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IMPROVING THE HUMAN CAPITAL MANAGEMENT MECHANISM IN INDUSTRIAL AND SERVICE ENTERPRISES IN THE CONTEXT OF THE DIGITAL ECONOMY

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Abstract:
This article examines the improvement of human capital management mechanisms in industrial and service enterprises under the conditions of the digital economy. The development of digital technologies, automation, artificial intelligence, and data-driven management systems is significantly changing the nature of work and the requirements for employees. In this context, human capital is becoming one of the most important strategic resources for ensuring enterprise competitiveness, productivity, and sustainable development. The article analyzes the theoretical foundations of human capital management, identifies the main challenges faced by industrial and service enterprises during digital transformation, and proposes practical directions for improving personnel management mechanisms. Particular attention is paid to digital competencies, continuous professional development, employee motivation, performance assessment, and the integration of digital technologies into human resource management. The study concludes that an effective human capital management system should combine technological innovation with employee development, organizational flexibility, and strategic planning.

Keywords: digital economy, human capital, human resource management, industrial enterprises, service enterprises, digital transformation, digital skills, employee development, labor productivity, personnel management.

INTRODUCTION

The rapid development of the digital economy has become one of the most significant factors influencing the transformation of modern economic relations. Digital technologies are changing production processes, business models, organizational structures, and management systems. Industrial and service enterprises are increasingly adopting automation, artificial intelligence, cloud computing, big data analytics, and digital platforms to improve operational efficiency and strengthen their competitive positions.

In these circumstances, human capital plays a decisive role in the successful implementation of digital transformation. Although modern technologies can automate many routine operations, their effective application requires qualified employees who possess professional knowledge, digital competencies, analytical thinking, creativity, and the ability to adapt to changing working conditions.

Human capital includes the knowledge, skills, professional experience, abilities, health, and personal characteristics of employees that contribute to economic productivity and organizational development. Unlike traditional production resources, human capital can continuously increase in value through education, professional training, practical experience, and innovation.

For industrial enterprises, the development of human capital is directly connected with technological modernization, production automation, quality improvement, and the efficient use of equipment. In service enterprises, employee competencies determine the quality of customer service, communication, operational flexibility, and customer satisfaction.

Therefore, improving human capital management mechanisms has become an important strategic task for enterprises operating in the digital economy. Traditional approaches based mainly on administrative control and formal personnel procedures are no longer sufficient. Modern enterprises need integrated management systems that combine digital technologies, continuous employee development, performance assessment, motivation, and strategic workforce planning.

The purpose of this article is to analyze the specific features of human capital management in industrial and service enterprises and to develop recommendations for improving its mechanisms in the context of the digital economy.

THEORETICAL FOUNDATIONS OF HUMAN CAPITAL MANAGEMENT

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The concept of human capital has developed through the works of prominent economists and researchers. One of the major contributors to this theory was Theodore W. Schultz, who emphasized the economic importance of investment in education, health, and professional skills. According to his approach, investments in people contribute to the growth of productivity and national economic development [1].

Gary S. Becker further developed the theory by explaining how education, professional training, and work experience influence individual productivity and income. He considered human capital investment an important factor in economic growth and the efficient allocation of resources [2].

In modern management theory, human capital is viewed not only as a collection of employee qualifications but also as a strategic organizational resource. Employees generate value through their knowledge, creativity, innovation, communication skills, and ability to solve complex problems.

In the digital economy, the content of human capital is expanding. Alongside traditional professional knowledge, employees increasingly need digital literacy, data analysis skills, technological awareness, cybersecurity knowledge, and the ability to work with digital management systems.

Human capital management refers to a systematic process of attracting, developing, motivating, evaluating, and retaining employees in order to achieve organizational objectives. Its main components include:

- workforce planning and recruitment;
- employee adaptation and professional development;
- assessment of knowledge, skills, and competencies;
- motivation and performance management;
- career planning and talent development;
- employee engagement and retention;
- digitalization of human resource management processes.

An effective human capital management system should ensure that the professional capabilities of employees correspond to the strategic goals and technological requirements of the enterprise.

The digital economy also changes the relationship between employers and employees. Flexible working arrangements, remote collaboration, digital communication, and continuous learning are becoming increasingly important. As a result, human capital management must become more flexible, analytical, and innovation-oriented.

RESEARCH METHODOLOGY

The research is based on a combination of theoretical analysis, comparative analysis, systematization, and generalization methods. These methods make it possible to examine the relationship between digital transformation and human capital management in industrial and service enterprises.

The theoretical analysis method is used to study scientific approaches to human capital, personnel management, and digital transformation. Comparative analysis helps identify the differences between human capital management requirements in industrial and service enterprises.

The system approach is applied to consider human capital management as an interconnected process consisting of recruitment, professional development, motivation, performance evaluation, and employee retention. Generalization is used to formulate recommendations for improving the management mechanism.

The research also considers the practical implications of digital technologies for enterprise management. Particular attention is paid to human resource management information systems, digital learning platforms, electronic personnel records, competency assessment tools, and data-based decision-making.

The proposed recommendations are conceptual and methodological in nature. Their practical effectiveness should be assessed through implementation and evaluation in specific enterprises, taking into account their size, industry, technological level, and organizational structure.

Table 1. Main directions for improving human capital management

Management direction	**Industrial enterprises**	**Service enterprises**
Digital competencies	Working with automated equipment and production software	Using digital platforms and customer management systems
Professional development	Technical training and engineering skills	Communication and customer service training
Performance assessment	Productivity, product quality, and safety indicators	Service quality and customer satisfaction

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Motivation	Performance-based incentives and professional growth	Recognition, career development, and employee engagement
Digital management	Production and personnel monitoring systems	Digital personnel platforms and service management systems

Source: Developed by the authors based on the theoretical analysis.

An important element of the proposed mechanism is the integration of human capital management with the overall digital development strategy of the enterprise. Personnel decisions should not be separated from investment planning, technological modernization, and organizational development.

The implementation of this mechanism can be organized through several consecutive stages.

Stage 1. Assessment of existing human capital. The enterprise evaluates employees' professional qualifications, experience, digital literacy, and competency levels.

Stage 2. Identification of future competency requirements. Management determines which skills and professional qualifications will be necessary for the implementation of new technologies and business processes.

Stage 3. Development of employee training programs. Individual and group training plans are created based on identified competency gaps.

Stage 4. Digitalization of personnel management. Digital platforms and information systems are introduced to improve recruitment, training, performance evaluation, and workforce planning.

Stage 5. Monitoring and evaluation. The enterprise regularly measures the results of human capital development and adjusts management decisions according to the findings.

This approach creates a continuous management cycle in which employee development is connected with enterprise performance and long-term competitiveness.

EXPECTED RESULTS AND PRACTICAL IMPLICATIONS

The improvement of human capital management mechanisms can contribute to several positive organizational outcomes.

First, systematic employee training can strengthen professional qualifications and improve the ability of workers to use modern technologies. This is particularly important for industrial enterprises implementing automated production systems and service enterprises adopting digital customer interaction platforms.

Second, digital personnel management systems can reduce the time required for administrative operations and improve the accuracy of workforce information. This allows managers to make more informed decisions regarding recruitment, employee development, and personnel allocation.

Third, transparent performance evaluation can strengthen employee responsibility and create a closer relationship between individual contributions and organizational objectives.

Fourth, effective motivation and career development systems can improve employee engagement and help enterprises retain qualified specialists.

Finally, the integration of human capital management with digital transformation strategies can increase organizational flexibility and support innovation.

However, these results are not automatic. Their achievement depends on the quality of management decisions, the availability of financial resources, the technological readiness of the enterprise, and the willingness of employees to participate in continuous learning.

For enterprises in Uzbekistan, these issues are particularly relevant due to the ongoing digital transformation of economic sectors and the need to strengthen the competitiveness of domestic production and services. The implementation of digital technologies should therefore be accompanied by investments in education, professional training, and the development of modern management competencies.

CONCLUSION AND RECOMMENDATIONS

The analysis demonstrates that human capital is one of the most important strategic resources for industrial and service enterprises in the digital economy. Technological modernization alone cannot guarantee sustainable development unless enterprises have qualified, motivated, and adaptable employees who can use new technologies effectively.

The improvement of human capital management mechanisms should be based on an integrated approach that combines digitalization, competency development, employee motivation, performance assessment, and strategic workforce planning.

REFERENCES

1. Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1), 1–17.
2. Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 3rd ed. Chicago: The University of Chicago Press.

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3. Davenport, T. O. (1999). *Human Capital: What It Is and Why People Invest It*. San Francisco: Jossey-Bass.
4. World Bank. (2019). *World Development Report 2019: The Changing Nature of Work*. Washington, DC: World Bank.
5. OECD. (2019). *OECD Skills Strategy 2019: Skills to Shape a Better Future*. Paris: OECD Publishing.
6. Schwab, K. (2016). *The Fourth Industrial Revolution*. Geneva: World Economic Forum.
7. International Labour Organization. (2021). *The Role of Digital Labour Platforms in Transforming the World of Work*. Geneva: ILO.
8. Ministry of Digital Technologies of the Republic of Uzbekistan. *Digital Uzbekistan – 2030 Strategy*. Official materials of the Republic of Uzbekistan.