СТОПАНСКА АКАДЕМИЯ „Д. А. ЦЕНОВ“ – СВИЩОВ

СЪЮЗ НА УЧЕНИТЕ В БЪЛГАРИЯ – КЛОН СВИЩОВ

Международна научна конференция

ПРОБЛЕМИ И ПРЕДИЗВИКАТЕЛСТВА ПРЕД ИКОНОМИЧЕСКИТЕ НАУКА И ОБРАЗОВАНИЕ ПРЕЗ XXI ВЕК

Свищов, 22 ноември 2024 г.

Сборник с доклади

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ISBN 978-954-23-2522-2 - Печатно
ISBN 978-954-23-2523-9 - Онлайн

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ЧОВЕШКИТЕ РЕСУРСИ В ЕРАТА НА ДИГИТАЛИЗАЦИЯ

Докт. Деница Гъркова-Захариева[1]

Резюме: *Човешките ресурси са ключов инструмент за развитие на бизнес организациите. В условията на дигитализация стопанските субекти следва да трансформират процесите, свързани с тяхното управление В този контекст, целта на доклада е в синтезиран вид да се представят новите моменти в средата, които провокират промени и в отношението и управлението на човешките ресурси в бизнес организациите.*

Ключови думи: *човешки ресурси, управление на човешките ресурси, дигитализация, предизвикателства.*
JEL: O1, L86
DOI: https://doi.org/10.58861/tae.pcesetfc.2024.69

HUMAN RESOURCES IN THE AGE OF DIGITALIZATION

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Abstract: *Human resources are a key tool for the development of business organizations. In the conditions of digitalization, business entities should transform the processes related to their management. In this context, the purpose of the report is to present in a synthesized form the new moments in the environment that provoke changes in the attitude and management of human resources in business organizations.*

Key words*: Human Resources, Human Resource Management, digitalization, challenges.*
JEL: O1, L86.
DOI: https://doi.org/10.58861/tae.pcesetfc.2024.69

1. Introduction

We are witnessing drastic and intense changes in digital nature. Digitalization is a process that radically changes the way we live, work and interact with each other. In the conditions of rapid economic growth, globalization and technological progress, digitization is not only a natural evolutionary process or trend, but has become a necessity that engages and correlates with all aspects of society. Digitalization influences and directly transforms the economy, education, social interactions, creating a new stage in the development of humanity. The era of digitization is interesting and challenging, providing new opportunities for

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progress and innovative achievements. At the same time, it also generates questions related to all processes of its improvement and implementation in various aspects of business and social life, for example sales, cyber security, training, etc. Digitization by its very nature creates conditions for the extraction of maximum benefits and for a sustainable and inclusive future. From such positions, the purpose of the report is to present in a synthesized form the new moments in the environment that provoke changes in the attitude and management of human resources in business organizations.

2. The era of digitization – the 21st century

The digitalization process has a significant impact on all models and structural formations in the economy. The pace of observed changes gives grounds for expected even more intense transformations, increasing use of artificial intelligence and cloud solutions, expanding scope of enterprises processing large volumes of data, etc. Along with the significant changes that are taking place, businesses and economies in general are being provided with opportunities to realize higher productivity and gain competitive advantages on a national and global scale. It is this approach that sets the right direction of development aimed at faster convergence with developed countries, especially important for economies with catch-up goals. We are directly witnessing the creation of new business models, for example the shared economy, remote work, etc. Traditional models of property management are changing, giving them different contours and being upgraded with specific functioning mechanisms. The new models help identify additional market niches and alternative solutions for consumers more quickly and easily. The business is totally changing its structure and operating environment according to the familiar models, which in turn gives rise to the need to search for new variants of regulation and legal regulation. An interesting example is online platforms that change the way of communication and relationship with consumers, and make trade more accessible and convenient. The process of interactive technological development and rise in the 21st century leads to a substantial increase in labour productivity, driven by a number of factors, the most important of which are rapid data processing and automation.

In addition to the economic aspect, digitalization has an impact on social interactions as well, significantly changing the way of communication on a personal and professional level. On the one hand, the digital environment is a vast space within which, through the use of social networks, there are practically no boundaries for communication between people from anywhere in the world, as well as for obtaining information in a fast way, but, on the other hand, there are also a number of new challenges, for example, related to finding suitable solutions for the protection of personal data and combating the spread of false information. In the course of the pandemic situation, in addition to easy interpersonal communication and social interactions, digital platforms have helped limit physical contacts and conduct conferences and business meetings under force majeure circumstances.

These are a kind of evidence for the need to use digital opportunities as a reliable, convenient and effective way of communication, as well as for the creation of a favourable environment for their subsequent improvement.

A key area for the implementation of digital tools and the use of artificial intelligence is the educational sphere. The possibility of distance learning, of applying interactive teaching methods and synchronous communication completely transforms the education system, contributing to the construction of a new learning environment through e-learning platforms, Internet communication, the use of virtual and augmented reality, etc. This is a huge challenge to conventional and traditional education, given the need for prior training of lecturers, facilitators and moderators, etc. in the new teaching conditions. Changes in the education system are also related to the necessary technological adaptation and the formation of a new teaching system, including its parallel use with existing technical means.

3. Human resources and the age of digitalization

The field of human resources and their management is interesting for scientists and researchers, but it also has a huge practical significance, which is why it represents an attractive field for digitization for business organizations as well (Shopov et al., 2013; Gospodinov, 2012; Dimitrov, 2009; Iliev, 2006; Koleva, 2012; Kolchagova, 2009; Kotsev & Kotsev, 2008; Mateev & Kirov, 2013; Stefanov & Peycheva, 2013; Shopov & Atanasova, 2009; Shopov, Atanasova, Shopov & Peycheva, 2003; Banfield & Kay, 2008; Bennison. & Casson, 1984; Byars & Rue, 2004; Milkovich, & Boudreau, 1991). Human resources have unlimited abilities and potential to identify new business opportunities, to make innovative changes, to realize continuously increasing benefits and to achieve business successes. „With their general and specific knowledge, professional skills, work habits, attitudes and personal qualities“ they „make it possible for the business organization to carry out effective economic activity and achieve the management goals“ (Shopov, Evgeniev, Kamenov, Atanasova & Bliznakov, 2013, p. 29). In addition to the management function, human resources are also involved in: the development of the brand, the maintenance of the company culture, the selection and appointment of personnel, the training and development of the personnel, etc.

The company's human resources management system includes a set of activities and elements that should function in a coordinated and coordinated mode. Its components include:

- *Recruitment and selection of personnel*. An important element, on the quality of whose activities depends the adequacy of the educational and qualification characteristics of the employed persons, the possibility of their inclusion in the company culture and the quality of the business results achieved by them. Efforts are directed along the axis of „identification – attraction – screening – evaluation – selection – hiring – adaptation and inclusion of the newly appointed persons in the relevant positions“.

- *Training and development*. It is a continuous process of expanding, upgrading and enriching the acquired and assimilation of new knowledge, skills, competences, work methods, work behaviours, etc.; as well as assistance for their subsequent transformation into regular work achievements. The aspiration is to continuously improve their professional knowledge and abilities, in accordance with the goals of the business organization. By investing in training and development, businesses not only increase employee engagement, but improve their efficiency and competitiveness.

- *Performance management*. In order to obtain an adequate evaluation of the performance of the employees for their way of working and development and to provide constructive feedback, various evaluation methods are used. In this way, the business organization approaches professionally and proves to its employees that it cares about them and their work, that it values their efforts and contributions, while human resources can understand what is expected of them in terms of professional skills and competence and how they can improve in the process of work. It is very important to build two-way communication with employees because it is essential for their development and to maintain their commitment and motivation.

- *Corporate culture and commitment*. In modern business operating conditions, more and more companies pay attention to the human factor and strive to introduce new methods of management and interaction with employees. This leads to increased productivity, increased results and increased efficiency. It is a well-built and defined company culture that provides significant advantages. The work environment is important and helps employees feel relaxed, engaged and satisfied. Company values and work ethics significantly predetermine the ability to identify positive characteristics of the environment that guarantee respect, trust, vision for growth, teamwork, effective communication, transparency, etc. Such an environment is a prerequisite for the formation of good relations between employees and managers. It favours the reduction of conflicts, the improvement of cooperation and the strengthening of the sense of empathy towards the business organization and its goals, it helps the higher productivity and the ability to retain the most valuable workers/employees. The consequence of all this is the minimization of the costs of hiring new personnel and their training, and in case of force majeure it would help to retain valuable employees for the organization.

In the modern conditions of doing business, the role of human resources is constantly growing, and the successful functioning of the human resources management system is gaining more and more importance. Those engaged in its maintenance must deal with numerous problems related to staff turnover, low employee satisfaction, frequent conflicts, etc. Along with them, business organizations face additional challenges related to the use of modern technologies and achieving the necessary degree of adaptability and flexibility. For their part, HR professionals also face a number of challenges, such as finding the right approach to balance between the human factor and technology, as intense global changes require adequate actions and solutions to effectively manage them.

4. Challenges to human resources in the conditions of digitalization

Successfully overcoming the new challenges facing human resources is related to a good knowledge of the digital environment, its tools and mechanisms. A key contemporary challenge is the introduction and widespread use of artificial intelligence. What is he? There are various definitions, but in general it can be defined as the ability of a machine to demonstrate abilities inherent in humans (to reason, to learn, to plan, to create, etc.). Artificial intelligence is applied in monitoring the environment with technical systems, in obtaining and processing data, etc. Artificial intelligence systems are able to adapt their behaviour to a certain extent by analysing the results of previous actions and operate autonomously. Why is artificial intelligence important? Some AI technologies have been around for over 50 years, but only in recent years have real breakthroughs been achieved thanks to increased processing power, the collection of massive data sets and the development of new algorithms. Predictions are that artificial intelligence will lead to major changes and even to a complete digital transformation of society. Therefore, it becomes a priority for the EU.

Various systematizations can be made of the specific varieties of artificial intelligence, but in general two main types can be distinguished (europarl.europa.eu):

- Software: virtual assistants, image recognition software, online search engines, speech and face recognition systems;
- Artificial intelligence with a physical form: robots, autonomous cars, drones.

Artificial intelligence is increasingly expanding into all spheres of the economy and society. Its wide application enables business organizations to: optimize processes, reduce costs, increase efficiency, improve customer service, achieve a better understanding of customer preferences, automate routine tasks (information/data processing and analysis, inventory management, accounting and etc.) etc. It is the use of various analytical tools that helps identify risks and more accurately predict the future. New technologies are a challenge and now a necessity for every organization. In the field of human resources, this is related to better personnel management, optimization of selection, training and development processes, as well as support for achieving better results in the organization. In addition, the use of artificial intelligence within the framework of human resource management helps to better cope with the competition; the creation of new positions, adequate to modern times; the construction of interesting workplaces and a stimulating-competitive environment.

A survey of 250 HR leaders, the results of which are reflected in the report „The Future of Work: Intelligent by Design“ (Eightfold AI), shows that 78% of respondents are already using AI in HR functions for employee records management, 77% – for payroll processing and benefits administration, 73% – for recruiting/hiring, 72% – for performance management, and 69% – for recruiting new employees. Regarding the possible future use of artificial intelligence, 92% of HR managers say

they intend to increase the use of the technology in at least one HR area. The top five areas are: performance management – 43%, payroll processing and benefits administration – 42%, recruiting and hiring – 41%, onboarding – 40%, and employee records management – 39%. Most plan to increase their use of artificial intelligence over the next 12 to 18 months." (enterprise.bg)

Staff selection *– artificial intelligence optimizes personnel selection processes.* Current conventional practice shows that employees spend considerable time in selecting suitable candidates. In addition, there is a possibility of the formation of a subjective assessment of their qualities and skills. For better management of such situations, artificial intelligence is extremely suitable. Some business organizations apply the technology to screen and effectively recruit staff for vacant positions. Artificial intelligence uses algorithms to recruit candidates, analysing multiple resumes in a short time and greatly facilitating the quick finding of the right candidate. The algorithms analyse the profiles of the candidates based on their registrations in social networks or through other Internet sources, thus trying to establish some of their special characteristics. The technology is also suitable for performing certain types of tests to establish certain behavioural skills. Applying this method of evaluation, with predetermined criteria and desired results, without a direct physical meeting between the candidate and the evaluator, it is not possible to obtain an objective personal assessment of the opinion, perceptions, character of the potential employee. Some companies prefer the application of a combined model of personnel selection. One of the main challenges in this field of activity is that organizations must be absolutely sure that they have developed and implemented a transparent selection process, free of discrimination.

Training and development *– various platforms based on the use of artificial intelligence have the ability to create and offer individual training programs, fully tailored to the needs, skills and preferences of employees, with training taking place in different forms, among which can be individual sessions with trainers, video tutorials, presentations and other types of training models*. This is a very good way to train, because the artificial intelligence can judge that if an employee is learning the material quickly, the system itself can generate courses with the corresponding appropriate learning resources and tasks for more advanced and faster results. This personalized corporate attitude motivates the employee to develop career and long-term in the given organization, which in turn contributes to better productivity as well as building a good image of the given organization.

Performance management *– artificial intelligence offers the possibility, through various tools* (feedback from colleagues, managers, clients, participation in projects and their final performance evaluation, training courses, trainings) *to analyse the development of a given employee, based on which to draw conclusions about possible necessary improvements, formulate proposals for optimizing management processes, implement incentives through various motivational*

programs for employees with better results, including defining ideas for subsequent possible improvements. Following such an algorithm provides opportunities to increase the quality of the evaluation process and the formation of better proposals for restructuring and improvement of labour processes, taking into account the individual characteristics of human resources and the specifics of technological production parameters. In this way, the employed can be further stimulated to improve their qualifications and work results; it is possible to lay the foundations for a sustainable process of continuous improvement of the applied training programs for new employees, as well as to form an environment for easier adaptation to the values of a company and its corporate concept.

Data analysis and strategic management *–from the analysis and results that AI generates, a number of conclusions can be drawn based on staff turnover, their evaluations, opinions, achievements and work style and performance*, which would help to: minimize of future errors, optimization of the work process, management and planning the development of the business organization.

Automation of routine tasks *– artificial intelligence provides opportunities to streamline routine administrative tasks* such as: payroll processing, document management and answering frequently asked questions from employees, helping to increase the efficiency of human resource management.

5. Conclusion

Human resources make a significant contribution to the results and development of business organizations. Creating a suitable environment for increasing their productivity favours the realization of a number of competitive advantages. In the conditions of digitization, operational commitments and strategic focus must be directed to parallel changes in all systems, including the human resources management system. The application of specific IT tools, data processing and effective communication in the field of human resources are a huge challenge that company management strives to cope with. Adequate choice and timely transformations depend on how successfully the new paradigms will be able to quickly and effectively fit into the company philosophy and will be able to contribute to the realization of the goals.

Reference

Господинов, Д. (2012). *Управление на човешките ресурси в училищни организации*. София: Деал-Емилия Недялкова.

Димитров, К. (2009). Съвременни аспекти в управлението на човешките ресурси. *Научни трудове на УНСС, Т. 2*, 315-343

Изкуствен интелект и човешки ресурси. НИТ – Нови Интернет Технологии ЕООД. https://www.online-learning.bg/izkustven-intelekt-i-choveshki-resursi-izpolzvane-na-ii-v-hr.

Изкуственият интелект: какво представлява и как се използва. Теми. Европейски парламент. https://www.europarl.europa.eu/topics/bg/article/20200827STO85804/izkustveniiat-intelekt-kakvo-predstavliava-i-kak-se-izpolzva.

Илиев, Й. (2006). Управление на човешките ресурси – необходимият подход от науката към практиката на българските фирми. *Годишник на УНСС*, 147-170.
Как изкуственият интелект помага в човешките ресурси? Top Skills Recruitment. https://www.topskills-bg.com/kak-izkustveniyat-intelekt-pomaga-v-choveshkite-resursi/.
Как изкуственият интелект променя управлението на човешките ресурси? 08.05.2024 Enterprise Magazine. https://enterprise.bg/administration/kak-izkustveniyat-intelekt-promenya-upravlenieto-na-choveshkite-resursi.
Кирчев, К. (16.06.2023). *Въздействието на AI върху човешките ресурси с управлението на таланти*. https://www.karieri.bg/news/40348_vzdeystvieto-na-ai-vrhu-choveshkite-resursi-i-upravleni.
Колева, С. (2012). Управление на човешките ресурси. София: ИК-УНСС.
Колчагова, Б. (2009). Мениджмънт на човешките ресурси. София: Кинг.
Коцев, Н. & Коцев, Е. (2008). Управление на човешките ресурси в организацията. В. Търново: Абагар.
Матеев, Г. & Киров, С. (2013). *Управление на човешките ресурси*. Благоевград: Колеж по туризъм.
7 Стъпки за ефективен подбор на персонала. 10/08/2021. https://ehr.bg/2021/08/10/podbor-na-personala/.
Стефанов, Л. & Пейчева, М. (2013). *Управление на човешките ресурси*. София: Тракия-М.
Човешки ресурси (HR) - какво представлява, определение и концепция. https://bg.economy-pedia.com/11031655-human-resources-hr.
Шопов, Д. & Атанасова, М. (2009). *Управление на човешките ресурси*. Част 1. София: Тракия-М.
Шопов, Д., Атанасова, М., Шопов, Т. & Пейчева, М. (2003). *Управление на човешките ресурси*. Част 2. София: Тракия-М.
Шопов, Д., Евгениев, Г., Каменов, Д., Атанасова, М., & Близнаков, Й. (2013). *Как да управляване човешките ресурси в предприятието*. София: Труд и право.
Banfield, P. & Kay, R. (2008). *Introduction to Human Resource Management*. Oxford: Oxford University Press.
Bennison, M. & Casson, J. (1984). *Manpower Planning Handbook*. IMS.
Byars, L. & Rue, L. (2004). *Human Resource Management*. Boston: IRWIN.
Milkovich, G., & Boudreau, J. (1991). Human Resource Management. Boston: IRWIN, Homewood
The Future of Work: Intelligent by Design. Eightfold AI's 2022 Talent Survey. www.eightfold.ai.