

DOI <https://doi.org/10.30525/978-9934-26-459-7-114>

DIGITALIZATION OF HUMAN CAPITAL MANAGEMENT: EFFICIENCY ISSUES

Jelena Tonova

ISMA University of Applied Sciences

Riga, Latvia

**Corresponding author's e-mail: Jelenatonova@gmail.com
orcid.org/0009-0002-3770-387X*

Abstract. The purpose of this work is the theoretical and practical substantiation a conceptual scheme for a successful digital human capital management system to increase efficiency, which consists of four stages: Organizing digital human capital management; Improving the efficiency of human capital management; Information accumulation. Building connections. Within the framework of the proposed system, it is possible to visualize the impact of HRM digitalization on the company's competitiveness.

Key words: *digitalization, human capital, digital technologies, HCM processes, HR technologies, effectiveness.*

Human capital is a key resource for both successful economic activity and for the implementation of change and innovation. This has a positive impact on the efficiency of production and competitiveness of the enterprise, and, in turn, has a positive relationship with the development opportunities of the economy. The transition to a digital HR paradigm helps enterprises more effectively and consistently optimize human resources using social, mobile, analytical, cloud and other technologies.

The use of digital technology in various business applications has altered how we work and how organisations manage their personnel [1]. Human resource practices specialists and academics are currently paying attention to contemporary digital technology such as cloud IT systems, artificial intelligence (AI), web platforms, and search engines because they are numerous, complex, impermanent, and highly interdependent on one another [2]. An increase in the use of automated, algorithmic workforce management approaches raises questions about their potential to reduce human bias and provide people who are engaged in algorithmic decision-making with a welcome and sustainable work environment [3].

The digital format of economic relations is focused on the transformation of all spheres of life, and its priority areas are the use and processing of large amounts of information, the introduction of digital technologies, and a new approach to human capital management, which contributes to improving the quality of products and services, the efficiency of economic systems, and the competitiveness of the country as a whole.

Digitalization differs from digital transformation, which is defined as the ability to convert available products and services into a digital format that provides a greater advantage than a physical product [4]. Thus, digital technologies already at the introduction stage not only contribute to cost savings, but also improve the customer service process and the internal management system.

The relationship between digital technologies and human resource management is a key aspect of modern business. Modern HR practices actively use remote work, which affects the level of stress, well-being and satisfaction of employees. The use of digital technologies is also changing working conditions in business, in particular in retail, which has benefited from the development of e-commerce. The main drivers of improving working conditions are the automation of HR processes, the implementation of AI, changes in personnel policies and labor market dynamics. They have an impact in the following ways:

- help streamline work processes;
- automate personnel functions;
- contribute to more rational human resource management etc.

Based on our research, we propose a conceptual scheme for a successful digital human capital management system to increase efficiency, which consists of four stages (Fig. 1):

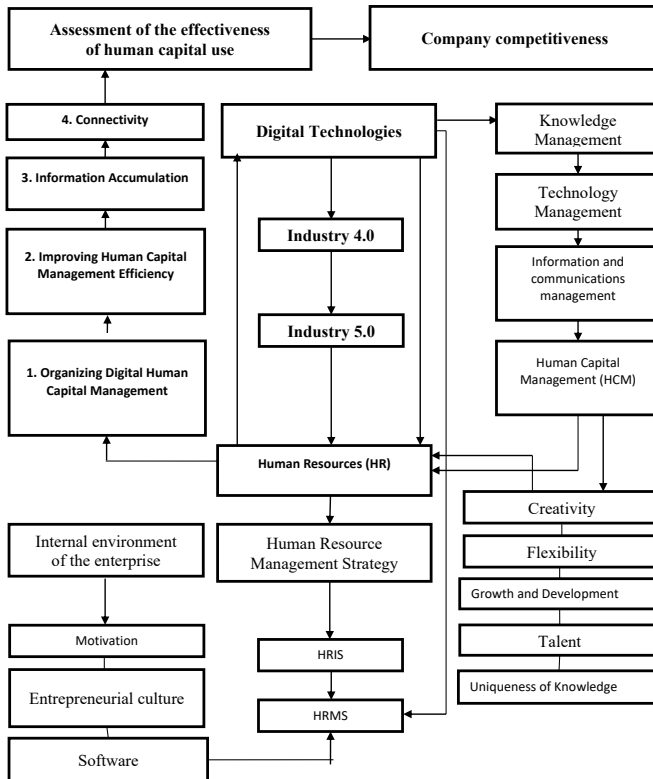


Fig. 1. Conceptual diagram of a digital human capital management system.

1. Organizing digital human capital management. At this stage, enterprises invest in talent and create technology platforms that effectively manage HR processes (usually through existing HR technology providers).

2. Improving the efficiency of human capital management. At this stage, digital technologies are used to improve methods of working with people, training, performance management, team communication, etc.

3. Information accumulation. At this stage, the necessary information is collected to influence business efficiency. Internal data is combined with external data, becomes as accessible as possible, and HR analytics generates important information for effective operations.

4. Building connections. Finally, digital human capital management is used to connect people, and digital technologies provide the opportunity to enhance a sense of team ownership and participation in the successful achievement of end results.

The capabilities inherent in digital technologies allow a company to respond very quickly to changes occurring in the external and internal environment. For example, data analysis can help companies identify areas of activity in which employee engagement is low, which allows them to develop targeted initiatives to address this problem in a timely manner. At the same time, using data analysis, which calculates the forecast values of human resource losses, regulates the consistency of human capital management policies with the overall development strategy of the company, which ultimately helps it to adapt to changes faster and adapt, as well as make informed decisions regarding human resource management.

Digital technologies are highly effective for human capital management not only at the organizational level but also at the macro level. They make decisions in the areas of employment [5], vocational education development [6] and even social security [7] faster, more accurate and more useful.

Despite the presence of a significant amount of scientific work on the impact of digital technologies on human capital management, the direct connection between digital technologies, HCM practices and efficiency remains insufficiently researched. I consider this my task for further work.

References

1. Kochling, M.C. Wehner, J. Warkocz, Can I show my skills? Affective responses to artificial intelligence in the recruitment process, *Review of Managerial Science* (2022) 0123456789, <https://doi.org/10.1007/s11846-021-00514-4>.
2. D. Myllymaki, Beyond the 'e-' in e-HRM: integrating a socio-material perspective, *Int. J. Hum. Resour. Manag.* 32 (12) (2021) 2563–2591, <https://doi.org/10.1080/09585192.2021.1913624>.
3. C.E. Connelly, C. Fieseler, M. Cerne, S.R. Giessner, S.I. Wong, Working in the digitized economy: HRM theory & practice, *Hum. Resour. Manag. Rev.* 31 (1) (2021) 1–7, <https://doi.org/10.1016/j.hrmmr.2020.100762>.
4. Heavin C., Power DJ. Challenges for digital transformation—towards a conceptual decision support guide for managers. *Journal of Decision Systems*, 2018, 27(1), 38–45. DOI: 10.1080/12460125.2018.1468697.

5. Azmuk N., Grishnova O., Kuklin O. (2022). Digital employment: Ukraine's ranking in the global division of digital labour. *Financial and credit activity problems of theory and practice*, 2(43), 380-391.

6. Kalenyuk, I., Grishnova, O., Tsymbal, L., & Djakons, D. (2021). Features of result based financing higher education. «*Вестник НАН РК*», (2), 50-57.

7. Kharazishvili, Y., Grishnova, O., & Kamińska, B. (2019). Standards of living in Ukraine, Georgia, and Poland: identification and strategic planning. *Virtual Economics*, 2(2), 7-36.

Author

Jelena Tonova, 28.08.1985, Latvia

Current position: PhD student,

University studies: ISMA University of Applied Sciences.
Riga, Latvia

Scientific interest: human capital; digitalization, digital technologies, HR technologies, effectiveness

Publications: 2 publications

Experience: 13 years business, teaching and scientific activity