THE ROLE OF DIGITAL TECHNOLOGIES IN MANAGEMENT DECISION-MAKING

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Abstract: This article analyzes the significance of digital technologies in the decision-making process of management. It highlights the role of modern digital solutions in enhancing the efficiency of enterprises and organizations, making swift and accurate decisions, managing information flows, and ensuring competitiveness in the context of the digital economy. Additionally, the article discusses digital decision-making models and their practical applications.
Key words: management decisions, digital technologies, digital economy, artificial intelligence, information systems, management, leader, decisions, personnel.

Introduction.

In the modern era, the process of making management decisions has emerged as a complex and multifaceted process. Traditional management methods are no longer fully satisfying the requirements for rapid information exchange and processing of large volumes of data. As a result, the development of digital technologies has fundamentally transformed decision-making mechanisms. Today, artificial intelligence, big data, blockchain, cloud technologies, digital simulations, and automated information systems are playing a crucial role in increasing management efficiency.

Through the use of digital technologies, leaders and managers will be able to ensure speed, accuracy, and transparency in the decision-making process. Especially in business processes, public administration, education, healthcare, and finance, digital solutions are becoming an integral part of effective management. International experience shows that states and organizations that implement digital transformation in a timely manner gain significant advantages in increasing competitiveness, rational use of resources, and innovative development.

In Uzbekistan, within the framework of the *"Digital Uzbekistan-2030"* strategy, e-government, online services, and data processing and analysis systems based on artificial intelligence are being gradually implemented in the public administration system. This process serves to increase the speed and efficiency of management decision-making. Thus, the role of digital technologies in management decisions is not only of practical importance, but also of scientific and theoretical relevance.

Analysis and results.

When making management decisions, digital technologies primarily facilitate the process of collecting, processing, and analyzing information. While decision-making in traditional management methods is often based on the experience of managers and available data, with the help of digital technologies, the process proceeds based on accurate figures, statistical analysis, forecasts, and modeling. This increases the reliability and effectiveness of decisions.

First of all, information systems and big data technologies play an important role in the field of management. With their help, organizations will be able to collect and process large amounts of data arising from the internal and external environment in real time. For example, data obtained through "smart sensors" in production processes allows management to optimize processes and use resources economically.

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Secondly, artificial intelligence (AI) and machine learning algorithms are widely used in decision-making processes. With the help of these technologies, it is possible to predict market trends, reduce financial risks, and study customer behavior. For example, in the banking system, credit decisions are often made through risk analysis programs developed on the basis of artificial intelligence.

Thirdly, digital modeling and visualization tools make the management process more understandable and clear. With the help of computer simulations, various scenarios are developed, and managers have the opportunity to assess their consequences in advance before making decisions. This process is especially effective in production, logistics, and strategic management.

Fourthly, cloud technologies and blockchain ensure transparency and reliability in the decision-making process. While cloud systems allow remote data management, blockchain technology guarantees the stability of transactions and processes. This situation is relevant in the spheres of finance, healthcare, public administration, and education.

Looking at global experience, in the USA, companies such as Google, Amazon, Microsoft make management decisions based on artificial intelligence and big data. In Germany, the *"Industry 4.0"* concept is widely implementing digital management systems in production. Japan, through the *"Society 5.0"* model, is making digital solutions a priority in all spheres of public life.

In Uzbekistan, within the framework of the *"Digital Uzbekistan–2030"* strategy, e-government systems in public administration are being expanded, and work is underway to expand the range of online services for the population and business entities. For example, the process of making decisions using electronic platforms in the tax and customs systems is transparent and operational. Electronic journals, electronic prescriptions, and telemedicine services have also been introduced in the education and healthcare systems, which contribute to the effective organization of management decisions.

Thus, digital technologies ensure not only efficiency, but also stability, accuracy, and innovative development in the process of making management decisions.

During the study, the influence of digital technologies on the process of making management decisions was deeply analyzed. First of all, it was found that digital technologies significantly increase the speed of decision-making. For example, with the help of real-time information systems, managers can obtain the necessary information in a matter of minutes and make quick decisions based on it. This is of great importance in ensuring the competitiveness of enterprises and organizations.

The second result is that with the help of artificial intelligence and big data technologies, opportunities for deep data analysis and forecasting are emerging. Analysis of Uzbek and foreign experience shows that the use of artificial intelligence yields effective results in such aspects as reducing financial risks, forecasting market trends, and rational use of resources.

The third important aspect is that digital technologies reduce errors caused by the human factor in the decision-making process. Since automated systems are based on accurate calculations, the probability of making incorrect or subjective decisions is significantly reduced.

Fourthly, digital technologies allow managers to visualize decisions and model various scenarios. This makes it possible to foresee the consequences of decisions and choose the most optimal option. It has been proven that such an approach increases efficiency, especially in the field of production, logistics, and education.

In the experience of Uzbekistan, within the framework of the *"Digital Uzbekistan–2030"* strategy, the introduction of e-government in public administration, telemedicine in healthcare, an electronic journal in education, and electronic tax and customs services in the financial system shows the practical results of digital technologies in making management decisions. As can be

seen from the results, digital technologies are becoming a decisive factor in ensuring transparency, reducing unnecessary bureaucratic processes, and increasing the efficiency of decision-making.

Compared to international experience, the German *"Industry 4.0"* model has proven the effectiveness of digital management in production, while the Japanese *"Society 5.0"* concept integrates digital technologies into the decision-making process in all spheres of public life. These experiences are also relevant for Uzbekistan and can serve as a key direction for the modernization of management systems in our country in the future.

Conclusion.

In conclusion, digital technologies have become an integral part of the modern management decision-making process. They not only expand the possibilities of data collection and processing, but also take the processes of analysis, forecasting, and modeling to a new level. Artificial intelligence, big data, cloud technologies, blockchain, and digital simulation make decision-making faster, clearer, and more transparent, while reducing the likelihood of human error and creating conditions for the efficient use of resources.

Global experience shows that countries and companies that have implemented digital transformation in a timely manner are gaining an advantage in global competition. In Uzbekistan, based on the *"Digital Uzbekistan–2030"* strategy, the widespread introduction of digital technologies in the spheres of public administration, economy, education, and healthcare is bringing management decisions to a qualitatively new level.

In the future, it is important to further improve digital management systems in our country, introduce automated decision-making mechanisms based on artificial intelligence, train personnel with modern digital skills, and implement international best practices. After all, the rational use of digital technologies in making management decisions is a guarantee of sustainable development, competitiveness, and innovative growth.

Based on the research findings, several suggestions and recommendations are proposed to further expand the use of digital technologies in decision-making processes. First, it is necessary to organize regular training programs and seminars for managers and specialists on digital technologies, artificial intelligence, and big data management. This will enhance the ability of decision-makers to effectively utilize modern digital tools. Second, decision-making processes in public and private organizations should be integrated into unified digital platforms, with broader access to open data and ensured transparency. Third, in developing digital governance in Uzbekistan, it is advisable to study Germany's *"Industry 4.0"* and Japan's *"Society 5.0"* models and adapt their positive aspects to the national context. Fourth, it is important to strengthen cybersecurity, protect personal and corporate data, promote digital ethics, and improve the legal and regulatory framework. Fifth, within the framework of state programs, supporting startup projects, innovative companies, and scientific research in the field of information and communication technologies is recommended in order to build a strong domestic digital ecosystem. Sixth, the use of artificial intelligence and digital simulation technologies in decision-making should be expanded to enable modeling of various scenarios in advance. The implementation of these suggestions and recommendations will increase efficiency in decision-making, reduce human errors, enhance transparency, and ensure the rational use of resources.

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