

3.1

DIGITAL HR AS AN INNOVATIVE TOOL FOR PERSONNEL MANAGEMENT IN ORGANIZATIONS AGAINST THE BACKGROUND OF CONTEMPORARY ISSUES AND CHANGES

Valentina Voronkova, Alla Cherep, Liudmyla Oleynikova, Oleksandr Cherep

ABSTRACT

Digital HR continues to be relevant and even becomes a still more core element of personnel management in organizations against the background of constant change. The consequences and impact of constant change such as technological innovation, demographic change, economic turbulence and globalization establish new challenges for HR management. Digital HR tools make it possible for organizations to easily scale up or scale down their HR processes depending on their necessities. They can be conveniently configured to respond to any changes in the company's scope of work or strategy. Digital HR platforms can support employee engagement and involvement, even in remote or distributed work environments. This is especially essential in environments where employees may work in different geographic locations or at different times. Constantly changing conditions often require a deep understanding of data to make informed management decisions. Digital HR systems provide tools to collect, analyze and use HR data to make effective strategic decisions. Constantly changing conditions may require constant updating of skills and competencies of employees. Digital HR tools can help keep and develop talents by providing access to learning resources, planning individual learning and development programs, and tracking learning progress. Therefore, digital HR remains a relevant and essential personnel management tool against the background of constant change, giving organizations the opportunity to effectively adapt to new challenges and support competitiveness.

KEYWORDS

Digital HR, technological innovation, personnel management, employee engagement, HR data analysis, competitiveness, strategic decisions.

Digital technologies make it possible to automate and optimize many processes in the area of personnel management, which ensures a quick response. Business environment changes rapidly, and organizations need to respond quickly to these changes. Digital HR makes it possible to introduce new tools and modify HR processes quickly and efficiently to satisfy changes in the business environment. Digital HR forwards the most important tasks and priority issues in personnel management, which is especially important under the conditions of limited resources and a competitive environment [1].

In a competitive environment, involvement and keeping talents is a crucial task. Digital HR can provide innovative tools to involve and keep the best staff members, such as staff development, mentoring programs and individualized career development plans. Against the background of constant changes, it is particularly important to ensure the security and confidentiality of personal data of employees. Digital HR makes it possible to implement data security arrangements and control access to confidential information. Constantly changing conditions can result in stress and uncertainty among employees. Digital HR can provide tools to support work relationships, communication and team spirit even in a virtual environment. Against the background of constant changes, digital HR continues to be a necessary tool for effective personnel management and achieving advance in business, – notes A. Yurhen in his paper "Management 3.0. Agile Management. Leadership and Team Management" [2].

Let's give consideration to some core aspects of analyzing the concepts of digital HR, which will help to understand how digital HR can be successfully implemented and integrated into organizational strategy and business processes. Concepts and authors related to digital HR.

Domestic scientists such as: M. Adamenko [3], A. Cherep [3–7] contributed significantly to the development of the theory of personnel management and the impact of digitalization on the efficiency of the use of employees at each workplace and the activity of the enterprise as a whole, O. Cherep [3, 6], I. Dashko [3, 6], O. Honchar [7], O. Kornukh [6], R. Korolenko [3], D. Krylov [7], P. Matkovskiy [36], A. Kolot [8], T. Kostyshyna [9], L. Oleinikova [7], O. Rozhenko [6], M. Semykina [10], M. Voinarenko [7].

These authors are known for their research and action-oriented recommendations presenting different perspectives and approaches to personnel management and the use of digital technologies in digital HR management. Their research and publications can be helpful for those interested in the implementation of innovative practices in personnel management and the use of digital tools to attain the strategic goals of the organization.

In her work "The Necessity of Forming a Labor Motivation Mechanism at Enterprises", the author specifies that by acquiring new knowledge and experience, developing their innate abilities, people multiply their human capital, increasing its quantitative and qualitative scope of functionality. Like any other capital, human capital shall generate income. This income depends on both on the amount and structure of capital and on the efficiency of its use [2].

In our research, let's also rely on paper (O. Buhaichuk, V. Nikitenko, V. Voronkova, R. Andriukaitiene and M. Malyshev "Interaction of the Digital Person and Society in the Context of the Philosophy of Politics"), which specifies the evolution of flexible models, organizational structures of the enterprise under the conditions of digital transformation, which affected all processes of the society – economy, politics, community, people, the way management and staff communicate and cooperate with each other,

on the formation of a digital person [11]. In Appelo Jürgen's paper "Management 3.0. Agile Management. Leadership and Team Management", a new approach to management in organizations is offered, especially within the framework of Agile software development methodologies [2]. Appello solves important problems of contemporary management, such as employee motivation, distribution of power, cooperation in teams, adaptation to changes, etc., considers them from the perspective of an Agile approach important for digital HR, which emerges as a core element of personnel management in contemporary organizations, especially through the lens of constant change in the labor market and technological innovations. Appelo Jürgen offers a number of tools and practices that can help managers and leaders increase the effectiveness of their work and stimulate the development of the organization. "Management 3.0" book is intended to help readers understand what changes can be made in the management approach to increase performance and adjust to the rapidly changing environment of contemporary businesses.

Research of O. Danilian, O. Dzeban, Y. Kalynovskyi testified that a digital person is a product of the information society, since in the contemporary information society a large amount of information about people is stored and processed in digital format [12, 13]. From our Internet browsing to transactions for the purchase of goods and services, our digital footprints become the basis for analysis and use by various organizations. Digitization has brought significant benefits to human resource management providing greater efficiency, accuracy and flexibility in processes related to human resource management. This means that workers shall have the necessary skills, knowledge and competencies to work efficiently in a digital environment. Digital transformation demands HR professionals to accustom to modern technologies and management strategies so as to successfully introduce these changes in the organizational culture. The digital environment is constantly changing, so it is essential to ensure the continuous improvement of employees' digital skills through training programs and regular updates. Chris Skinner's paper "Digital Human: The Fourth Revolution of Humanity Includes Everyone" investigates the impact of digital transformation on contemporary society and human life [14]. The author examines changes the digital revolution has brought and will bring in various aspects of life including the economy, politics, culture, education and the work environment. Skinner analyzes the impact of new technologies, such as artificial intelligence, blockchain, the Internet of Things, on social relations, business processes and other areas of life. He also examines the possible consequences of these changes and the challenges they pose to society, which is important for the rapid transformation brought about by the digital era and may be useful for those interested in the future development of technology and its influence upon our lives.

For the purpose of solving the research tasks of digital HR as a priority issue of organizations and an important element of change management, let's rely upon the

evolution of digital technologies of the industrial revolution from 4G to 5G within the framework of the issues of digital globalization [15]. Effective change management: Changes in today's business environment require adaptability and flexibility. Digital HR can help organizations manage these changes by introducing new technologies and approaches to HR management, contribute to improving the effectivity of HR processes, allowing the automation of many routine tasks in the area of HR management, saving time for strategic analysis and decision-making.

The analysis of management information support in organizations as complex systems under the conditions of digitalization is a crucial issue [16]. Managing information streams in organizations involves a number of core aspects, as organizations collect large amounts of data from various sources such as internal systems, social media, IoT sensors, and more. It is important to have effective systems in place to analyze this data for the purpose of obtaining valuable information for decision-making. Digital transformation of organizations involves the application of various technologies, such as cloud services, artificial intelligence, data analytics, blockchain, etc. To implement successful digital transformation, organizations shall be ready to implement and optimize these technologies. *People Analytics* concept concentrates on the use of data and analytics to make strategic decisions in the area of personnel management, which is developed on the basis of data analytics, psychology and management. Ben Waber, President and Founder of *Humanyze* specializes in analyzing data about employee workflows and communication to improve productivity and effectivity.

Digitalization settings require employees to be flexible and able to quickly adjust to changes. The analysis of the literature proved that digital transformation requires organizations not only to invest in technology, but also to change culture and management approaches, digital transformation of education based on artificial intelligence, which should change the way we learn and perceive education [17]. The expanding automation and introduction of artificial intelligence in various spheres of life require specialists to gain new skills, such as data analysis, the ability to work with algorithms and machine learning models, and comprehension of the ethical aspects of the artificial intelligence application. Digital training of specialists within the framework of artificial intelligence requires a combination of technical knowledge with a deep understanding of the social and ethical aspects of this technology.

The paper of M. Tegmark "Life 3.0: The Age of Artificial Intelligence", in which he examines the impact of artificial intelligence on the future of humanity [18] was very helpful for us. The author suggests the concept of "Life 3.0" describing the stage of the society development in which technology and artificial intelligence becomes the main architects of our lives and exponentially expands their capabilities. Tegmark examines the ethical, social and political aspects of the implementation of artificial intelligence and puts forward a number of suggestions for how society should interact with these new technologies

ensuring maximum benefits and minimizing risks. This research, which is very influential in the field of artificial intelligence and technology development, as well as in the field of philosophy and ethics, offers important perspectives for understanding what the future may look like within the meaning of the rapid development of intelligent machines. In the monograph "Artificial Intelligence: an Era of New Threats or Opportunities?" (2023) reference is made to the fact that such an approach will be helpful for ensuring effective ethical integration of artificial intelligence into the educational process [19]. Open-mindedness to innovation, flexibility and the ability to quickly adjust oneself become core components of successful management of information resources in conditions of digitalization.

We are interested in the research of A. Vance and E. Musk "Tesla, SpaceX and the Way to a Fantastic Future", two prominent figures of the contemporary technological world [20]. Both are famous for their high-flying projects and influence upon the development of modern technology; their names are often associated with *Tesla* and *SpaceX* companies, which they founded. Elon Musk founded *SpaceX* with the purpose of reducing the cost of space launches and making space more accessible to private companies and individuals. *Tesla* has come into prominence for its electric cars and innovative approaches to the automotive industry, the *Neuralink* project is developing brain implants, and *The Boring Company* is developing underground transportation infrastructure. Vance Ashley, as the founder and CEO of *Neuralink*, co-founder of *OpenAI*, and former *SpaceX* collaborator, is well-known in the field of artificial intelligence and neural interfaces. The path of these two inventors is paved with great difficulties, but their achievements have already made a huge contribution to technological progress and influenced the perception of the future. Their companies and projects continue to change the world, opening new opportunities in space, automotive, energy and artificial intelligence fields.

The paper of G. van den Berg and P. Pietersma "25 Key Models of Management. Change Management", includes creating strategies, planning, communication and supporting employees during the change process [21]. Digital technologies can help organizations optimize their business processes, improving performance and reducing time and resource costs. The use of automated control systems and artificial intelligence can improve the effectivity of flexible structures. They are helpful for tracking and analyzing large quantities of data, and make it possible to take more informed decisions and forecast future trends.

In the papers of B. Christian and T. Griffiths "Life According to Algorithms. How to Make a Rational Choice" [22], G. Sunil "Digital Strategy. Guide to Rethinking Business" [23], E. Brynjolfsson and E. McAfee "The Second Machine Age: Work, Progress and Prosperity in a Time of Brilliant Technologies" [24] reference is made to the fact that in the framework of digital transformation, 5G development of flexible management structures plays an integral role in ensuring digital HR as a powerful lever for efficiency, competitiveness and optimization of human resource management. Flexible management

structures have made it possible for organizations to quickly respond to changes in the technological environment and market conditions. They are able to quickly switch over between different strategies and methods of responding to challenges. Flexible management structures require continuous training and development of personnel. This includes both professional developments to ensure proficiency in the use of new technologies and soft skills development to facilitate communication and collaboration in flexible team structures.

The overall purpose of these activities is to create a team that is ready and able to work effectively in a digital environment, thus contributing to the success of the enterprise in the current digital world. The theoretical foundations of "Digital HR Transformation" confirm that digital technologies for the development of flexible management structures in the framework of the digital transformation of the 5G industry can transform the entire personnel management cycle, from recruiting to keeping talented employees and their development [25]. The transition from 4G to 5G opens up new opportunities for the introduction of advanced technologies in the area of HR, such as augmented reality (AR), virtual reality (VR), artificial intelligence (AI) and Big Data analytics. Considered all round, the development of flexible governance structures is an important factor in the prosperous digital transformation of the 5G industry, as they enable the efficient implementation of new technologies and rapid response to changes in the environment.

Let's use data (BIG DATA), artificial intelligence, AGILE-methodology as a factor for increasing the efficiency of a digitalized society and analyzing digital HR as a core element of personnel management against the background of challenges and changes in organizations. *The Future of Work* concept includes an analysis of the impact of digital technologies on organizational culture, team structure and work processes. The paper of C. Schwab "The Fourth Industrial Revolution" is an important contribution to the understanding of current technological trends and their impact on the improvement of digital HR as a core element of personnel management under the conditions of rapid changes [26]. The paper analyzes important aspects of the implementation of digital technologies in the field of personnel management, such as the use of artificial intelligence, data analytics, online tools and platforms for personnel development, automation of routine processes in the global economy and society. In this book, Schwab examines how emerging technologies such as artificial intelligence, robotics, the Internet of Things, and bio- and nanotechnology are joining together to create a new era of industrial development. He considers how these technologies are changing business models, labor, production, governance and the environment. Schwab also addresses the social and economic challenges arising from these technological changes, and proposes strategies for how societies can adjust to the new existence of the fourth industrial revolution. "The Fourth Industrial Revolution" is an important resource for comprehending how technological progress is transforming the global economy and society, and for finding ways to adjust to these changes.

Authors' papers O. Cherep, V. Voronkova, S. Bespalova and S. Tabachnikov "Personnel Motivation: from Theory to Practice of Motivating Employees to Perform Effective Activities" [27] and O. Cherep, B. Babajanov and V. Voronkova "Digitalization of the Economy as a Platform for Creating New Values in a Transformational Environment" [28] have helped to investigate the digitalization of the economy as a platform for creating new values in a transformational environment, to determine theoretical and practical aspects of digital HR as a core element of personnel management in organizations under the conditions of constant change. These authors are known for their research and action-oriented recommendation presenting different perspectives and approaches to personnel management and the use of digital technologies in digital HR management. Their research and publications can be advantageous for those interested in the implementation of innovative practices in personnel management and the application of digital tools to achieve the strategic purposes of the organization. Digital HR becomes an important element of strategic change management in organizations, as it makes it possible to effectively adjust to the rapidly changing business environment, develop digital strategies and gain competitive advances in the era of digital globalization [23].

General problem: personnel management under the conditions of constant changes. Let's make attempts to analyze the most current problems faced by organizations under the conditions of constant changes. More specifically, the use of artificial intelligence in HR organizations, which require the implementation of specific innovations in contemporary personnel management systems including machine learning and data analytics to improve personnel management processes against the background of constant changes of the "second machine epoch" [24].

Digital HR helps organizations effectively manage remote teams and work in an environment of constant change, taking into account the issues of communication, collaboration and team cohesion. Digital HR strategies are intended for keeping professionals and talented employees in an unstable environment facing new global challenges including through staff development and career development plans. Data security and privacy in digital HR requires the provision of privacy of employees' personal data in digital HR, especially considering the issues in the field of cyber security. Organizational leaders are using innovative digital HR approaches to support the psychological health and well-being of employees in the settings of constant change, including remote work and stressful situations. Digital HR helps organizations to adjust their training and development programs to rapidly changing needs and requirements due to constant changes in the business environment, for which organizations shall be flexible and adaptive [2]. Effective management of dynamic teams uses innovative HR to form and manage transient teams that can quickly adjust to new tasks and challenges in an environment of constant change. At the same time, digital HR contributes to the creation of an innovative culture and stimulates creativity among personnel in the framework of constant change, helping organizations

implement new ideas and strategies. Digital HR helps leaders and managers adapt to unpredictable circumstances and make strategic decisions in conditions of constant change, in particular by means of data analysis and promoting the development of leadership competencies. These aspects reflect the core trends that we have considered in the article regarding the role of digital HR in solving the problems of personnel management under constant change. The questions that were raised remain relevant in the context of modern personnel management and digital HR, the development of artificial intelligence and machine learning [20].

Under the conditions of constant change, it is essential to quickly and effectively adjust to the new requirements of the labor market and provide the necessary competencies. Digital tools facilitate automation and optimize recruiting and selection processes. Organizations shall be flexible and respond rapidly to changes in their environment. Digital HR helps create work environments that support team closeness and effective communication. The leadership having change management skills is a core element to an organization's advance against the background of constant change. Digital resources and programs promote to preparing leaders capable to effectively manage change, and employee satisfaction and engagement remain critical to company productivity and development. Digital tools raise the possibility of timely identification and resolution of problems arising during the process. Remote work has become an increasingly common practice, especially in an environment of constant change, as effective communication and collaboration of remote teams is enabled by digital tools. Thus, these issues remain essential for consideration and discussion in the framework of current personnel management in a transformational environment [28].

DIGITAL HR AS A PRIORITY ISSUE OF ORGANIZATIONS AND AN IMPORTANT ELEMENT OF CHANGE MANAGEMENT

Digital HR is a core element of personnel management in organizations, particularly against the background of constant change in business and market environment. Let's analyze the reasons why digital HR is accepted to be a priority issue and an important element of personnel motivation and stimulation of change management practitioners [27]:

1. Digital tools provide more efficient monitoring and management of work processes such as hiring, employee evaluation, training and staff development.
2. In response to digital technologies, HR can automate many routine tasks, which allows employees to dedicate more time to strategic tasks and competence development.
3. Digital solutions can support internal communications and help create a corporate culture that promotes employee involvement and satisfaction.

4. Digital tools make it simple for HR to quickly respond to changes in the organization and market environment, providing flexibility in implementing current HR strategies and policies.

5. Digital platforms collect large quantities of personnel data, enabling analytics and predicting trends that help make informed HR decisions.

6. Digital tools facilitate finding, selecting and attracting the best candidates for vacancies. They provide more efficient methods of job posting, resume analysis, and candidate evaluation. For another thing, digital platforms can promote the maintenance and development of talents, which contributes to their keeping in the organization.

7. Digital HR systems make it possible to better control access to confidential information and ensure compliance with legal regulations on data protection. This is especially important within the framework of strict regulatory requirements such as the General Data Protection Regulation (GDPR).

8. Digital solutions can generate incentives for innovation and creativity among personnel, giving them convenient access to resources for self-development and joint collaboration on projects.

9. Digital tools give the possibility to automate the processes of introducing changes in the organization, which simplifies coordination and communication between different departments and levels of management.

10. Digital HR solutions can significantly reduce the costs of administrative processes such as document processing, storage and sharing information. Automating these processes reduces the need for human resource and reduces the possibility of errors.

11. Digital platforms facilitate the creation of transparent HR systems where employees can easily access their career information, salary, benefits and other important aspects, resulting in increased confidence and employee satisfaction.

12. Due to digital HR tools, organizations can more easily adjust to changes in internal and external factors, respond faster to challenges and provide flexibility in solving problems.

13. Digital HR tools can help improve relationships with customers and partners by providing quick and efficient access to personnel information, making communication with the organization more transparent and effective.

14. Digital HR systems can render assistance to organizations in order to ensure conformity with HR regulatory requirements, specifically in the area of personal data storage and protection, which is increasingly important in current data world.

All these factors make digital HR not only a priority issue for organizations, but also an important change management tool, making it possible for organizations to efficiently adjust to new challenges and market conditions. In recent years, digital HR has become not only a necessity, but also a competitive advantage for organizations. Companies that successfully implement digital initiatives in the field of personnel management usually have

a greater ability to adjust to changes and compete effectively in the market, forming core management models [21].

DIGITAL HR AS A POWERFUL LEVER OF EFFICIENCY, COMPETITIVENESS AND OPTIMIZATION OF HUMAN RESOURCE MANAGEMENT

Digital HR refers to all digital methods, tools and services used for optimization and improvement of human resource management. Objectively, this is an actual digital shift driven by the company's HR function. Change management, which more and more companies see as a necessary element, reflects the desire to adjust to current trends, new user behavior and new ways of working. The digital transformation of the HR function can happen on several levels:

1) for recruitment: job sites, bulletin boards, mobile applications, video interviews, professional social networks, big data, artificial intelligence, ATS (recruiting software), HRIS (personnel management information system), etc. For several years, digital technologies have been a tool necessary to facilitate the search for talents and the entire hiring process, contributing to the formation of a digital person as a product of the information society [12];

2) for administrative management of human resources with process automation, employee training: e-learning, mixed learning, MOOC, videos, webinars, etc.;

3) for management: with powerful tools facilitating activity monitoring and improving the quality of employees' work;

4) for HR marketing and internal communications (social networks, newsletters, intranet, etc.).

Digital technologies as HR function comply with the main challenges. This is an important step for the company that makes it possible to match the behavior and new habits of candidates and employees. It is also a powerful lever of the company's performance and competitiveness. Activating digital transformation within the HR function, firstly, enables to automate labor-intensive tasks such as payroll, job position management, absences, leaves, expense reports, schedules, etc. This allows HR teams to save time and concentrate themselves on the company's main activity and on objectives with high added value (talent management and employee loyalty, training, etc.). Dematerialization of the HR function is also important for simplifying and enhancing talent acquisition and thus reducing recruitment costs and limiting errors when choosing sources (use of big data, artificial intelligence, statistical tools, HR software, etc.). Tools like cloud computing also help protect and simplify HR data management. Digital tools will also improve the adaptation and welcoming of new employees (for example, by offering them access to a digital platform designed to facilitate adaptation) against the background of social instability as

a global trend in the contemporary world [13]. Digital HR also makes it possible to offer employees a quality digital experience in their work environment. Digital tools facilitate internal communication, organization and interaction within teams, as well as the development and monitoring of skills by means a digital and accessible learning offering. Digital transformation within the HR function will also strengthen the company's employer brand through a strong digital appearance on various communication channels (social networks, websites, etc.). According to estimates, 82 % of candidates get to know about the company online before applying. Digital technologies are also an excellent means of maintaining and increasing employee loyalty within the company. It allows to offer new ways of arranging work (remote work, flexible office, etc.), help teams improve their skills, optimize tasks and move forward management. Consequently, the digital transformation of HR has become an essential element of change management within the company. Furthermore, 82 % of HR decision makers believe that digitalizing of HR functions is a priority issue. Digital HR acts as a powerful lever for increasing performance, competitiveness and optimization of human resource management within the framework of the evolution of digital technologies of the industrial revolution from 4G to 5G against the background of the challenges of digital globalization [15]. It has an influence on various aspects of personnel management and provides a significant number of preferences. Digital tools allow automation of many routine HR tasks, such as timekeeping, processing employee inquiries, and responding to inquiries concerning benefits and licensing. Digital platforms enable the collection and analysis of personnel data, making it possible for the management to make informed decisions concerning personnel development, HR planning, and strategic management. Digital tools can support employee involvement and satisfaction by providing convenient access to information, development opportunities and communication in a remote framework. Digital HR allows organizations to be more flexible and adjustable to changes in the economic and social environment with the help of rapid introduction of new initiatives and strategies for information management in organizations as complex systems under the conditions of digitalization [16]. Digital platforms can support talent development by providing access to educational materials, training and other development opportunities in an employee-friendly form. All these factors contribute to increased performance, improved interaction between employees and management, and increased competitiveness of the organization in the labor market.

DEVELOPMENT AND IMPROVEMENT TRENDS OF DIGITAL HR AGAINST THE BACKGROUND OF PERSONNEL MANAGEMENT

Digital transformation of human resource management is the application of basic elements such as digital professionals, digital tools, digital management and digital

scenarios for a comprehensive modernization of all aspects of human resource management, which is facilitated by the digital transformation of education on the basis of artificial intelligence [17]. Of these, it is necessary not only to transform the conventional thinking and development management logic, but also to adjust the organizational structure, strengthen business transformation, form new work methods, business forms and management models, as well as build a digital ecosystem by means of the company's own developments, characteristics. So, and in no other way it is possible to ensure reliable support for the general operation and management activities of the enterprise. Digital professionals are a core element in the digital transformation of human resource management, they can skillfully use various digital technologies and tools, such as mastering digital application development, digital application programming, and command of data collection and big data. At the same time, these professionals can use digital skills or accurately interact with other company departments, external partners and customers with data-based platforms, along with effective solution of various issues related to human resource management activities, making advanced personnel solutions. Digital specialists occupy a dominant position in the digital transformation of human resource management.

Digital tools are an important foundation for the digital transformation of human resource management and the foundation of big data management of human resource. They can provide powerful support of data, technology, information and platforms for digitization and intelligent human resource management. Currently, the new generation of information and communication technologies, represented by the Internet, the Internet of Things, big data, cloud computing, and 5G, has an unprecedented influence upon the work and development of human resource management and contributes to the formation of a digital person [14]. The use of big data is one of the main issues facing the digital transformation of human resource management. The major feature of digital tools is the scientific improvement of work methods, business activities and work processes of human resource management. For example, using digital platform tools, such as remote office systems, to remove conventional time and space barriers for human resource management to improve work efficiency, improve the employee experience and overcome obstacles related to employees being unsynchronized with time and progress tasks to ensure the effective development of various management actions within the framework of the flexible management structures development against the background of the digital transformation of the 5G industry [25].

So that to advance the performance, effectiveness and improve digital HR of human resource management, some technology companies have also developed various operational digital tools for enterprises related to human resource management, such as Social Security Cloud, Red Sea Cloud and other additional tools that integrate digital thinking in human resource management, employment, education, evaluation and keeping, including

the comprehensive collection and analysis of corresponding data on human resources, generation of an employee database, creation of a data system for the evaluation of specialists. The model, processes and content of human resource management in the digital era undergo profound changes, with greater emphasis on the complete use of big data, artificial intelligence and other data processing technologies to obtain and analyze valuable data related to human resource management for achieving technological purposes. The major task of managers is to generate a new model of human resource management and implement the process, automation and intelligence of human resource management to adjust to the actual needs of the digital era. The digital management of human resources primarily involves the generation of a digital network platform for building a highly programmed and automated model of human resource management, the formation of a complete model of human resource management within the enterprise and their integration into the overall strategy of the digital transformation of the enterprise [29]. Subsequently, accelerating the digital transformation of human resource management, strengthening the advanced management of human resource data applications we have the opportunity to generate a digital system that provides reliable assurance and support for enterprise development. Furthermore, to complete the digitization of human resource management activities such as recruitment, training, appraisal, compensation and career development, while at the same time extracting and collecting valuable digital information to "build a database". Finally, to create "digital twins of employees" within the enterprise, use digital technology to analyze the daily behavior and work performance of employees, accurately predict the work performance of employees, and provide the various talents necessary for the development of the enterprise. So, and in no other way it will be possible to carry out various types of employee activities. The enterprise is transformed, becomes more efficient and faster, and also creates new ways of control, coordination and cooperation [1].

The ultimate outcome of the digital transformation of human resource management is the creation of digital scene to more intuitively display activities related to human resource management, significantly increase the efficiency of cooperation between departments and help enterprises in making scientifically-based decisions. Digital scenarios are based on human resource data (including internal and external data) and develop monitoring and analysis models to describe current problems and effectively forecast future problems and issues with which human resource management deal, facilitate accurate selection of people and positions, and reduce labor costs, resource inconsistencies. Building a digital scene can create an ecosystem of digital human resources, help use intelligent data analysis to create multi-dimensional portraits of employees, and understand their current behavior, attitudes, emotions and supply status of corporate employees to develop a company's work interface, an innovative communication model. It is necessary to form intelligent, humanized and individual human resource service products

for organizations and individuals. On this basis, team interaction in different units of the enterprise will also have digital characteristics. For example, changes in digital platforms, applications and service methods will improve the employee experience and provide significant business development assistance to reduce costs and improve efficiency. Currently, some companies have begun to use applications for integrated personnel management and self-service of employees to help implement intelligent and automated management of human resources, as well as in the selection of employees, management service methods, recruitment and dismissal, self-service, intelligent training, individual approach. So as to accelerate the process of digital transformation of human resource management, it is possible to take advantage of digital technologies and digital systems such as cloud computing, big data, artificial intelligence, mobility and 5G to the full extent to promote a comprehensive, three-dimensional and holistic approach. Changes in human resource management activities, including business ecosystem creation, corporate change facilitation, value and added value formation, etc., provide strong support for the digital transformation of the company's internal strategy, structure, functions, composition and processes, and continue to update its forms and application scenarios, which will help companies compete in the market and gain a competitive advantage in the artificial intelligence era [18] (**Table 3.1**).

● **Table 3.1** Trends for improving digital HR in the context of personnel management

Development trend	Description
1	2
Technological tools	It is necessary to analyze the available technologies and platforms for the implementation of digital HR. These can be HR information systems (HRIS), cloud solutions, social networks for business, software tools for data analysis and other innovative tools
Functionality scope	It is important to understand which specific functions can be automated and optimized with digital HR. This may include recruiting processes, employee evaluations, project management, training and development, analytics, etc.
Impact on business processes	It is necessary to understand how the implementation of digital HR will affect various business processes in the organization. This may include efficiency improvement, cost reduction, improvement of service quality for employees and customers, competitiveness increase, etc.
Adaptation to business needs	The concept of digital HR shall be adapted to the unique needs and requirements of a specific organization. This may require integration with existing systems, development of own solutions or involvement of external service providers

◆ Continuation of Table 3.1

1	2
Change management	It is important to consider how the implementation of digital HR will affect organizational culture and change management processes. This may require communication with employees, training and support for the implementation of new tools
Legal aspects and data security	Compliance with data protection and employee privacy laws shall be considered. This is especially important within the framework of the introduction of new technologies that collect and process personal data
Personnel and training requirements	With the introduction of new digital tools, new requirements for staff skills and competencies may arise. A training and development plan should be considered to ensure that employees have the necessary skills to successfully use digital HR

Source: Developed by the authors

Hence, the improvement of digital HR (human resource management) against the background of personnel management includes a number of trends that are intended to ensure more effective and productive management of human capital, which covers:

1. Application of digital tools and software solutions for automation of routine tasks in the area of personnel management, such as time-keeping, report preparation, personnel administration, etc.

2. Using data analytics to collect, analyze and apply information on employees, which allows for more informed decisions in the area of personnel management.

3. Implementation of specialized software products for effective management of employee information including salary data, vacations, personal data, etc.

4. Use of digital platforms for recruitment including job postings, candidate selection, testing and interviews.

5. Development of interactive online courses and platforms for personnel training and development, which makes it possible for employees to acquire new skills and knowledge at any time convenient for them.

6. Using digital means of communication and collaboration to keep in touch with employees and stimulate their engagement in work.

7. Using technology to provide an individual approach to each employee considering their needs, skills and career purposes.

These trends help to increase the performance and efficiency of personnel management providing greater flexibility, accuracy and an individual approach to interaction with employees.

The purpose of the digital transformation of human resources management is to use digital technologies to solve existing problems in human resources management

activities, to redefine and design business scenarios and processes of human resource management, as well as to improve the relationship between internal systems and the external environment based on functional interoperability, which provides support of continuous transformation, innovation and advancement of enterprises. It is necessary to understand that the digital transformation of human resource management is not carried out randomly, but shall comply with a certain core logic, otherwise it will not just achieve actual results, but will also lead to increased costs and risks, which makes it difficult to develop digital transformation or to satisfy expectations [26].

In the digital era, promoting digital transformation of human resource management is an important task of enterprise development. Nevertheless, limited by previous conceptions, this activity shall be performed for the internal functions and services of the enterprise, in other words, it shall be based on the construction of a digital human resource management system, through the analysis and correlation of big data, which allows to penetrate into the "selection" of employees. The entire hiring, training, retention, screening and compensation process will drive the viability of the entire human resource life cycle and further strengthen employees' sense of identity, belonging and responsibility. It is important to note that, moreover, human resource management activities should also be oriented towards the development of satisfying the needs of external users, that is, creating value by providing support for relevant external activities. The change in the way of thinking also advance higher demands as to human resource management, or rather, it emphasizes that the human resource management department is no longer a cost center, but can be a business center, contributing to the development of corporate governance, entrepreneurial activity and create value. With this objective in view, the digital transformation of human resource management shall transform from internal services to market competition so as to rapidly increase the market competitiveness of enterprises. As a consequence, the study of digital HR as a core element of personnel management in organizations within the framework of challenges and changes has theoretical significance as well as practical one. Studying the topic make it possible to expand knowledge about the impact of digital technologies on personnel management and organizational processes; contributes to the development of theoretical concepts of personnel management and organizational development; understanding the principles of digital HR helps improve HR management practices to achieve better performance.

The practical significance of this study is that the use of digital technologies in HR provides a means for the automation and optimization of many processes, such as recruitment, training and development, evaluation and reporting. Organizations that effectively use digital solutions in HR can adjust more quickly to changes in market conditions and remain competitive. The use of innovative technologies in HR can improve employee satisfaction and engagement, which in turn helps keep talented staff. This means that the understanding and implementation of digital HR is important for both academic research and practical application in human resources management of organizations.

REFERENCES

1. Garnier, A. (2022). Digital RH: transformation numérique de la fonction ressources humaines. Available at: <https://www.wayden.fr/digital-rh-la-transformation-numerique-de-la-fonction-ressources-humaines/>
2. Yurhen, A. (2019). Menedzhment 3.0. Agile-menedzhment. Liderstvo ta upravlinnia komandamy". Kharkiv: Vyd-vo "Ranok: Fabula", 432.
3. Cherep, A., Adamenko, M., Cherep, O., Dashko, I., Korolenko, R., Kornukh, O. (2023). The Influence of the Innovation Potential of Personnel on Strengthening Economic Security of Ukrainian Enterprises in the Post-War Period. *Wseas Transactions On Business And Economics*, 20, 70–79. <https://doi.org/10.37394/23207.2023.20.8>
4. Cherep, A. V. (2013). Interrelation between labour motivation and efficiency indicators of personnel usage. *Actual Problems of Economics*, 1 (139), 117–123. Available at: http://nbuv.gov.ua/UJRN/ape_2013_1_15
5. Cherep, A. V. (2013). Necessity for formation of labour motivation mechanism at enterprises. *Actual Problems of Economics*, 3 (141), 134–149. Available at: http://nbuv.gov.ua/UJRN/ape_2013_3_15
6. Cherep, A., Cherep, O., Dashko, I., Rozhenko, O., Kornukh, O., Matkovskiy, P. (2022). Strengthening Economic Security of Enterprise on the Basis of Investing in Staff Management System. *Academy of Strategic Management Journal*, 21 (4), 1–9. Available at: <https://www.abacademies.org/articles/strengthening-economic-security-of-enterprise-on-the-basis-of-investing-in-staff-management-system.pdf>
7. Voinarenko, M., Cherep, A., Honchar, O., Krylov, D., Oleinikova, L. (2019). Information Provision for Forecasting Strategies Innovative Activities of Enterprises. *Proceedings – International Conference on Advanced Computer Information Technologies*, 362–365. Available at: <https://scientific-rating.znu.edu.ua/index.php?r=publication%2Fview&id=8008>
8. Kolot, A. M. (2019). Pratsia 4.0" yak model ta platforma novoi (tsyfrovoi) ekonomiky. The sphere of employment and income in the digital economy conditions: mechanisms of regulation, challenges and development dominants. Kyiv: KNEU, 13–28. Available at: <https://r.donnu.edu.ua/bitstream/123456789/1622/1/%E2%84%9610.pdf>
9. Kostyshyna, T. A. (2018). Socio-economic motivation of employees in enterprises in modern conditions. *Scientific Bulletin of Poltava University of Economics and Trade. Series: Economic Sciences*, 3, 109–117.
10. Semykina, M. V. (2011). Labour motivation: a new paradigm in competitive environment. *Chernihivskyi naukovyi chasopys. Seriya 1, Ekonomika i upravlinnia*, 2 (2), 118–126. Available at: <https://core.ac.uk/download/pdf/81588446.pdf>

11. Marusiak, N., Bak, N. (2022). Financial security of the enterprise and threats of its loss in the modern economic environment. *Ekonomika ta Derzhava*, 2, 109–113. <https://doi.org/10.32702/2306-6806.2022.2.109>
12. Danilian, O. H., Dzeban, O. P., Kalynovskyi, Y. Y. (2023). Digital Man as a Product of Information Society. *Cogito*, 15 (1), 142–159. Available at: https://cogito.ucdc.ro/COGITO_MARTIE_2023.pdf
13. Danilian, O. H., Dzeban, O. P., Kalynovskyi, Y. Y. (2022). Social Instability as a Global Trend of the Modern World. *Cogito*, 14 (3), 141–162. Available at: https://cogito.ucdc.ro/COGITO_SEPTEMBER_2022.pdf
14. Skinner, C. (2020). *Digital Human: The Fourth Revolution of Humanity Includes Everyone*. Kharkiv: Ranok Publishing House: Fabula, 272.
15. Voronkova, V., Nikitenko, V., Oleksenko, R., Andriukaitiene, R., Kharchenko, J., Kliuinenko, E. (2023). Digital Technology Evolution of the Industrial Revolution From 4G to 5G in the Context of the Challenges of Digital Globalization. *TEM Journal*, 12 (2), 732–742. <https://doi.org/10.18421/tem122-17>
16. Marienko, V.; Tabachnikov, S., Oaks, S. (Ed.) (2022). Information security of management in organizations as complex systems in the conditions of digitalization. *Modern Scientific Strategies of Development*. California: GS Publishing Services, 62–81. <https://doi.org/10.51587/9781-7364-13395-2022-008-62-81>
17. Klopov, I., Shapurov, O., Voronkova, V., Nikitenko, V., Oleksenko, R., Khavina, I., Chebakova, Y. (2023). Digital Transformation of Education Based on Artificial Intelligence. *TEM Journal*, 12 (4), 2625–2634. <https://doi.org/10.18421/tem124-74>
18. Tegmark, M. (2019). *Life 3.0 The Age of Artificial Intelligence*. Kyiv: Nash format, 432.
19. Cherep, A. V., Voronkova, V. H., Bekhter, L. A., Cherep, O. H., Lyshchenko, E. H.; Tatomyr, I., Kvasnii, L. (Eds.) (2023). Minimization of Information Security Risks Amid the Challenges of Digital Society. *Artificial intelligence: an Era of New Threats or Opportunities?* Praha: Oktan print, 190–201. <https://doi.org/10.46489/aiae-ont-23-23>
20. Vance, A. (2018). *Elon Musk. Tesla, SpaceX and the Way to a Fantastic Future*. Kyiv: FOP Forostina O. V., 428.
21. Van den Berg, G., Pietersma, P. (2020). *25 kluchovykh modelei upravlinnia*. Kharkiv: Ranok-Fabula Publishing House, 208.
22. Christian, B., Griffiths, T. (2020). *Griffiths Vol. Life According to Algorithms. How to Make a Rational Choice*. Kyiv: Nash format, 510.
23. Sunil, G. (2020). *Digital Strategy. Guide to Rethinking Business*. Kyiv: KM-BUKS Publishing House, 320.
24. Brynjolfsson, E., McAfee, E. (2016). *Druha epokha mashyn: robota, prohres ta protsvitannia v chasy nadzvychainykh tekhnolohii*. Kyiv: FUND, 236.

25. Metelenko, N., Klopov, I., Voronkova, V., Nikitenko, V., Oleksenko, R., Brytvienko, A., Runcheva, N. (2023). Development of Flexible Management Structures in the Context of Digital Transformation of INDUSTRY 5G. *Review of Economics and Finance*, 21 (1), 2052–2060. Available at: https://refpress.org/wp-content/uploads/2023/12/Oleksenko-3_REF.pdf
26. Schwab, K. (2019). Chetverta promyslova revoliutsiia. Formuiuchy chetvertu promyslovu revoliutsiiu. Kharkiv: Knyzhkovyi klub "Klub Simeinoho Dozvillia", 426.
27. Cherep, O., Voronkova, V., Bespalova, S.; Tabachnikov, S. (2023). Motyvatsiia personalu: vid teorii do praktyky stymuliuvannia pratsivnykiv do Zdiisnennia efektyvnoi diialnosti. *Prospective Directions of Scientific and Practical Activity*. Sherman Oaks: GS Publishing Services, 57–64. <https://doi.org/10.51587/9798-9866-95921-2023-011-58-64>
28. Cherep, O. H., Babajanov, B. A., Voronkova, V. H. (2022). Digitalization of the economy as a platform for creating new values in a transformational environment. *Financial Strategies of Innovative Economic Development*, 54 (2), 25–28. <https://doi.org/10.26661/2414-0287-2022-2-54-04>
29. Christopher, S. (2018). *Total Automation. How Computer Algorithms Change Life*. Kyiv: Nash format, 280.