

ARTIFICIAL INTELLIGENCE AS A CHALLENGE FOR HUMAN RESOURCES MANAGEMENT

Introduction

The changes currently observed in the business environment lead many researchers to conclude that we are witnessing the next, fourth industrial revolution, referred to as Industry 4.0 [Schwab, 2018]. At its core is the digital transformation not only of industry but of all areas of socio-economic life. It has been made possible by a variety of technologies, which include the Internet of Things, artificial intelligence, blockchain, autonomous vehicles, 3D printing, and robotics. However, recent years have definitely belonged to artificial intelligence, which has become a widely discussed and used technology thanks to the free Chat GPT. Organizations are also very interested in the potential opportunities it presents.

Artificial intelligence is increasingly applied in the field of human resources management [Kaur et al., 2023; Lukasik-Stachowiak, 2023; Pandey, Khaskel, 2019]. Numerous studies conducted at the interface of artificial intelligence and human resources processes allow us to identify a number of advantages associated with it. Their consideration can take place on two levels: employee and organizational [Palos-Sanchez et al., 2022]. The first one highlights the advantages that can be counted on in the case of the simplest, almost automatically performed tasks. The use of artificial intelligence in their case means that employees “free up” their previously occupied time and can devote it to activities that bring greater value to the organization.

On the organizational level, researchers emphasize the positive correlations between the implementation of artificial intelligence in selected areas of human resources management and the effects observed in the organizational and transformational

* Grzegorz Łukasiewicz, Ph.D. – Krakow University of Economics. ORCID: 0000-0001-7203-2413.

fields [Vrontis et al., 2022]. In the first case, organizations can count on an increase in work efficiency, cost reduction, improvement of the organization's image, acquisition of new customers, and an increase in their satisfaction with the products or services provided. In the transformational field, on the other hand, attention is paid to increased innovation, which translates into offering new products or services to customers.

However, artificial intelligence does not generate only positive effects. Problems and challenges that may significantly hinder or even prevent the use of high-tech IT solutions are becoming very important, especially in the context of human resources management. Numerous implementations of various solutions based on artificial intelligence in the area of HRM are often criticized or even pointed to their negative consequences (Bhave, Teo, Dalal, 2020; Böhmer, Schinnenburg, 2023; Zhou, Wang, Chen, 2023). Applications based on advanced algorithms operate at the intersection of modern technologies, law, ethics and management. This causes controversy regarding their validity. Therefore, the aim of the article is to identify and analyze the key challenges that artificial intelligence poses to human resources management.

2. Artificial intelligence – an attempt at definition in the context of human resources management

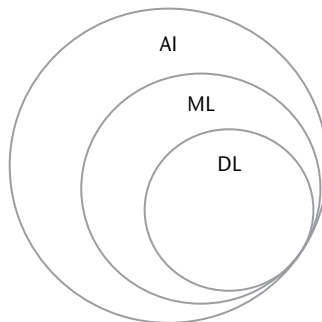
The last decade has been a period of dynamic changes observed in many areas of socio-economic life. In particular, the area of broadly understood information technology (IT), including artificial intelligence, has been subject to these changes. Due to its increasingly easy and free access for individuals and business entities (for example, in the form of Chat GPT and its Jasper AI counterparts, Writesonic, Rytr.me, or Texta.ai), AI has become a potential source of various benefits [Wu et al., 2023].

The dynamic development of this area of IT has its basis in research and publications dating back to the 1950s. In 1950, Alan Turing published a landmark article *Computing Machinery and Intelligence*, in which he asked a fundamental question – *can machines think?* [Turing, 1950]. This question, considered from the point of view of philosophy or logic, continues to fuel discussions today, not only academic ones. The aforementioned scientist is also known as the creator of a test to examine the intelligence of a machine – known as the Turing test. Although more than 70 years have passed since the aforementioned publication, the issue of artificial intelligence has never lost its relevance. On the contrary, when analyzing the number of publications devoted to this issue, it is clear that after 2000, the number of studies has increased significantly [Simon, 2023]. Today, artificial intelligence is increasingly used by numerous organizations, mainly for commercial purposes. However, business is not the only major recipient of IT solutions using such tools. Artificial intelligence is

also applied in the arts, medicine, science, and education, contributing to the rapid analysis of complex problems and increasing productivity.

A clear definition of artificial intelligence requires, at the outset, a discussion of the basic concepts associated with it, which are often mistakenly equated with AI as synonyms. These are machine learning and deep learning. These two concepts should be considered subsets of artificial intelligence [Ziółkowska, 2023]. Based on the approach presented by Microsoft, machine learning is based on algorithms used to identify data patterns. The patterns, in turn, are used to create a data model that enables prediction. Deep learning, on the other hand, is an advanced type of machine learning based on neural networks. It requires a large data set for training, which results in a deep learning model. This model takes information from multiple data sources, analyzing it in real time without the need for human intervention (oracle.com; azure.microsoft.com). Graphically, the subsets of artificial intelligence mentioned are shown in Figure 1.

Figure 1. Subsets of artificial intelligence



AI (artificial intelligence)

ML (machine learning)

DL (deep learning)

Source: Ziółkowska [2023: 92].

In the literature, artificial intelligence, particularly its definition, is widely described and discussed [Mroczko, 2023, Ratten, 2024]. Before proposing a definition, attention should be paid to its basic features. According to F. Kurp, artificial intelligence is characterized by:

- the ability to learn and acquire knowledge (an essential feature),
- adaptability (the ability to adapt to previously unknown environmental conditions),
- autonomy (the capacity to handle diverse, often unexpected situations without help from the system's environment).

These features gain particular significance when analyzed in the context of human resources management. Adopting after A. Pocztowski [2018: 33–34] that human

resources management (HRM) includes “the formation of strategies, processes, structures, and tools supporting the achievement of high labor efficiency and raising the quality and value of human capital as a source of value generation for stakeholders”, it should be emphasized that the ability to learn, adaptability, and autonomy align closely with the overall concept of HRM. Continuous changes in the organizational environment force HR staff to learn new rules and relationships, adapt procedures and tools accordingly, and exercise a high degree of autonomy in personnel decision-making. Artificial intelligence systems, with their inherent characteristics, can significantly support the work of modern HR managers.

Given the above assumptions about artificial intelligence, the following part of the article adopts the definition proposed by T. Zalewski. Artificial intelligence is understood as “a system which allows performing tasks that require a process of learning and taking into account new circumstances in the course of solving a given problem, and which can, to varying degrees – depending on the configuration – act autonomously and interact with the environment” [Zalewski, 2020: 14].

3. Problem areas at the interface of artificial intelligence and human resource management

3.1. Opacity of algorithms, datafication and nudging

Very compelling considerations regarding the negative consequences of algorithms used in human resource analytics were presented in the publication by L. Gal, T.B. Jensen and M.-K. Stein [2020]. They identified three related risks: opacity of algorithms, datafication, and nudging. Each of these risks is directly related to information systems using artificial intelligence (algorithms) and the challenges they pose in the field of human resources management.

At the outset, it should be emphasized that algorithms based on large datasets are regarded as tools that support decision-making process. However, their operation can result in certain data being entirely ignored, their significance downplayed or, conversely, data with low relevance being treated as crucial, depending on the underlying assumptions. It follows that they are becoming increasingly important in shaping the work environment. Therefore, it is justified to seek a thorough understanding of how algorithms work in order to answer fundamental questions: *Which data are considered for a particular problem? Which are rejected, and why? How do the selected data influence the results obtained, and how are they interrelated?* Unfortunately, getting answers to such questions is not straightforward. The main reason for this is the opacity of algorithms, that is, the inability to identify and understand the principles by which they operate.

According to J. Burrell [2016], the opacity of algorithms used in fields such as artificial intelligence arises from three main reasons: deliberate secrecy, lack of IT competence, and complexity at the application level. First, the secrecy surrounding algorithms used in market applications is embedded in the “inner workings”. These companies assume in advance that they will not disclose the “inside workings” of the algorithms, as they treat them as a resource through which they achieve a competitive advantage. Making them public would expose them to potential losses and, undoubtedly, the risk of competitors using some of the knowledge they contain. The second case is when organizations, despite having access to the code of algorithms, are unable to understand the rules they use due to a lack of adequate competence. Hiring professionals in relevant IT fields does not guarantee that they will be able to make an accurate analysis of the algorithm, while hiring IT specialists just for this task may not be cost-effective. The last reason for the discussed opacity is the high complexity of the construction and operation of algorithms at the level of the entire application. Increasingly, IT solutions offered, despite being sold as a single application, actually consist of multiple modules written by different people/teams differing in coding skills, among other things. This, in turn, causes difficulties in the overall interpretation of the purchased solutions.

The opacity of algorithms is a fundamental challenge facing human resources management. Certainly, they will be increasingly used in decision-making processes at various levels of HRM – both operational and strategic. This, however, will create many complications for HR managers. In the case of the opacity in question, the main problem and challenge will become providing clear and precise answers to simple questions, for example: *why did a certain employee receive a bonus and another did not? For what reason was a particular employee terminated? Why was this employee hired and not another? What arguments determined the promotion of a particular employee?* It is worth noting at this point that an organization is not just a formal structure, goal, or material and technical equipment. It is first and foremost a social group that functions according to certain established rules and principles. Artificial intelligence, through the opacity of algorithms, disrupts the process of employee alignment with these rules. The lack of precise feedback makes it impossible for employees to determine which behaviors are acceptable and which are not. This consequently translates into a sense of non-acceptance by the group and isolation. The way out of this type of situation is a comprehensive description of the decisions recommended by the algorithms, in which any doubts would be effectively clarified. A broader look at ways to reduce the opacity of algorithms and other related problem areas is presented in Table 1.

Table 1. Mitigating the negative effects of algorithm use in human resources analytics (People Analytics, PA)

Ethical challenge	Reframing PA	New organizational roles and practices	Alternative technology design principles
Opacity	Humanizing PA portrays them as technologies that are capable of making mistakes, and that therefore should be scrutinized and held up to account	Algorithmists can sharpen human oversight in algorithmic decision-making, including a balanced emphasis on human-machine input	Revealing PA's reasoning, including their shortcomings and uncertainty, makes them more readily interpretable and less opaque
Datafication of the workplace	Acknowledging the complexity of moral situations highlights the need to mitigate datafication and cultivate human interpretations	Algorithmists can advocate for adding breadth and multiplicity to algorithmic accounts, counteracting reductionism and one-sided representations	Exposing shortcomings in algorithmic reasoning highlights the need for additional, non-datafied insights
Nudging	Universal nudging can result in a morally deficient workforce; organizations should limit the scope of nudging and allow members to reflect, and exercise human judgment to develop their practical wisdom	Algorithmists can ensure that nudging is transparent and consistent with workers' pursuit of their internal goods, which is aided by the incorporation of rich and intuitive accounts of workers and their actions	The introduction of ambiguity and accountability into PA design can lead to probabilistic context-based nudging rather than deterministic and decontextualized nudging

Source: Gal, Jensen, Stein [2020].

Datafication is becoming an important issue for human resources management. According to K. Śledziowska and R. Wloch, datafication should be understood as “data acquisition through the creation of digital representations of the real world as a result of digitization; integration (processing and merging of data sets) and analysis of data using algorithms; deriving economic, social, or political value from the information thus acquired” [2020: 67]. Many authors also emphasize that datafication is a consequence of digitization, i.e. converting analog data into digital. Digitization made it possible for societies to store very large amounts of data in a digital form, but the data was still treated as a copy of analog data used for one purpose (e.g., scanned photos, documents, books, etc.). Only datafication made it possible to analyze digital data using sophisticated statistical and econometric methods or using artificial intelligence algorithms (for example searching for photos of a given person). Thus, the traditional pyramid in the form of data-information-knowledge-wisdom, where data is unstructured facts and information is the data processed so that it is meaningful to the decision-maker [Grabowski, Zajac, 2009: 105], has lost its relevance. Today,

in the age of datafication, it is increasingly difficult to distinguish between data and information [Mai, 2016].

We can certainly talk about datafication also in relation to human resources management. Modern organizations can collect, store, and analyze large amounts of personal data. Already at the stage of recruitment and selection, data is collected from application documents, interviews conducted via chatbots or HR recruiters. Chatbots collect information not only in the form of answers to traditional questions but also analyze the vocabulary used or the response time to the questions asked. Data are also collected in other areas of human resources management. Performance management provides a lot of information about employee productivity, for example in the form of the number of telephone calls made, their effectiveness, and time spent in a dedicated application or on websites related or unrelated to the work performed. Employee development is primarily the number and types of training received and its results. In remuneration, on the other hand, we collect data on the amount and structure or changes over time.

Collecting this type of data also raises many managerial, ethical, and legal issues. Questions about the types of information organizations can collect, or concerns about data privacy – especially when an employee is unaware of the analysis of his or her digital footprints, such as sent emails- remain unresolved. The issue of employee subjectivity also recurs. In the world of digital data and algorithms, values represented by employees, attitudes toward work, and the ability to maintain appropriate interpersonal relationships are receding into the background. Employees are perceived mainly through digital data stored in databases that largely determine how they are perceived, for example, by their superiors. It is also problematic to analyze data from multiple employees and draw conclusions against only one of them based on the data. Algorithms that analyze emails, phone conversations, posts on forums, or company chat rooms do not take into account gestures or words spoken in informal contacts that are so important to us. The omission of such important data can result in descriptions of employees that differ significantly from reality.

Another problem area emerging in the context of artificial intelligence and human resources management is guiding the behavior of selected employees (nudging). This type of practice occurs when a person with appropriate knowledge is able to take advantage of temporary psychological or emotional susceptibility and influence other people to change their thoughts or behaviors [Gal, Jensen, Stein, 2020]. This knowledge may come from applications that monitor, for example, the mood of employees by scanning their facial expressions and are able to identify people who are in emotional crisis. This can prompt decision-makers to intervene and, consequently, change the behavior of the indicated employees. It should be noted that often the employees against whom interventions are made, are unaware of this fact.

3.2. Complexity of HR outcomes, small data, accountability regarding fairness, ethical norms, labor laws and employee reactions

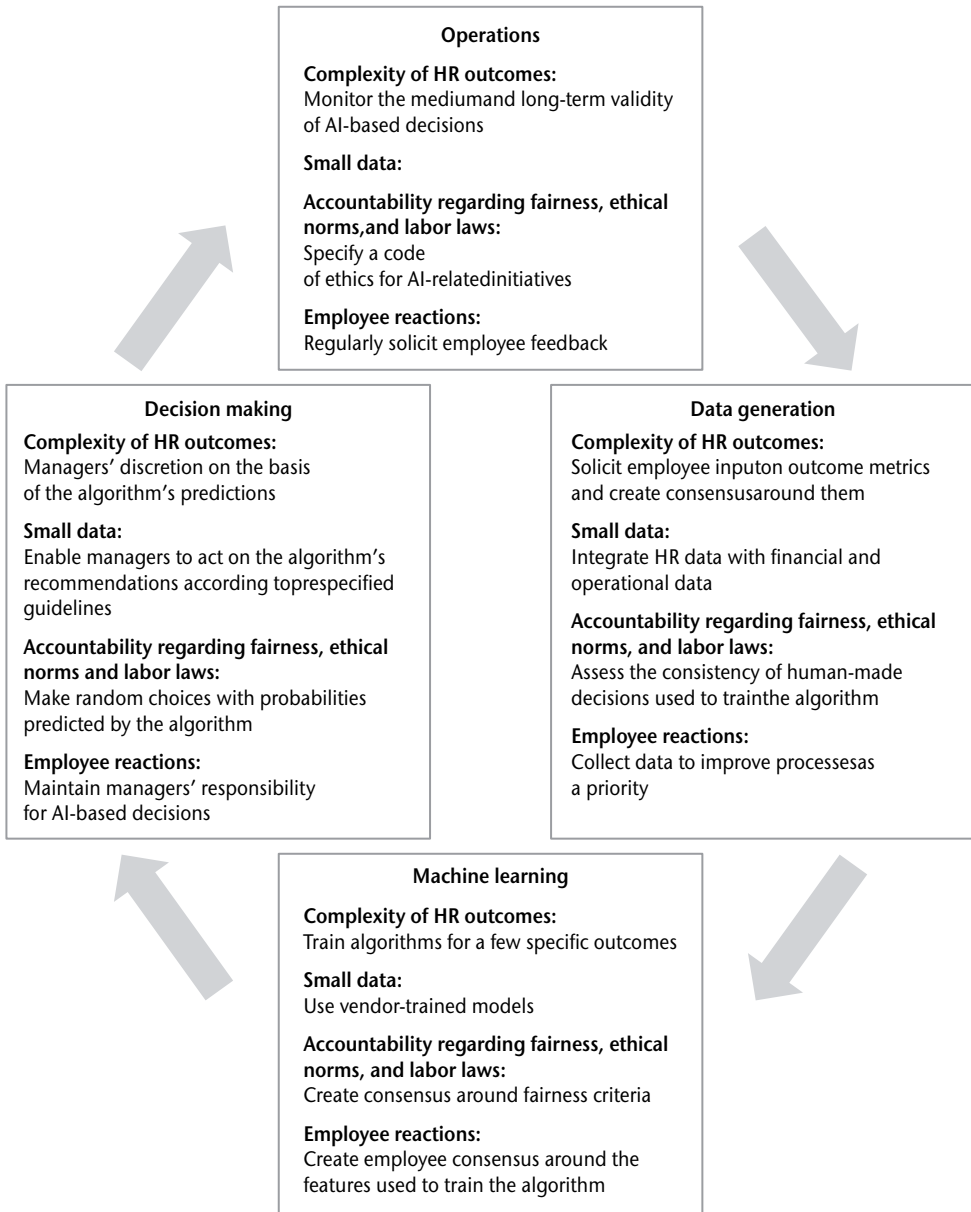
A different approach to the challenges emerging in the field of human resources management under the influence of artificial intelligence was proposed by P. Tambe, P. Cappelli, and V. Yakubovich [2019]. According to the researchers, the main challenges in this area are: (1) the complexity of human resources management outcomes, (2) the limited availability of data, (3) responsibility for compliance with ethical standards and labor laws, and (4) employees reactions. Each challenge was integrated into the operational cycle of artificial intelligence systems, enabling the authors to propose actions aimed at mitigating the potential negative effects of these systems. This proposal is presented in Figure 2.

The complexity of HRM outcomes primarily relates to the evaluation of employee and the assessment of HRM's impact on an organization's economic performance. In an increasingly complex work environment, requiring permanent development of one's competencies, the attempt to answer the question of who the best employee is and what characterizes him poses more and more problems. The criteria used for this purpose are becoming more and more extensive, and they also allow for the assessment of work results from various perspectives – qualification, efficiency, behavior, and personality. Thus, it is difficult to expect unquestionable ways of evaluating employees from algorithms, when people with many years of experience in this field clearly have problems with it. The situation becomes more complicated when it comes to teamwork. The effects of a given employee's work are then dependent on the work of other team members, which further complicates the final individual assessment of employees. A small amount of data, on the other hand, is a problem that can be described as technical. Machine learning requires a very large amount of data, often in the millions. This requirement means that the field of human resource management can be questioned as one in which artificial intelligence can be used. Some events, particularly in small and medium-sized companies, are very rare. Examples include disciplinary dismissals, promotions, changes in salary conditions, or even participation in training. Gathering the required amount of data to power artificial intelligence for many companies, even large ones, will be a major challenge.

The issue of ethical standards in the discussed proposal is identical to the datafication discussed earlier, and its basis, as the authors emphasize, is the lack of transparency of the algorithms used [Tambe, Cappelli, Yakubovich, 2019]. The final challenge for HRM relates to the reaction of employees to decisions based on analysis by artificial intelligence. When employees find that an algorithm is based on specific data as a result of their behavior, they will, despite perceiving such rules as

unfair, adjust their behavior in such a way as to “cheat the system” and thus get the best possible results. This type of behavior can ultimately lead to undermining the relevance of the algorithms used.

Figure 2. The functioning cycle of artificial intelligence systems in the area of HRM along with a proposal to solve selected problems



Source: own study based on Tambe, Cappelli, and Yakubovich [2019].

4. Discussion and recommendations

Presented considerations regarding the implementation of artificial intelligence in human resources management show that understanding the problems related to this process is becoming a key issue. Organizations should be prepared for various problems that may arise during the implementation of modern IT solutions. At the same time, there is a great need for anticipatory actions aimed at identifying and mitigating possible problem situations. The recommendation for these actions may be as follows:

- **Training of HR staff.** The implementation of solutions based on artificial intelligence should be preceded by training of HR department employees. The training should cover the possibilities and benefits of implementing IT solutions, as well as the tools and technologies that can be used by organizations. In order for HR department employees to become ambassadors of artificial intelligence, they must have current and extensive knowledge on the subject (potential solutions to problems: nudging, countability regarding fairness, ethical norms and labor laws, employee reactions).
- **Needs analysis.** Organizations identify areas of human resources management that can benefit most from AI-based solutions, e.g. employee acquisition, performance management, retention and development of talented employees, and remuneration management. Needs analysis is the basis for conducting market research in terms of available IT tools and then selecting solutions that best meet the needs of the organization (potential solution to problems: complexity of HR outcomes, small data, opacity of algorithms, datafication).
- **Integration with current systems.** IT systems used by organizations for many years may be incompatible with AI-based solutions. For this reason, IT departments must actively participate in the selection of new solutions to ensure safe and effective data migration (potential solution to problems: small data, opacity of algorithms, datafication).
- **Shift management.** The increasing use of AI in personnel processes is associated with major changes in individual job positions. Preparing employees for these changes is very important. Hence the key role of the management board and organization leaders in providing support in the most difficult moments of this process (potential solution to problems: employee reactions, accountability regarding fairness, ethical norms and labor laws).

Presented proposals aimed at minimizing problem situations created by AI in HRM do not constitute a closed list. They can be considered as a starting point for a broader discussion on this topic. However, it should be emphasized that organizations preparing to implement solutions using AI can organize dedicated training, analyze needs in

this area, plan the integration of the systems used and effectively manage change. The result of these activities will be a more effective and efficient implementation of artificial intelligence into HRM.

Conclusion

Artificial intelligence represents a real challenge for human resources management. Its use in personnel processes can have multiple consequences. The literature draws attention not only to the positive effects of its application, but increasingly recognizes the potential problems that organizations will face. In the proposals cited, it is emphasized that the problems revolve around the following issues: opacity of algorithms, datafication, nudging, complexity of human resource management effects, a small amount of data, responsibility for compliance with ethical and legal standards, and employee reactions to the algorithms.

We are only at the beginning of the implementation of artificial intelligence in human resources management. Despite this, many challenges are already clearly emerging. The organization's approach to these challenges will determine the success or failure of the entire process. Success will require greater awareness of these challenges and further research in this area.

Acknowledgements

The article is co-financed by the Krakow University of Economics as part of the program Conference Activity Support – WAK 2023.

References

- [1] Bhawe D.P., Teo L.H., Dalal R.S. [2020], Privacy at work: A review and research agenda for a contested terrain, *Journal of Management* 46(1): 127–164.
- [2] Burrell J. [2016], How the machine “thinks”: understanding opacity in machine learning algorithms, *Big Data & Society*, January–June: 1–12.
- [3] Böhmer N., Schinnenburg H. [2023], Critical exploration of AI-driven HRM to build up organizational capabilities, *Employee Relation: The International Journal* 15(5): 1057–1082.
- [4] Grabowski M., Zając A. [2009], Dane, informacja, wiedza – próba definicji, *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie* 798: 99–116.
- [5] <https://azure.microsoft.com/pl-pl/resources/cloud-computing-dictionary/what-is-artificial-intelligence#autonomous cars> (accessed: 12.02.2024).

- [6] <https://www.oracle.com/pl/artificial-intelligence/machine-learning/what-is-deep-learning/> (accessed: 12.02.2024).
- [7] Jung J., Song H., Kim Y., Im H., Oh S. [2017], Intrusion of software robots into journalism: the public's and journalist's perceptions of news written by algorithms and human journalists, *Computers in Human Behavior* 71: 291–298.
- [8] Kaur M., AG R., AG R., Gandolfi F. [2023], Research on artificial intelligence in human resource management: trends and prospects, *Global Journal of Management and Business Research: Administration and Management* 23 (A5): 31–46.
- [9] Kurp F. [2020], *Sztuczna inteligencja od podstaw*, Helion, Gliwice.
- [10] Łukasik-Stachowiak K. [2023], Uncertainties and challenges in human resource management in the era of artificial intelligence, *Scientific Papers of Silesian University of Technology, Organization and Management Series* 181: 341–356.
- [11] Mai J.-E. [2016], Big data privacy: The datafication of personal information, *The Information Society* 32(3): 192–199.
- [12] Mroczo F. [2023], Sztuczna inteligencja i jej wykorzystanie w logistyce, *Prace Naukowe Wyższej Szkoły Zarządzania i Przedsiębiorczości z siedzibą w Wałbrzychu* 53(1): 41–60.
- [13] Palos-Sanchez P.R., Baena-Luna P., Badicu A., Infante-Moro J.C. [2022], Artificial intelligence and human resources management: A bibliometric analysis, *Applied Artificial Intelligence* 36(1): 2145631.
- [14] Pandey S., Khaskel P. (2019), Application of AI in human resource management and gen Y's reaction, *International Journal of Recent Technology and Engineering* 8(4): 10325–10331.
- [15] Pocztowski A. [2018], *Zarządzanie zasobami ludzkimi*, Polskie Wydawnictwo Ekonomiczne, Warsaw.
- [16] Ratten, V. (2024), Artificial intelligence: Building a research agenda, *Entrepreneurial Business and Economics Review* 12(1): 7–16.
- [17] Schwab K. [2018], *Czwarta rewolucja przemysłowa*, Studio Emka, Warsaw.
- [18] Szymon J. [2023], Artificial intelligence – an agenda for management sciences, *E-mentor* 2(99): 47–55.
- [19] Śledziowska K., Włoch R. [2020], *Gospodarka cyfrowa. Jak nowe technologie zmieniają Świat*, Wydawnictwo Uniwersytetu Warszawskiego, Warsaw.
- [20] Tambe P., Cappelli P., Yakubovich V. [2019], Artificial intelligence in human resources management: Challenges and a path forward, *California Management Review* 61(4): 15–42.
- [21] Turing A.M. [1950], Computing machinery and intelligence, *Mind* 49: 433–460.
- [22] Vrontis D., Christofi M., Pereira V., Tarba S., Makrides A., Trichina E. [2022], Artificial intelligence, robotics, advanced technologies and human resource management: A systematic review, *The International Journal of Human Resource Management* 33(6): 1237–1266.

- [23] Wu T., He S., Liu J., Sun S., Liu K., Han Q-L., Tang Y. [2023], A brief overview of ChatGPT: The history, status quo and potential future development, *Journal of Automatica Sinica* 10(5): 1122–1136.
- [24] Zalewski T. [2020], Definicja sztucznej inteligencji, in: Lai L., Świerczyński M. (eds.), *Prawo sztucznej inteligencji*, Wydawnictwo C.H. Beck, Warsaw: 1–14.
- [25] Zhou Y., Wang L., Chen W. [2023], The dark side of AI-enabled HRM on employees based on AI algorithmic features, *Journal of Organizational Change Management* 36(7): 1222–1241.
- [26] Ziółkowska E. [2023], Wpływ sztucznej inteligencji na rynek finansowy w procesie podejmowania decyzji ekonomicznych – szanse, wyzwania i rekomendacje, *Studia i Prace Kolegium Zarządzania i Finansów* 192: 89–108.

ARTIFICIAL INTELLIGENCE AS A CHALLENGE FOR HUMAN RESOURCES MANAGEMENT

Abstract

Artificial intelligence is increasingly being used in various areas of organizational management, including human resources management. While its application offers numerous benefits, it also presents significant challenges. The aim of the article is to identify and analyze the key challenges that artificial intelligence presents in the context of human resources management. Based on a critical review of the literature, the article discusses the basic challenges emerging at the intersection of artificial intelligence and human resources management. These include algorithm opacity, datafication, the conscious management of behavior, the complexity of human resources management outcomes, limited data availability, responsibility for compliance with ethical and legal standards, and employee reactions to algorithmic applications. A number of negative consequences of the ill-considered use of artificial intelligence have been demonstrated and possible organizational activities that can help minimize them have been presented.

KEYWORDS: ARTIFICIAL INTELLIGENCE, HUMAN RESOURCES MANAGEMENT, ALGORITHMS

JEL CLASSIFICATION CODES: M15, M54

SZTUCZNA INTELIGENCJA JAKO WYZWANIE DLA ZARZĄDZANIA ZASOBAMI LUDZKIMI

Streszczenie

Sztuczna inteligencja jest coraz częściej wykorzystywana w różnych obszarach zarządzania organizacjami. Dotyczy to również zarządzania zasobami ludzkimi. Jej wykorzystanie skutkuje nie tylko pozytywnymi następstwami, ale także powoduje wiele związanych z tym problemów. W związku z powyższym za cel artykułu przyjęto identyfikację i analizę kluczowych wyzwań, jakie sztuczna inteligencja stawia przed zarządzaniem zasobami ludzkimi. Bazując na krytycznej analizie literatury przedmiotu, w artykule omówiono podstawowe wyzwania wyłaniające się na styku sztucznej inteligencji i zarządzania zasobami ludzkimi, a mianowicie: nieprzejrzystość algorytmów, datafikację, świadome kierowanie zachowaniem, złożoność efektów zarządzania zasobami ludzkimi, małą liczbę danych, odpowiedzialność za przestrzeganie norm etycznych i prawnych oraz reakcję pracowników na wykorzystywane algorytmy. Wykazano szereg negatywnych konsekwencji nieprzemyślanego zastosowania sztucznej inteligencji oraz przedstawiono możliwe działania organizacji, które mogą pomóc w ich minimalizacji.

SŁOWA KLUCZOWE: SZTUCZNA INTELIGENCJA, ZARZĄDZANIE ZASOBAMI LUDZKIMI, ALGORYTMY

KODY KLASYFIKACJI JEL: M15, M54