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MANAGEMENT DECISION-MAKING UNDER RISK AND UNCERTAINTY

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ABSTRACT *The article deals with the problems of making managerial decisions, which are the result of the creative mental activity of the subject of management, associated with the identification of the problem, analysis and assessment of the situation, forecasting development trends, socio-economic justification and choice of behavioral alternatives and action programs of the socio-economic system to solve the problem that has arisen. or achieving goals. Modern organizations are distinguished from organizations of the old type by the presence of a significantly*

larger number of large and gigantic organizational systems in which the role of management decisions is growing. This fact is due to the fact that, unlike organizations of the old type, modern organizations have a large number of top and middle managers, and the professional duty of each of them is to make a management decision in accordance with the powers delegated to him. Teamwork and rationality, which is based on a professional management decision, have become the core of today's management. Effective management requires the modern manager to control human resources, the environment and material resources in order to optimally achieve the goal. This can only be achieved through the proper use of decision-making tools. Modern tools and methods for the development and adoption of managerial decisions are of a universal nature and are aimed at the processes of modernization of the economy taking place in the Ukrainian economy. Today, risk analysis and management is very expedient and the relevance of risk management issues is becoming increasingly important, this is what is necessary for the further correct and optimal application of risk management in the main business processes of an enterprise, on the basis of which the main profit of enterprises using the processes of analysis and risk management. Particular attention is paid to the continuous improvement of risk management in different situations. Management risk as a multifactor category of management is studied in the dynamics of a purposeful cyclic management process.

KEYWORDS: *management activity, management decision-making methods, organization, decision-making process strategy, risk management, information support, monitoring, forecasting.*

JEL CLASSIFICATION M120, L10.

INTRODUCTION

Effective management requires the modern manager to control human resources, the environment and material resources and technology in order to achieve the goal optimally. This can only be achieved through the proper use of decision-making tools. The main tasks of a manager in the field of decision-making under conditions of uncertainty are to identify an area of increased risk, assess the degree of risk, develop and take measures to prevent risk; in the event that damage has already occurred, take measures to optimally compensate for it; analyze and prevent risks. Practice shows that increased risk occurs under a variety of circumstances: when making the wrong managerial decision, with an unsatisfactory performance of a subordinate task, an unsuccessful choice of an executor, an error in a marketing forecast, a refusal of management to accept a manager's radical proposal.

BODY OF PAPER

In the course of the activities of organizations, situations constantly arise when there is a need to choose one of several possible options for an act. The result of such a choice is a definite decision. An important feature of managerial decision-making processes is the need to take into account the influence of uncertain factors and consider all possible consequences of the alternatives presented for choice. Therefore, the methods of prospective analysis play an important role here, which allow making managerial decisions based on an assessment of possible future situations and choosing from several available solutions the most effective for a particular situation.

The effectiveness of any management activity lies in the ability to make correct and timely decisions. Decision-making is carried out at all stages of management activity and, as it were, permeates all its functions, from setting goals and objectives to control. The results of the work of the team largely depend on the degree of validity of management decisions. In psychological terms, the adoption of a managerial decision is considered as an act of will, the result of which is the formation of a particular goal and the means to achieve it. The result of the management decision should be to bring the managed system in line with the intended goals. Any managerial decision is reduced to the choice of one or another option from several possible ones.

The modern science of management, and with it the theory of managerial decision-making, arose after the emergence of organizations in the modern sense. Modern organizations are distinguished from organizations of the old type by a large number of top and middle managers, as well as the presence of a relatively small number of specialists who, not being managers, by virtue

of the powers delegated to them, must make important management decisions for the organization. Teamwork and rationality, which is based on a professional management decision, have become the core of today's management.

Theoretically, when developing management decisions, the following groups of methods are distinguished: analytical, statistical, mathematical, heuristic, activating, expert, scenario methods and decision trees. Each method is based on the study of specially designed models, periodically tested for validity, accuracy and efficiency. The main goal of each model is to simplify the solution development process. Accuracy is determined by the correspondence of the simulated procedures and operations of developing solutions to real processes.

The process of developing management decisions is one of the most important management processes. The success of the whole business largely depends on ensuring its effectiveness. The study of this will help the leader, who owns the technologies for developing, making and implementing managerial decisions, to effectively manage the organization in a complex, constantly changing economic environment. The need for decision-making arises at all stages of the management process, is associated with all areas and aspects of management activities and is its quintessence. The adopted management decisions are always projected into the future, so the manager at the time of adoption of the methods used at the stage of assessing alternatives: methods of multi-criteria assessment; methods of expert evaluation; expert methods; factual methods. Methods used at the stage of identifying alternatives: the method of "brainstorming"; morphological analysis; methods of associations and analogies; methods of control questions; way of "creative assault". Methods used at the stage of selection, implementation of the solution and evaluation of the result: functional cost analysis; chain substitution method; a causal analysis of a decision cannot know with absolute certainty how the situation will change. In other words, at the moment of making a managerial decision, there is a significant element of uncertainty and risk. Uncertainty conditions exist when the manager does not know exactly the outcome that each choice will have. Under risk conditions, the probability of the outcome of each decision can be determined with a known probability. When making managerial decisions under conditions of uncertainty and risk, it is necessary to conduct a risk analysis. After the risk analysis has been carried out, special risk management techniques are used in the process of developing managerial decisions. [1]

For effective management, it is necessary to take into account many tools and factors, to observe certain methodological foundations. An analysis of the special literature made it possible to determine the method of making a managerial decision as a set of methods and techniques for performing procedures for making a managerial decision aimed at solving a problem situation. In order to further analyze the methods for developing and making managerial decisions, it seems appropriate to first consider the classifications of methods that exist in scientific practice. In modern economic science, there are many classifications of methods used in the decision-making process. So some researchers propose to divide the entire set of methods into the following groups:

1. A method based on the intuition of the manager, due to the presence of his previously accumulated experience and the amount of knowledge in a particular field of activity, which helps to choose and make the right decision;

2. A method based on the adoption of "common sense", when the manager, when making decisions, substantiates them with consistent evidence, the content of which is based on his practical experience;

3. A method based on a scientific and practical approach, involving the selection of optimal solutions based on the processing of large amounts of information, helps to justify decisions. This method requires the use of modern technical means and, above all, electronic computers. [2]

The theory of decision making under risk and uncertainty is based on the following assumptions:

1. The object of the decision is clearly determined and the main possible risk factors are known. In financial management, such objects include a separate financial transaction, a specific type of securities, a group of mutually exclusive real investment projects, etc.

2. According to the decision-making object, an indicator was chosen that best characterizes the effectiveness of this decision. For short-term financial transactions, this indicator is usually chosen as the amount or level of net profit, and for long-term - net present income or internal rate of return.

3. An indicator characterizing the level of its risk was chosen for the decision-making object. Financial risks are usually characterized by the degree of possible deviation of the expected performance indicator (net profit, net income, etc.) from its average or expected value.

4. There are a finite number of decision-making alternatives (a finite number of alternative real investment projects, specific securities, ways to carry out a certain financial transaction, etc.).

5. There is a finite number of situations for the development of an event under the influence of changes in risk factors. In financial management, each of these situations characterizes one of the possible future states of the external financial environment under the influence of changes in individual risk factors.

6. For each combination of decision-making alternatives and situations of the development of an event, the final indicator of the effectiveness of the decision can be determined (a specific value of the sum of net profit, net present income, etc., which corresponds to this combination).

7. For each of the situations under consideration, it is possible or impossible to estimate the probability of its implementation. The possibility of estimating the probability divides the entire system of risky decisions into the previously considered conditions for their justification ("risk conditions" or "uncertainty conditions").

8. The choice of a solution is carried out according to the best of the considered alternatives.

[3]

The development of effective solutions is the main prerequisite for ensuring the competitiveness of products and firms in the market, the formation of rational organizational structures, the implementation of the correct personnel policy and work, the regulation of socio-psychological relations at the enterprise, and the creation of a positive image. When making decisions, a modern manager must: widely use a variety of management methods; assess the decision-making environment and risks; know and be able to apply various models and methods of forecasting for decision-making, based on the analysis of the macro- and microenvironment of the functioning of the enterprise.

CONCLUSION

Thus, we can conclude that in the process of developing and making management decisions in conditions of uncertainty and risk, the manager is faced with the need to analyze existing risks, as well as measures to avoid, retain, transfer risks or reduce their degree. In addition, in conditions of uncertainty and risk, the manager must use special techniques and methods of development and decision-making. Decision making is the connecting process needed to perform any managerial function. In a market economy, a manager can influence the destinies of many people and organizations with his decisions. Depending on the level of complexity of the tasks, the decision-making environment varies depending on the level of risk.

Uncertainty conditions exist when the manager does not know the exact result of each choice. Under conditions of risk, the possibility of the outcome of each decision can be determined with some reliability. If the information is insufficient to predict the level of probability of the results depending on the choice, the conditions of the decision are uncertain. In case of uncertainty, the manager must determine the probability of possible consequences, taking into account his own judgment. Each decision is associated with trade-offs, negative consequences and side effects, the value of which the leader must match the expected benefits. All decisions, not only programmed, but also not programmed, made by the manager must be based not only on judgments, intuition and experience, but also to apply a rational approach to decision making.

When making decisions, a modern manager must: extensively use a variety of management methods; assess the decision-making environment and risks; know and be able to apply different models and methods of forecasting for decision. M. Pantelieiev M. S *Rozvytok innovatsiinoi*

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