



DIGITAL MANAGEMENT MODEL AS A MANAGEMENT TOOL FOR DIGITAL TRANSFORMATION IN INDUSTRIAL SECTORS

Xamidova Shoxidaxon Baxtiyarovna,

1st-year basic doctoral student at the

Andijan State Technical Institute

xamidovashohidaxon5@gmail.com

<https://orcid.org/0009-0009-4750-4795>

Article history:	Abstract:
Received: 28 th July 2026 Accepted: 26 th August 2026	This article is devoted to the theoretical and practical study of the digital management model aimed at increasing the efficiency of managing digital transformation processes implemented in industrial sectors. It examines current trends and challenges of introducing digital transformation at industrial enterprises, the structural components, principles of the digital management model, and mechanisms for its integration into the management system, as well as scientific and methodological proposals and recommendations for the practical application of the developed model. This topic is of significant importance for the scientific substantiation of processes aimed at ensuring the competitiveness of industrial sectors, the rational use of resources, and adaptation to the requirements of the digital economy.

Keywords: Scattered, management concept, strategy, model, information and communication, maturity level.

МОДЕЛЬ ЦИФРОВОГО МЕНЕДЖМЕНТА КАК УПРАВЛЕНЧЕСКИЙ ИНСТРУМЕНТ ЦИФРОВОЙ ТРАНСФОРМАЦИИ В ПРОМЫШЛЕННЫХ ОТРАСЛЯХ

Хамидова Шохидахон Бахтияровна,

базовый докторант 1-го курса

Андижанского государственного

технического института

xamidovashohidaxon5@gmail.com

<https://orcid.org/0009-0009-4750-4795>

Ключевые слова: Разрозненный, концепция менеджмента, стратегия, модель, информационно-коммуникационные, уровень зрелости.

Аннотация. Данная статья посвящена теоретическому и практическому исследованию модели цифрового менеджмента, направленной на повышение эффективности управления процессами цифровой трансформации, осуществляемыми в промышленных отраслях. В ней рассматриваются современные тенденции и проблемы внедрения цифровой трансформации на промышленных предприятиях, структурные компоненты, принципы модели цифрового менеджмента и механизмы ее интеграции в систему управления, а также научно-методические предложения и рекомендации по практическому применению разработанной модели. Данная тема имеет важное значение для научного обоснования процессов обеспечения конкурентоспособности промышленных отраслей, рационального использования ресурсов и адаптации к требованиям цифровой экономики.

SANOAT TARMOQLARIDA RAQAMLI TRANSFORMATSIYANING BOSHQARUV VOSITASI SIFATIDA RAQAMLI MENEJMENT MODEL

Xamidova Shoxidaxon Baxtiyarovna,

Andijon davlat texnika instituti



1-bosqich tayanch doktoranti
xamidovashohidaxon5@gmail.com
<https://orcid.org/0009-0009-4750-4795>

Annotatsiya: Mazkur maqolada sanoat tarmoqlarida amalga oshirilayotgan raqamli transformatsiya jarayonlarini boshqarish samaradorligini oshirishga qaratilgan raqamli menejment modelini nazariy va amaliy jihatdan tadqiq etishga bag'ishlangan. Sanoat korxonalarida raqamli transformatsiyani joriy etishning zamonaviy tendentsiyalari va muammolari, Raqamli menejment modelining tarkibiy qismlari, tamoyillari va uni boshqaruv tizimiga integratsiyalash mexanizmlari, Ishlab chiqilgan modelni amaliyotga tatbiq etish bo'yicha ilmiy-uslubiy takliflar va tavsiyalar. Ushbu mavzu sanoat tarmoqlari raqobatbardoshligini ta'minlash, resurslardan oqilona foydalanish va raqamli iqtisodiyot talablariga moslashish jarayonlarini ilmiy asoslashda muhim ahamiyat kasb etadi.

Kalit so'zlar: Tarqoq, menejment konsepsiyasi, strategiya, model, axborot-kommunikatsiya, yetuklik darajasi.

INTRODUCTION: In the modern global economy, the rapid development of digital technologies has fundamentally transformed traditional economic systems, making digital transformation a key driver of sustainable development. For industrial sectors, which serve as the backbone of the national economy, transitioning to digital management models is no longer just a competitive advantage, but a critical necessity. The integration of advanced technologies—such as big data analytics, artificial intelligence, automation, and the Internet of Things (IoT)—requires a complete overhaul of traditional management paradigms.

However, introducing digital transformation into industrial enterprises often brings complex challenges, ranging from infrastructural limitations to structural rigidity within management systems. Therefore, developing a comprehensive and effective digital management model is vital for optimizing production processes, ensuring efficient resource allocation, and strengthening the competitiveness of industrial sectors in the digital era. This article explores the theoretical foundations and practical mechanisms of implementing such a model to bridge the gap between traditional industrial management and modern digital demands.

To date, the topic of digital management has been addressed in the works of not only local researchers, but also foreign scientists. Of these, T. V. Aleksandrova[1], V. G. Antonov[2], Gartner[3], McKinsey[4].

The concept of digital management is viewed both as a separate, new section of management science and as a predictable transformation of general management, since a modern enterprise cannot compete in the market and successfully realize its advantages without using new technologies.

The implementation of digital management implies an effective combination of existing resources and targeted financial investments directed toward digital technologies. Combining existing assets with new information and communication developments should be carried out as beneficially as possible for the transformation of business processes and changes in enterprise operations. Digital management is aimed at

solving such challenges of implementing digital transformation as: increasing the company's digital maturity level; eliminating elements of fragmented digitalization; organizing the process of personnel adaptation to digital tools; and ensuring that the technologies used align with the strategic goals of the enterprise.

THE PURPOSE OF THE STUDY: To develop a scientific and methodological framework as well as practical recommendations for a digital management model aimed at enhancing the efficiency of digital transformation processes in industrial sectors, optimizing resource allocation, and strengthening industrial competitiveness.

MATERIALS AND METHODS OF THE STUDY:

During the research process, data from the Statistics Agency of the Republic of Uzbekistan, reports from international and local analytical centers (including Gartner and McKinsey), statistical and annual indicators related to the digital transformation processes of industrial enterprises, as well as scientific and theoretical literature published in the field, were used as the main materials.

RESULTS AND DISCUSSION: An analysis of digital transformation management processes in industrial sectors shows that digitalization efforts in many enterprises are still not systematic, but rather implemented in a fragmented and piecemeal manner (patchwork digitalization). This situation creates discrepancies between technological solutions and strategic goals, sharply reducing the efficiency of invested capital. The digital management model proposed in this study is specifically aimed at overcoming these problems, and as a new and promising direction in management science, it ensures the following important outcomes:

STRATEGIC ALIGNMENT: Creates the basis for the complete transformation of enterprise operations by harmonizing existing production assets and resources



with modern information and communication technologies and digital tools.

ENHANCING MATURITY LEVEL: Enables the accurate assessment of companies' digital maturity levels and provides the opportunity to raise them step-by-step.

MANAGEMENT OF THE HUMAN FACTOR: Provides organizational support for employees' adaptation process to new digital tools, which reduces resistance to technological changes.

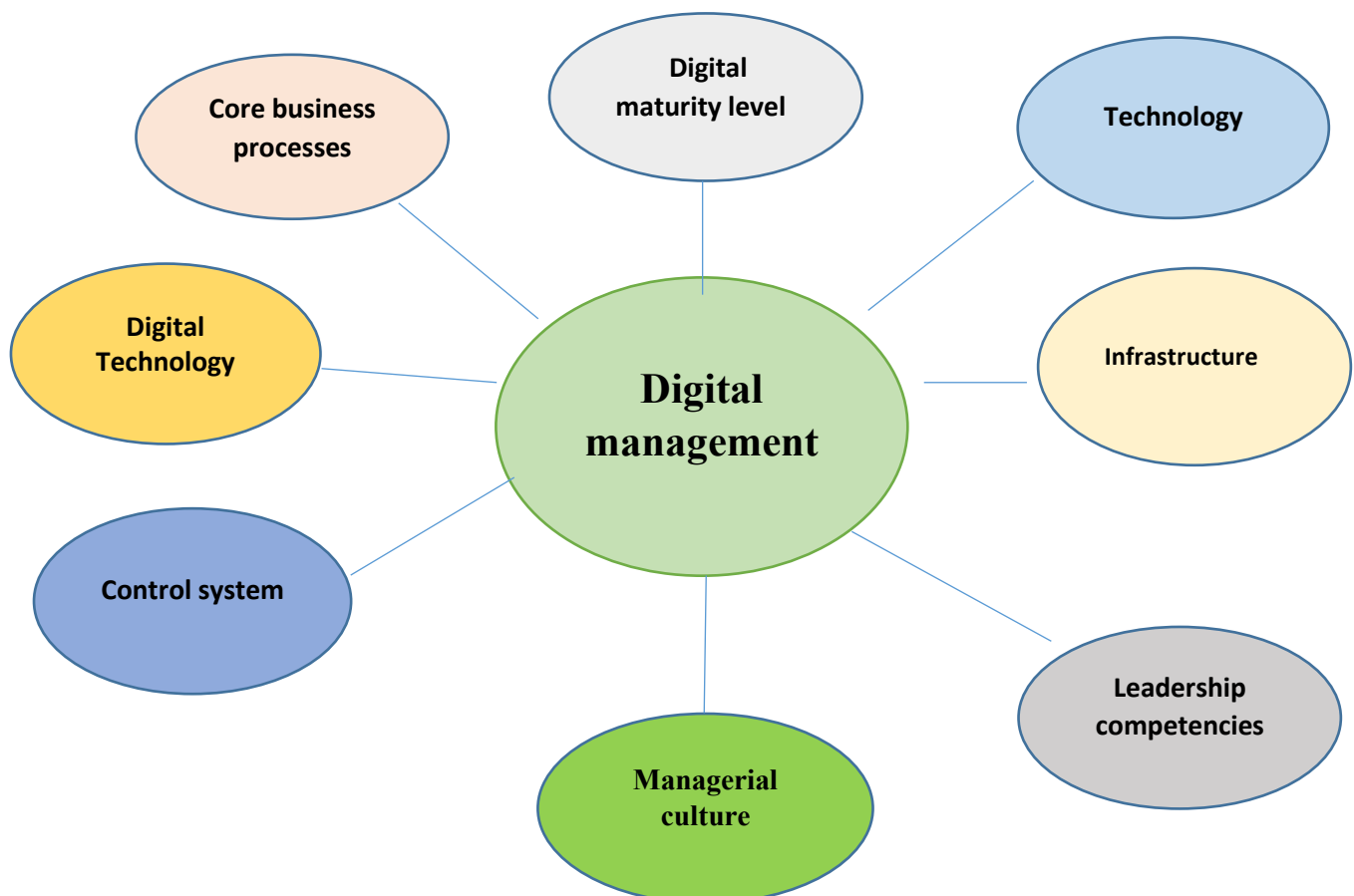
The proposed digital management model provides a foundation for subsequent research. Based on the type of organization intended for implementation, the author highlights three distinct digital management

frameworks: industrial enterprises, project and project-oriented organizations, and small and medium-sized enterprises (SMEs). Each model holds substantial academic potential and calls for dedicated further investigation and approbation, thereby defining the future vector of the author's scientific endeavors[5].

The product value-based digital management model implies describing the process of implementing digital management on the basis of a manufacturing enterprise or an enterprise whose competitive advantages are based on the characteristics of the finished product.

In this case, digital technologies are aimed at improving the product and its characteristics, as well as increasing its value for consumers, partners, and the enterprise itself—represented by employees and top management.

Figure 1- Product value-based digital management model in industrial sectors.





The proposed model enables enterprises to optimize internal resources, adapt swiftly to market changes, and more fully satisfy consumer demands.

It was substantiated that the use of digital technologies in the management of industrial sectors is not merely about automating processes, but rather about rethinking the entire product value chain and elevating it to a new level.

The step-by-step implementation of this model into the practice of industrial sectors enhances the digital maturity level of enterprises, strengthens their competitiveness in domestic and foreign markets, and serves as a robust theoretical and practical foundation for future scientific research.

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