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EXPLORING THE DIGITAL LANDSCAPE: INTERDISCIPLINARY PERSPECTIVES

EXPLORING THE DIGITAL LANDSCAPE: INTERDISCIPLINARY PERSPECTIVES

Monograph

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1.4. Optimization of the stages of accepting administrative decisions to minimize the impact of uncertainty

The management process is closely related to the decision-making procedure. Decision-making is a cognitive process that leads to the choice of one of the alternative options. This process is crucial for all spheres of human activity because the success of the individual, the efficiency of the enterprise, and the development of society as a whole depend on the decisions made.

The issues of making and implementing management decisions in conditions of uncertainty are highlighted in the scientific works of numerous researchers, including Lazebna O. (Лазебна, 2011), Matiiko I. (Матійко, 2013), Hryniv L., Vachil O. (Гринів, Вачіль, 2015), Kuzylyak V., Yakovchuk R., Samilo A., Povstin O., Shishko V. (Кузиляк et al., 2016), Mohnenko A. (Мохненко, 2015), Yushchenko N. (Ющенко, 2017), Tyrkalo Yu. (Тиркало, 2022), Shegda A. (Шегда, 2011), Nozhko I. (Ножко, 2023), Heydarova O., Payuk V. (Гейдарова, Паюк, 2023), Volynets I. (Волинець, 2023), Maznev G. (Мазнєв et al., 2016), Chikalo I. (Чикало, 2023) and others. Given the significant interest in this topic from the academic community, there is a need to systematize and generalize existing knowledge and experience in the field of decision-making.

Definitions of the theory of decision-making differ among different scientists, but in general, two main approaches can be distinguished: narrow and broad. A narrow interpretation describes decision-making as the process of choosing the optimal solution from a set of alternatives, while a broad interpretation considers decision-making as a complex management process. The broader approach is considered more correct in practice since it covers not only the development of alternative options but also the organization of execution, control, and analysis of the results associated with the implementation of the decision. The implementation of decisions is a fundamental aspect of management activity, penetrating all its areas and becoming the main part of the management process (Гончаров, 2003).

«Management decision in everyday practice is a product of managerial work, the mental activity of a person. A managerial decision can also be interpreted as a process implemented by the subject of management, determining the actions aimed at solving the task in the existing or projected situation» (Барабаш, 2008).

Making a management decision is the main phase of the management process, which begins with the identification of a problem that needs to be solved and ends with the choice of the best solution – an intellectual action aimed at overcoming a crisis situation. Decision-making is the primary function in the management process, and its successful implementation plays a decisive role in achieving the goals and objectives of the enterprise.

Usually, the decision is made by the manager, guided by the principle of authority, but it is also important to consider a collective approach that helps reach the most considered and informed decisions. Both of these principles are interrelated and do not contradict each other. In systems with one-person management, the principle of personal responsibility for the implementation of the decision prevails, while in collegial structures, extensive discussion and preparation of decisions by a group of people are used. However, there are cases of deviation from these principles. When a leader guided only by his own authority shows inflexibility and self-centeredness, he can ignore the initiatives of subordinates and collective opinions, without utilizing the experience of his employees. Instead, some managers prefer to agree on decisions collegially, even when it is within their personal competence, leading to unnecessary delays and reduced personal responsibility.

Autonomy plays an important role in decision-making, allowing each employee to act within their competence according to established tasks and directives. Therefore, it is crucial to establish exactly what decisions can be made at different levels of management and how managers should monitor implementation without undermining the initiative and autonomy of subordinates. Managers at lower levels often avoid risky decisions for fear of making mistakes. However, it is possible to reduce the risk of errors by clearly defining the tasks that require coordination, skilled management, and analyzing errors to avoid them in the future.

Management decision is a tool of influence on the object of management and its components, an important element in the creation of management relationships, and the basis for the implementation of every managerial function in the enterprise.

There are three main approaches to management decision-making:

I. Classical model;

II. Behavioral model;

III. Irrational model (Бутко et al., 2018; Горський et al., 2022; Катренко & Пасічник, 2020; Петруня et al., 2020).

The classical model is based on the concept of «rationality» in the decision-making process, with the assumption that the decision-maker must demonstrate complete objectivity and logic, have a defined goal, and all their actions must be directed towards choosing the optimal alternative. The main aspects of the classical model include:

- determination of the goals of decision-making;
- availability of complete information about the circumstances affecting the decision;
- awareness of all possible options for actions and their consequences;
- availability of a justified system of priorities for assessing the importance of each alternative;
- the desire to maximize the benefit for the enterprise through its decisions.

According to the classical model, the decision-making process should take place in well-defined conditions, allowing managers to choose the best decision based on complete information that is most in the interests of the enterprise. However, in practice, decision-making is often complicated by numerous constraints and subjective factors affecting the choices, which are taken into account by the behavioral model.

In contrast to the classical approach, the behavioral model recognizes that decision-makers often face a lack of complete information about the circumstances they encounter. They also do not have access to all possible choices and are not always able to predict the consequences of each potential decision.

Based on these observations, Herbert Simon (Herbert, 1976) introduced two key concepts of the behavioral model:

- The concept of «bounded rationality» suggests that although people strive for rationality in their decisions, their capacity for rational analysis is limited by incomplete information, limited cognitive capacity, and limited decision time. Thus, there is a possibility that there will always be a better option than the one that was chosen.
- The concept of «achieving satisfaction» is based on the assumption that, due to the impossibility of achieving absolute rationality, managers tend to settle for solutions that seem good enough under the given circumstances, rather than ideal. This process reflects the moment of making a decision, which, according to H. Simon, is considered «good enough» in the context of existing constraints.

Managers who «achieve satisfaction» can be guided by various motives, such as the desire not to discard already found acceptable alternatives in favor of finding new ones, the inability to evaluate a large number of options, or the influence of personal, subjective factors on the decision-making process.

The model of irrational decision-making is based on the assumption that decisions are formed before alternative options are considered. This approach is commonly used:

- when solving unique and unusual problems that require an unconventional approach;
- in situations where the time to make a decision is limited;
- when one manager or group of managers has enough authority to dictate their decision.

The decision-making process, along with coordination and information exchange, plays an important role in intra-organizational activities, while the peculiarity of this process lies in its direct impact on the achievement of the company's goals. The process of management decision-making is influenced by numerous factors, among which stand out:

- *Degree of risk.* Risk is an integral part of the management decision-making process and signifies the possibility of misinterpretation of data, use of incorrect information, or errors in personnel activities, which can lead to inappropriate decisions with potentially negative consequences. Risk increases in crisis situations due to limited time frames, rapid changes in the situation, and high levels of uncertainty; as the decision level increases, so does the cost of errors.
- *Information.* The importance of collecting, processing, distributing, and using information cannot be underestimated. Each error in the management chain can cause disruptions in the work of its other elements, affecting the quality of decisions, and consequently, the timeliness of their adoption and implementation in rapidly changing conditions.
- *Time.* The speed with which emergencies develop significantly reduces the time available to analyze information and make decisions, forcing them to be made in real time, often with limited resources. Effectiveness in these conditions depends on the ability to quickly receive and process relevant data to develop effective action plans.
- *Personal qualities of the manager*. The decision-making process is closely related to the personal characteristics of the manager, including their knowledge, experience, professionalism, emotional state, and leadership ability. The quality of the decisions made and their implementation depend significantly on these factors, and the poor quality of the tasks is often the result of mistakes at the management level (Яковчук, Саміло, 2017).

Thus, it is important to pay attention to each of these factors to ensure the effectiveness of the management process, especially in the context of rapid and unpredictable changes characteristic of emergency situations. All actions within the framework of management are aimed at solving a certain problem; therefore, the main goal of management activity is to find effective methods, approaches, tools, and techniques that allow achieving the desired results in given circumstances.

The process of rational adoption and implementation of management decisions covers several phases: preparation for decision-making, the act of decision-making itself, and its further implementation (Шафоренко, 2023).

The study of scientific literature indicates a wide range of opinions regarding the stages of the process of formation and adoption of managerial decisions. In particular, according to management experts from the USA, Michael H. Meskon, Michael Albert and Franklin Hadoury, the process of choosing a management solution should include five main stages: analysis of the problem situation; establishing restrictions and criteria for choosing a solution; identification of possible alternatives; analytical evaluation of these alternatives; and, finally, choosing the most appropriate solution (Mescon et al., 1988).

The opinions of Ukrainian scientists on this issue deserve attention. Thus, V. Priymak believes that management decision-making includes the following stages: data collection about potential problems; recognition and clarification of the problem; setting goals and developing strategies to solve the identified problem; collection of necessary information for this; analysis of collected information; establishing restrictions and criteria for choosing solutions; creation of alternative options; their assessment; choosing a specific solution; coordination of the chosen decision with the governing bodies and its implementation; and direct execution of the decision (Приймак, 2008).

I. Gevko outlines the main stages in the process of making management decisions as follows: recognition and specification of the problem; development of goals and strategies for addressing this problem; collection of important information; creation of solution options; choosing a specific solution; and its implementation (Гевко, 2009).

Yu. Barabash believes that the decision-making process can be considered in detail as a complex sequence of steps, stages, and procedures, where each of them is interconnected through a system of direct and inverse relationships, allowing for the formation of a flexible and adaptive management model. At the same time, the scientist distinguishes nine stages of the decision-making process: data collection and analysis; description of the problem situation; diagnosis of the problem; development of alternative solutions; choosing the optimal solution; assessment of selected alternatives; formation of the final decision; implementation of the decision; control and correction of performance (Барабаш, 2008).

M. Vinohradskyi, A. Vynohradska and O. Shkanov describes the decision-making process by the manager as a sequence of nine, but slightly different stages, which include: familiarization with the problem or situation; analysis of the situation and setting goals; data collection and establishment of criteria for evaluating proposed solutions; drawing up a decision plan; evaluating possible solutions and choosing the best of them; legal approval of the decision; delivery to executors and development of measures to implement the decision; monitoring of decision implementation; analysis of the results of decision implementation (Виноградський et al., 2003).

Hrubiak S. identified the following stages in the process of making and implementing management decisions: gathering information about possible problems; identification of the problem situation and its causes; development of an evaluation system; diagnosis of the situation; developing a forecast of the development of the situation; generation of alternative solutions; selection of the main options for management decisions; development of scenarios for the development of the situation; expert assessment of the main options for management actions; collective expert assessment; decision-making; control and assessment of decision implementation (Грубяк, 2017).

Based on the analysis of the above approaches to the process of making and implementing management decisions, it is possible to single out the following sequence of stages, which takes into account key aspects and supplements them with new nuances (Fig. 1).

This approach makes it possible to systematize the process of making and implementing management decisions, ensuring its flexibility and adaptability to the changing conditions of the external and internal environment of the enterprise.

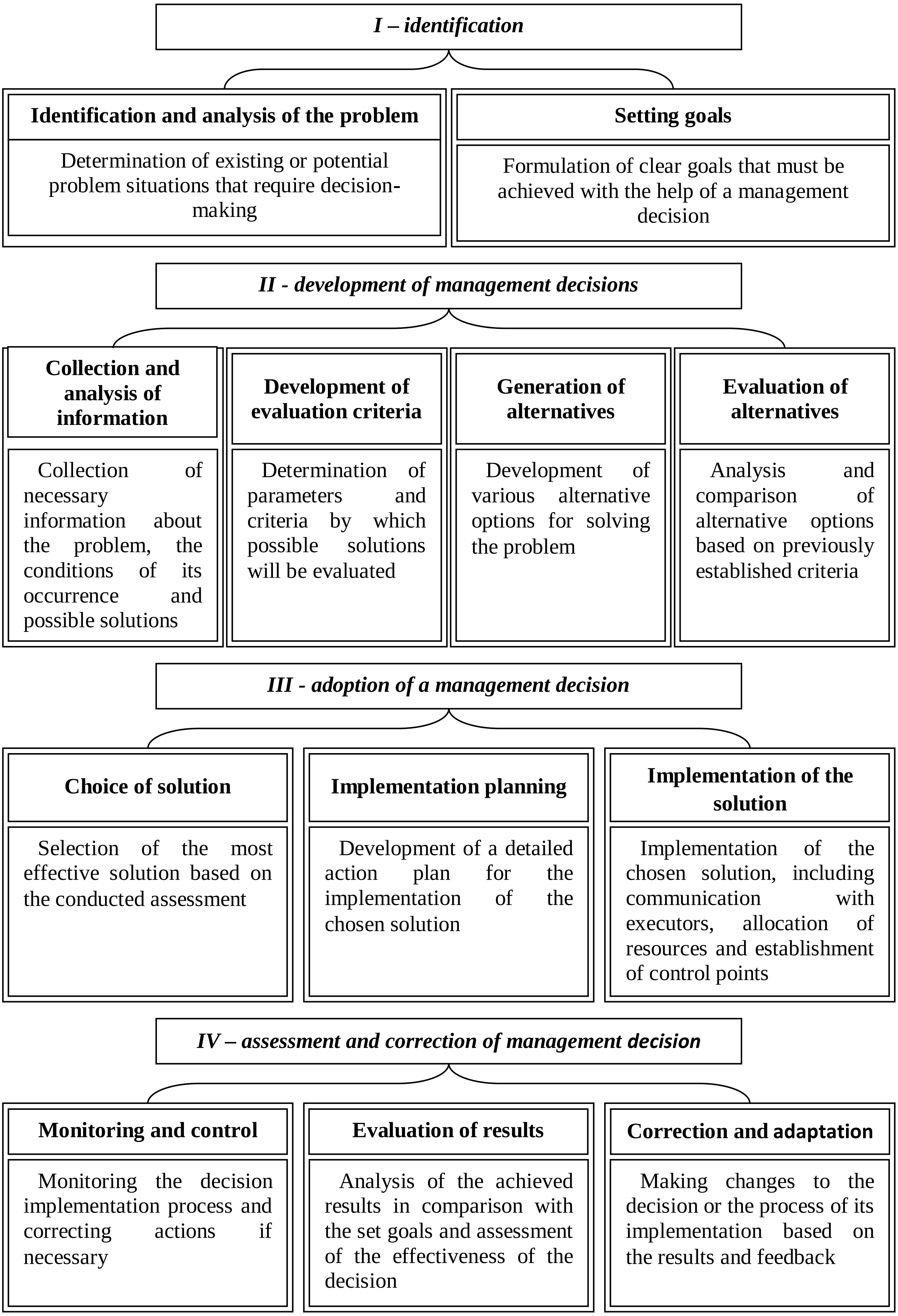

Fig. 1. Stages of adoption and implementation of management decisions

The process of formulating, adopting, and implementing management decisions covers both objective and subjective aspects, requiring a structured approach and the involvement of intuitive abilities, skills, and knowledge of the person responsible for it. To systematize the management decision-making process, the use of both formal and informal methods is effective, helping to analyze previous decisions and choose the best options given the conditions.

The proposed management decision-making technology includes several stages, which can be summarized as follows: I – identification; II – development of management decisions; III – adoption of a management decision; IV – assessment and correction of management decision. At the first stage, identification, there is an analysis of information from the scene of events about the current situation, identification of the problem, and assessment of available resources to eliminate the consequences.

The second stage, the development of management solutions, emphasizes the definition of criteria for choosing the optimal solution. A variety of assessment methods may be used, including qualitative, quantitative, and scoring scales.

In the third stage, making a management decision, it is important to consider all possible alternatives, determine the «best» and «worst» scenarios, and involve experts for an in-depth analysis of the proposals.

At the fourth stage, evaluation and correction of the management decision, monitoring and analysis of the results of implemented decisions take place. This stage involves measuring the effectiveness of the solution using predefined success indicators. A key aspect is determining the degree of achievement of the set goals and identifying any deviations from the planned results. Based on the received data, actions are corrected, if necessary, to optimize the implementation process and increase the effectiveness of management decisions. This may include the adaptation of strategy, changes in planning, as well as the improvement of approaches to the implementation of decisions in the future. Thus, the fourth stage provides not only an assessment of the achieved results but is also an important means for the continuous improvement of the management process.

In the context of the above-mentioned stages, the key aspect of the effective implementation of a management solution is the adaptability and flexibility of the management system, allowing for a prompt response to changes in the internal and external environment of the enterprise. This requires managers not only to have a high level of professionalism and a deep understanding of the specifics of their company's activities but also the ability to make quick decisions in conditions of uncertainty.

Emphasis on constant monitoring and evaluation of activity results is the foundation for identifying potential risks and gaps in the implementation of management decisions. This, in turn, contributes to the improvement of the decision-making process, allowing the enterprise to be more flexible and adaptable to changes.

Therefore, management decisions are an integral part of any enterprise because they allow it to function, develop, and achieve its goals. The effectiveness of these decisions depends on many factors, starting from the qualifications of the manager and ending with external factors that the company cannot always influence.

The process of making managerial decisions is a sequence of stages that require careful analysis and justification. Defining the problem, gathering information, formulating goals, generating alternatives, evaluating them, and choosing the optimal solution are all components of effective managerial influence.

It is important to note that there is no universal algorithm for making the right decisions because each situation has its own characteristics. However, the knowledge and ability to use scientific methods and principles, as well as the constant improvement of one's skills, significantly increase the competence of the manager in this area.

It should be emphasized that management decision-making is not only the prerogative of the manager but also teamwork. Involvement of other team members, experts, and consultants in this process makes it possible to expand the range of possible options and helps to choose the optimal solution.

Thus, improving the management decision-making process is a continuous effort and investment. However, the results of this process – the effective functioning of the enterprise, its resistance to external challenges, and dynamic development – indicate that these efforts are justified.

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