UDC 331.5

N. A. Lukashuk PhD, Associate Professor;
Qu Ruozhang, MS's student (BSTU, Minsk)

DIGITAL TECHNOLOGIES IN HR MANAGEMENT: ESSENCE AND ECONOMIC EFFECT

With the development of technologies such as BigData and artificial intelligence, the digital transformation of enterprises is accelerating, and human resource management is shifting from traditional administrative functions to digitalization and intelligence, improving efficiency while creating economic value.

In the process of promoting digital transformation of human resources, enterprises face many challenges such as data privacy protection, system integration, and employee change resistance, which need to be properly addressed.

There are four types of organizations depending on the level of digitalization of the strategy and business operations [1].

In the first, analogue, the potential for digitalization does not cover either the strategic or the current activities of the company.

In the second case – digital organization I (operational application) – the application area of the digitalization is only limited to the management of operational processes to increase their speed and quality, as well as to reduce costs.

The third type, digital organization II (strategic compliance), involves the coordination of technological capabilities with the strategic goals of the organization, and digitalization covers all business operations and part of the company's strategy.

In the last type, digital organization III (strategic integration), technologies are directly integrated into the strategy development process, and digital potential is used to find new directions for business development [1, 2].

We can give the essential characteristics of digital technology in human resource management.

Automation and process optimization. Automated tools can handle repetitive tasks such as salary, recruitment, and onboarding. For example, artificial intelligence recruitment platforms can quickly screen resumes and conduct preliminary interviews, reducing the administrative burden on human resources departments and improving work efficiency.

Simplify repetitive tasks. After the introduction of automation in enterprises, the human resources department can devote more time and energy to strategic tasks such as talent planning and employee development, improving overall management efficiency.

Data analysis and decision support provide in-depth insights and precise decision-making. By collecting and analyzing employee data such as performance, attendance, training records, etc., companies can gain in-depth insights, predict employee turnover risks, develop retention strategies in advance, and reduce employee turnover rates.

Data analysis optimizes human resource planning, accurately allocates talent resources, such as predicting and arranging personnel reasonably based on business needs, improving overall operational efficiency, and enhancing enterprise competitiveness.

The Economic Effects of Digital Technology in Human Resource Management we can evaluate in:

a) shorten recruitment cycle and optimize configuration:

– automated recruitment process shortens the recruitment cycle, quickly fills key positions, and reduces job vacancy losses;

– data analysis optimizes human resource allocation and improves employee work efficiency.

b) reduce manpower and maintenance costs:

– automated tools reduce reliance on manual labor and lower labor costs.

c) improve recruitment quality and reduce turnover costs:

– artificial intelligence recruitment platforms efficiently screen candidates and improve recruitment quality;

– data analysis identifies the risk of resignation in advance, develops retention strategies, and reduces turnover costs.

Research on Chinese SMEs has found that companies adopting digital human resource practices significantly improve productivity and employee satisfaction, with a 20% increase in productivity and a 30% increase in employee satisfaction for a certain company.

Data analysis and employee engagement platforms improve human resource management efficiency, create economic value, and demonstrate the importance of digital technology in small and medium-sized enterprises.

Digital technologies in HR management can solve some problems:

1. Data Privacy and Security:

– enterprises need to ensure that data collection, storage, and processing comply with laws and regulations to prevent data leakage and abuse;

– regularly conduct data security audits, such as once every quarter, to promptly identify and resolve security risks and ensure employee data security.

2. Future development direction:

– in the future, artificial intelligence and machine learning will optimize human resource processes and provide precise decision support, such as intelligent talent matching systems;

– enterprises will pay more attention to enhancing employee engagement and satisfaction through digital technology, such as creating personalized employee experience platforms to meet employee needs.

In short, the reasons of digital technologies development in HR management can be mentioned as

important components and challenges to be addressed. The application of digital technology in human resource management is an important component of enterprise digital transformation, optimizing processes through various means and creating economic value.

Enterprises need to address challenges such as resistance to change, data privacy, and system integration, actively embrace digital technology, formulate reasonable strategies, and enhance competitiveness and sustainable development capabilities.

continuous innovation and adaptation to change. With the continuous advancement of technology, enterprises should continue to pay attention to the application of new technologies such as artificial intelligence and big data in human resource management, and explore innovative practices.

Adapt to changes, flexibly adjust human resource strategies to cope with market fluctuations, changes in employee demand, etc., to ensure the long-term stable development of the enterprise.

promote industry transformation and development. The successful application of digital technology by enterprises can set a benchmark for the industry, promote the transformation of the human resources management industry, and enhance overall efficiency and competitiveness.

Promote knowledge sharing and cooperation, share experiences through industry associations, seminars, and other forms, jointly explore the best practices of digital technology in human resource management, and promote industry development.

LITERATURE

1. Strohmeier S. Digital human resources management: A conceptual clarification. Germ. J. of Hum. Res. Manag.: Zeitschrift für Personalforschung. – 2020. №34(3). – 3.345-365. – URL:

2. https://www.researchgate.net/publication/341524062_Digital_human_resource_management_A_conceptual_clarification (date of access 12.01.2025)

3. Chaplaev H., Mazhiev K., Idigova L. Use of digital technologies in human resources management // SHS Web of Conferences 164. 2023. – P. 1–5.