SECTION 2. SOCIAL AND ECONOMIC PROBLEMS OF EDUCATION AND SCIENCE DEVELOPMENT IN THE 21ˢᵗ CENTURY

BIG DATA AND ARTIFICIAL INTELLIGENCE TECHNOLOGIES IN HR MANAGEMENT

БОЛЬШИЕ ДАННЫЕ И ТЕХНОЛОГИИ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В УПРАВЛЕНИИ ПЕРСОНАЛОМ

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Abstract. This article provides an overview of new trends in human resource management that determine radical changes in the context of labor relations, conditions and organization of work: HR becomes a partner of business; personalization of approaches to human resource management; growth of digitalization and automation of HR processes. The results of the study of various consequences of these trends and their impact on the field of human resource management are presented. It is concluded that the penetration of digital technologies into the HR management requires new thinking and changes the approach to the process of interaction with people.

Аннотация. В данной статье приведен обзор новых трендов в сфере управления человеческими ресурсами, которые определяют радикальные изменения в контексте трудовых отношений, условий и организации труда: HR становится партнером бизнеса; персонализация подходов к управлению человеческими ресурсами; рост цифровизации и автоматизации HR-процессов. Представлены результаты исследования различных последствий этих трендов и их влияния на сферу управления человеческими ресурсами. Сделан вывод о том, что проникновение цифровых технологий в сферу управления человеческими ресурсами требует нового мышления и меняет подход к процессу взаимодействия с людьми.

Modern organizations are faced with radical changes in the context of human resource management, conditions and organization of work. A number of existing global trends inevitably lead to significant changes in the field of human resource management, among which the most significant trends can be identified: HR becomes a business partner; personalization of approaches to human resource management; growth of digitalization and automation of HR processes.

The first global trend is that human resource management is becoming a full-fledged strategic function of business. In the vast majority of companies, personnel decisions are made taking into account the strategic context of the business. An important growth area for human resource management as a strategic function is the effective collection and analytical processing of personnel data from a large number of sources. Therefore, the HR trend how a business partner is leading to the trend of using " Big" Data " as a basis for decision-making in the field of human resource management. When considering HR processes, the focus shifts from solving a local problem to solving a business problem, so continuous performance management becomes important. Continuous performance management refers to the creation of a new, permanent process of goal setting, coaching, performance appraisal and feedback.

The second global trend is that each employee is not just part of a group, an abstract "target audience", but is considered as a bearer of unique properties, so HR The task arises of meeting the individual needs of the employee. Companies are beginning to closely monitor employee development within the company, and there is growing interest in well-being programs, which should help maintain work-life balance and increase productivity, engagement and job satisfaction. This trend echoes the trend of continuous performance management, but its peculiarity is the personalization of the approach to human resource management.

Relationship analytics can be identified as a trend, the source of which was the personalization of approaches to human resource management. The focus of collecting and analyzing employee-related big data is shifting from indicators such as employee turnover, length of service, and performance ratings to indicators such as team relationships, employee well-being and emotional state.

The spread of digital technologies is changing the nature of employee work, requiring them to develop new competencies to successfully complete work tasks, so another trend can be called the intellectualization of work. Given the digital transformation of the workplace, it's no surprise that more than half of all employees (54 %) will require reskilling and upskilling in just three years, according to a 2018 World Economic Forum report. In a highly competitive labor market, organizations cannot depend solely on recruitment to attract employees with the required competencies. Continuous staff training plays an important role in obtaining critically needed competencies. Frequent job changes and the accelerating rate of skill obsolescence require the development

of new approaches to creating diverse training programs for people who move between several different occupational fields during their working lives.

According to Deloitte research, rapid and ongoing changes in the nature of work are changing the relationship between learning and work itself, making them more integrated and connected than ever before. Therefore, it is necessary to develop training programs that focus on job content, helping people use information and improve their skills during everyday work tasks. With the widespread adoption of mobile devices, the cloud, and the adoption of augmented reality devices, organizations will be able to take new approaches to digital learning, where learning occurs in small doses, almost imperceptibly, throughout the workday. It is also important that training be more personalized, targeted to a specific person and available at any convenient time and mode.

The third trend is the continued growth of digitalization and automation of HR processes. Digital technologies are fundamentally changing the approach to human resource management practices.

Cognitive technologies based on artificial intelligence, such as machine learning (ML), neural networks, bots, natural language processing (NLP), have the potential to transform almost any industry. Cognitive technologies help analyze ever-growing data, processing volumes of complex data that the human mind and traditional analysis methods cannot handle. Self-learning algorithms in these technologies make it possible to detect patterns and connections that cannot be identified using conventional analytics. But, as with big data analytics, algorithms and advanced models depend on reliable and accurate input of raw data and precision in query construction.

Digital HR technologies are no longer stand-alone tools, but are becoming part of more complex ERP systems in which HR modules are integrated with financial or other modules, which also allows the collection of complete data and analysis of them together. However, many companies are still focused on automating basic HR processes. Due to the overload of employees with information from various sources, a new problem arises – the problem of employee productivity when working with diverse arrays of data from various sources. According to J. Bersin, there is a phenomenon where most companies have too much technology available. Gradually, companies are realizing that they need less HR software, not more, and that it needs to be integrated into the company's work systems.

"Digital technologies can make our busy lives easier to navigate, but they can also disrupt fundamental elements of human connection". Despite attempts to replicate human behavior and gestures using artificial intelligence and machine learning, the fundamentals of human connection-eye contact, personal interaction, empathy-remain indispensable to technology. So, if employees lack human touch when interacting digitally, it can create an environment where people feel isolated and dissatisfied. With the introduction of digital technologies into HR processes, a new challenge arises: can we create HR

software that truly improves productivity and, by connecting people, helps teams work better together? According to J. Bersin, this is one of the tasks of effective HR – Find opportunities to use digital technologies to improve productivity, feedback and alignment between teams across the company.

Currently, the PRC is heading towards the formation of a digital economy, that is, towards conducting business activities in which digital data is the key factor of production. Digitalization of the economy is reforming traditional economic relations and existing business models, including human resource management practices.

According to K. Bengtsson, M. Bloom, digitalization is an ongoing revolutionary change in society, which creates the need to change the management of organizations and human resources. Digitalization in organizations is perceived as external pressure from change resulting from disruptive innovations in society. In addition, digitalization refers to a deep transformation of business, implying the use of digital technologies to optimize business processes, increase company productivity and improve customer experience/

Experts talk about the digital transformation of companies – the integration of digital technologies into the company's strategy at all levels – as a way to adapt to rapidly changing conditions and, ultimately, a way to survive in competition.

Consequently, the penetration of digital technologies into the field of human resource management is not just a transition to the digital space and automation of systems, but also new thinking, a new approach to the process of interaction with people.

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