutralize risks under conditions of expressiveness by methods of the non-numeric mathematics and by applying the SWAT-BALANCE-analysis, reasonability of the management development in Russia taking into account the current turbulent impacts of the internal and external environment, and

8. Revealing sample models of management processes in the foresight management system to neutralize risks under conditions of expressiveness as a comprehensive dynamic system on the micro-level by the cellular automation method.

4. Conclusion

The results obtained when choosing the optimal approach to modeling management and control processes in the foresight management system taking into account conditions of expressiveness allow to smooth active impacts of external and internal environments on various areas of the civil society life activity, as well as to model management processes in the foresight management system to neutralize risks under conditions of expressiveness by methods of the non-numeric mathematics. It is urgent to reveal sample models of management processes in the foresight management system to neutralize risks under conditions of expressiveness as a comprehensive dynamic system on the micro-level by the cellular automation method.

At the present time a sufficient number of researches are devoted to problems of management in the foresight management system, as well as problems related to managing and neutralizing risks. A lot of standards, guides, and instructions in this area, as well as mechanisms, classifications and algorithms of risks management, and numerous publications prove this (Puzov E.N., Yashin S.N., 2007); (O.S. Glinskaya, O.N. Golubiatnikova, A.V. Shokhnekh, 2010); (Matveenko V.P., Shokhnekh A.V., 2014); (Smirnova N.A., Sizeneva L.A., Vasiliev E.S., Gushchina E.G., Alimova E.A., 2016); (Maniaeva V.A., 2011). Active impact of external and internal environments on various areas of the individual's life defines the urgency of forming, implementing, and efficient use of the foresight for the management development. The foresight management system is focused on forecasting and constructing long-term (10-15 years) strategies of the management thought development to achieve strategic goals and tasks. However, the formation of approaches to modeling management and control processes in the foresight management system taking into account conditions of expressiveness is an entirely

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