

MODERN METHODS OF ENTERPRISE MANAGEMENT IN THE DIGITAL ECONOMY

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Abstract

This article examines modern methods of enterprise management in the context of the digital economy and analyzes their role in improving organizational performance. The rapid development of digitalization has increased the importance of utilizing information and communication technologies, automating business processes, and implementing data-driven management systems in enterprise operations. The study highlights the advantages and practical application of contemporary management approaches such as Agile, Lean Management, Enterprise Resource Planning (ERP), and Customer Relationship Management (CRM) systems. Furthermore, the impact of emerging technologies, including Artificial Intelligence (AI), Big Data, cloud computing, and the Internet of Things (IoT), on enterprise management is investigated. The findings indicate that integrating digital technologies into management processes contributes to cost reduction, increased labor productivity, efficient resource utilization, and enhanced enterprise competitiveness. The article also presents scientific conclusions and practical recommendations regarding the organizational, technological, and human resource factors required for successful digital transformation.

Keywords: Digital economy, enterprise management, digital transformation, artificial intelligence, Big Data, ERP, CRM, Agile, Lean Management, cloud computing, IoT.

Introduction

The rapid development of the digital economy has led to fundamental changes in economic relations, business processes, and management mechanisms. The widespread adoption of modern information and communication technologies has created new forms of organizing and managing enterprise activities. Digitalization processes contribute to improving efficiency in production, marketing, logistics, finance, and human resource management. Therefore, the application of innovative approaches to enterprise management has become one of the most pressing issues of the modern business environment.

In the digital economy, enterprises face the challenges of maintaining competitiveness, adapting to changing market demands, and responding promptly to customer needs. Effective implementation of these tasks requires the adoption of data-driven management, business process automation, and modern software platforms. In particular, Artificial Intelligence (AI),



Big Data analytics, cloud computing technologies, and the Internet of Things (IoT) are enabling enterprise management to reach a qualitatively new level of development.

In recent years, numerous reforms and strategic initiatives aimed at accelerating digital transformation processes within enterprises have been implemented. As a result, the speed and accuracy of managerial decision-making have improved, while resource utilization efficiency has increased. Management systems based on digital technologies not only optimize internal business processes but also enhance interactions with external partners and customers.

Modern enterprise management methods such as Agile, Lean Management, Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and Business Intelligence (BI) systems are being widely adopted. These approaches contribute to increasing organizational flexibility, reducing operational costs, improving production efficiency, and ensuring strategic development. Moreover, the integration of digital technologies into management processes has become a key factor in strengthening the long-term sustainability and international competitiveness of enterprises.

Results

The results of the study indicate that the application of modern digital technologies and management approaches in the context of the digital economy significantly enhances enterprise performance and operational efficiency. In particular, the implementation of Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Agile, and Lean Management methodologies contributes to the optimization of management processes, reduction of operational costs, and improvement in the speed and quality of managerial decision-making. Furthermore, the use of Artificial Intelligence (AI) and Big Data technologies enables enterprises to accurately forecast market demand, analyze consumer behavior, and respond effectively to customer needs. These technologies support data-driven decision-making, improve resource allocation, and strengthen the overall competitiveness of enterprises in a rapidly changing business environment.

Table 1.1. The impact of digital management methods on enterprise performance

Management Method	Main Function	Expected Outcome
ERP System	Resource management	Reduction of operational costs
CRM System	Customer relationship management	Increased customer loyalty
Agile	Flexible management approach	Faster decision-making processes
Lean Management	Waste reduction	Waste reduction
Big Data	Data analysis and processing	Enhanced quality of strategic decisions
Artificial Intelligence	Process automation	Increased labor productivity



As shown in table 1.1, each modern management method contributes to the development of specific aspects of enterprise performance. In particular, ERP and CRM systems enable organizations to effectively manage their resources and customer relationships. Agile and Lean Management approaches enhance organizational flexibility and help reduce unnecessary costs, thereby improving overall operational efficiency and competitiveness.

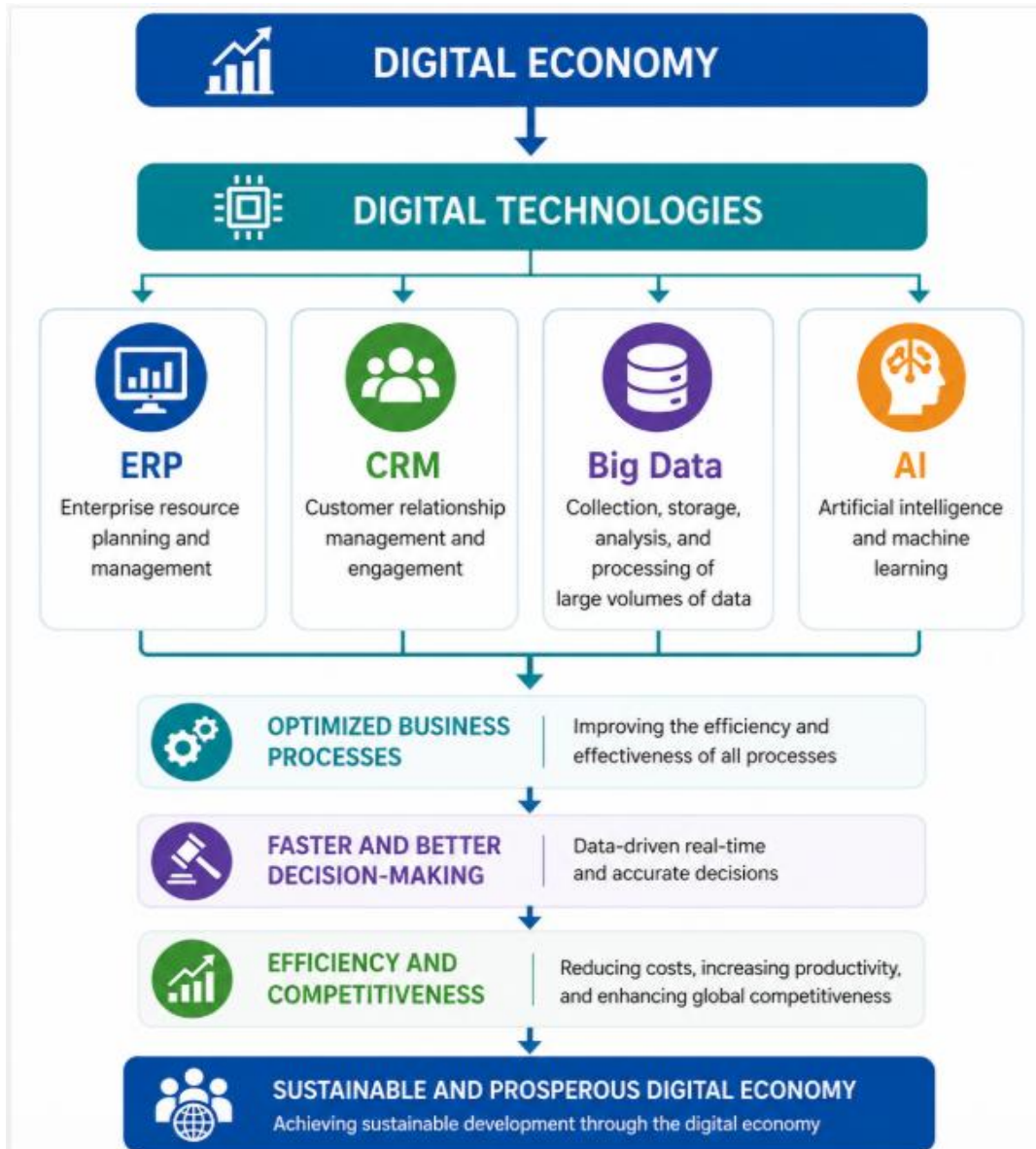


Figure 1.1. Conceptual framework of digital management in enterprises under the digital economy.

The obtained results indicate that the implementation of digital management technologies in enterprises ensures greater transparency in management processes, improves production and service delivery operations, and supports the strategic development of organizations. Furthermore, management systems based on digital technologies enhance the innovative capacity of enterprises and enable them to respond rapidly to changes in market conditions.



Therefore, the adoption of modern management approaches in the context of the digital economy is considered a key factor for ensuring sustainable enterprise development.

Discussion

The findings of the study demonstrate that modern digital technologies and innovative management approaches significantly improve enterprise performance in the context of the digital economy. Management systems such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Agile, and Lean Management facilitate process integration, efficient resource utilization, and rapid managerial decision-making. In addition, systems based on Big Data, Artificial Intelligence (AI), and cloud computing technologies provide enterprises with substantial advantages in forecasting, data analysis, and strategic decision-making.

However, the implementation of these technologies in practice is associated with several challenges. One of the major obstacles is the insufficient development of digital infrastructure, which slows down transformation processes in some enterprises. Furthermore, the shortage of qualified IT specialists limits the effective utilization of modern management systems. Information security and data protection also remain critical concerns, as digital systems are highly vulnerable to cyber threats and cybersecurity risks.

The analysis revealed that ERP and CRM systems contribute to the effective management of both internal and external business processes, while Agile and Lean Management approaches enhance organizational flexibility and reduce unnecessary costs. Artificial Intelligence and Big Data technologies enable enterprises to implement data-driven decision-making processes, thereby improving management effectiveness and strategic planning.

In the future, enterprise management in the digital economy is expected to become increasingly automated and based on intelligent systems. This transformation will contribute to strengthening enterprise competitiveness, improving resource efficiency, and ensuring sustainable organizational development.

Conclusion

The results of this study confirm that modern enterprise management methods play a decisive role in improving organizational performance in the digital economy. Digital transformation processes are fundamentally reshaping management systems, making them more responsive, flexible, and data-driven. In particular, management approaches such as ERP, CRM, Agile, and Lean Management contribute to the optimization of internal business processes and ensure the efficient utilization of organizational resources.

Innovative technologies, including Artificial Intelligence (AI), Big Data, cloud computing, and the Internet of Things (IoT), expand the strategic management capabilities of enterprises, enabling them to adapt rapidly to market changes and strengthen their competitive position. At the same time, the successful implementation of these technologies requires the development of digital infrastructure, enhancement of human capital, and the establishment of robust information security measures.

Overall, the adoption of modern management methods in the digital economy ensures sustainable enterprise development, improves operational efficiency, and supports organizations in achieving a strong position within the global competitive environment.



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