APPLYING AI IN THE RECRUITMENT AND SELECTION PROCESS AND BUILDING THE ORGANIZATIONAL CLIMATE (PART I)

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Purpose: In this article, let us seek an answer to the question of what the implications of the use of AI in the area of recruitment and selection of employees (R&S) may be for the organisational climate. The first part of the article aims to identify the scope of the application of AI in HRM and to demonstrate the research gap regarding the impact of the use of AI in R&S on organisational climate.

Design/methodology/approach: Desk research was conducted in the context of the use of AI in HRM. We have selected review articles that highlight the opportunities and risks of using AI. The article has been divided into two parts. In the first, we attempted to identify AI activity in HRM and R&S. In the second, we have conducted a detailed case study of AI applications in S&R and discussed its impact on the organisational climate.

Findings: Our research has shown that the relationship between the use of AI in R&S and organisational climate has not been a focus of research to date. The research led to the conclusion that improvements in the efficiency of R&S caused by the application of AI, can have a significant impact on organisational climate. Due to the relatively young field of research as well as the pioneering practice of applying AI in this area, the consequences of its application are not yet well revealed.

Originality/value: Typical variables for evaluating process execution, such as time, cost, quality, safety, have become essential perspectives for evaluating R&S task execution by AI. In the case of modern organisations, where value is created from knowledge and innovation, much of which is motivated by social interactions, there is a need for a creative atmosphere. Will homogenous corporate employees, selected by predictive algorithms, be able to be creative as a team? Will the polarisation of creative debates disappear? Will anyone in a unified organisation be able to challenge existing solutions and propose other, better ones? For the sake of efficiency improvements, do we want to renounce social relationships, the excitement of a new solution? These are the dilemmas we signal. Our research points to the challenges facing HR departments and professionals in the age of the digital revolution.

Keywords: artificial intelligence (AI), recruitment, selection, organisational climate, work atmosphere, human resources management (HRM).

Category of the paper: Viewpoint.

1. Introduction

The issues addressed in the article are the result of reflection and the need to speak out regarding the shape of human collaboration with artificial intelligence (AI) in the field of employee recruitment and selection. Hirsh (2019) states that to properly use the achievements of AI, it is necessary to conduct a detailed assessment of the consequences of its application in HR. Academic discussion, in this regard, must identify both the benefits and losses of its implementation and the negative impact on organizational culture. Many of the activities carried out in recruitment and selection are repetitive and can be automated using AI, while some, despite the apparent repetitiveness of the activities, have a peculiar variation that can be automated, but whether the intended results of such automation will be in line with the expectations of the organization. Among the many items of literature in the field under discussion, many focus on the analysis of the direct impact of AI on the implementation of a task, e.g. recruitment, training, etc. This trend can be referred to as pro-efficiency orientation. A simple understanding of AI as a helper in the execution of routine activities is much simplified and schematic (Aslran et al., 2021; Boustani, 2021; Jatobá et al., 2019; Hmoud, 2021).

Such thinking is one-sided and only emphasizes the benefits of improving simple efficiency (we commit fewer resources to HR tasks). In our article, we would like to look for connections between the active use of AI in recruitment and personnel selection (S&R) and organizational climate (atmosphere). This relationship is not direct but takes place through the employee, it is the employee's mental construction, value system and personal culture, among others, that influence the atmosphere at work. The interactions of these micro-worlds (individuals) create that atmosphere we want to be in or avoid. The consequences of using AI in the recruitment and selection process are also related to the formation of the organizational culture (we often speak of digital, dual culture), the course of cooperation and the achievement of synergies and social (social-digital) competencies. In the article, we will basically take up the theme of organizational climate and its connection with the recruitment and selection process implemented by AI.

The whole analysis is further complicated by the fact of the birth in the present time of organizations whose fundamental model of operation is the use of the network as a workplace, that is, remote work. In such an organization, interpersonal interaction as traditionally understood is replaced by some new form, which requires separate research. The considerations in the article are an attempt to answer the following research questions:

1. What is the scope of AI solutions in HRM, and more specifically in recruitment and selection (R&S)?
2. Does the research conducted on the use of AI in R&S look for its impact on the organizational climate?

The purpose of the first part of this article is to identify the extent of the use of artificial intelligence in HRM, more specifically in recruitment and selection (R&S), and to demonstrate the research gap in the impact of the use of artificial intelligence in HRM (R&S) on organizational climate.

As a result of the analysis, key areas undertaken by researchers in the context of applying AI in HRM were identified. To this end, a review of the literature on the subject was conducted, as well as secondary research of review articles, in this area. Using a search by the keywords artificial intelligence and organizational climate in the EBSCO database, results were obtained that indirectly relate to this relationship. No articles directly related to this relationship were identified. Using a search with the keywords artificial intelligence, HRM, a number of articles were identified: Last week (429), Last month (915), Last 3 months (1738), Last 6 months (2881), Last 12 months (4781), All dates (16228) (EBSCO, 05.06.2024), the number of which has been growing rapidly recently. Of these, the ones selected were essentially those that are of an overview nature and point out the opportunities and risks of using AI in HRM.

2. Artificial Intelligence in HR and R&S systems

So what is the role of Artificial Intelligence? The field has not yet developed a universally accepted definition. Many definitions differ in the phrases used, however, in terms of meaning they do not differ. We consider Artificial Intelligence to be a Big Data-based technology that uses algorithms to detect, investigate, analyze and implement tasks as any intelligent human would do (Khatri et al., 2020).

Artificial intelligence (AI) attempts to be defined as a field of knowledge that includes, among other things, neural networks, robotics and the creation of models of intelligent behavior and computer programs that simulate that behavior, also including machine learning, deep learning and reinforcement learning (Artificial Intelligence Portal; European Commission).

An AI system, according to the OECD, is a system based on the concept of a machine that can influence an environment by making recommendations, predictions or decisions about a preset set of goals. It does this by using input, machine or human data to: perceive real or virtual environments, summarize such perceptions into models manually or automatically, and use model interpretation to formulate outcome options (https://www.oecd.org/digital/).

Khatri et al. (2020) believe that AI is an essential factor in technological progress at the moment, at the same time it is a topic for consideration in terms of its practical use. An important aspect of the use of AI is the lack of regulations conditioning and controlling its use. The pace of development of this technology is so fast that AI research and regulations have not kept up with the pace of its development (Niehueser, Boak, 2020).

3. Artificial Intelligence in HR – results of literature research

Widespread research interest in the use of artificial intelligence in HRM tasks is only beginning in the second decade of the 21st century. A systematic literature review conducted by Jatobá et al. (2023) showed that the interest of researchers is concentrated in four areas (a division proposed by the authors), they are: "Strategic HR and AI" - 33 publications, "Recruitment and Artificial Intelligence" - 14 publications, "Training and Artificial Intelligence" - 7, and "Future of Work" - 7 articles.

The area of application of AI in the field of HR indicated in the literature can be divided into three areas: the first concerns the recruitment methods themselves as a factor in the attractiveness of the job offer made, the second concerns improving the efficiency of the implementation of tasks in the recruitment and selection process, and the third is oriented towards a certain form of individualization of the offer when looking for employees with a very specifically set profile.

An important problem highlighted in the literature is the insufficient state of knowledge regarding the advantages, disadvantages, and possibilities of AI applications in the HRM sphere and further what consequences this will have on the labor market. The literature in this area is still in its infancy, suggesting the need for further research to understand what this field can provide to organizations in the future (Pereira et al., 2021), highlights the debate between positive and negative views of authors on the adoption of artificial intelligence in HR. Many authors note that the changes brought about by the digital revolution and, in particular, the application of artificial intelligence is critical and strategic for the development of organizations. Today we are at the heart of these transformations, the HR department is under pressure: flexibility of employment forms and workplace, flexible employees, pressure to digitize business models or, finally, to implement AI and machine learning. Acting in accordance with organizational strategy, the HR field is directly affected by all these changes, while supporting organizational development by embracing and incorporating this emerging digital environment (Bondarouk, Brewster, 2016).

HRM is a system involving people, processes and technology (Potgieter, Mokomane, 2020). As a result of the impact of these factors, the way things are done, the tools used, and the structure will be completely transformed, artificial intelligence has the potential for revolutionary transformation and can change both the role of management and the necessary organizational practices (Kshetri, 2020; Jarrahi, 2018).

Thus, we are seeing the entry of technology into HRM. This situation demands innovative and creative rethinking of its structures and routines. It demands the courage to transform thinking based on optimizing routines into "digital thinking" (Kshetri, 2020). It can also help reduce the time and costs incurred in such activities and make the organization economically viable, differentiating it from its competitors (Jatobá et al., 2019) and enabling the

implementation of new intelligent mechanisms for undertaking human resource management tasks that were previously performed marginally.

In addition, it is necessary, many researchers argue, to maintain, sustain and transform the development of traditional forms of recruitment to forms that take advantage of the achievements of technology including AI (Black, van Esch, 2020).

Artificial intelligence (AI) supports human resource management (HRM) by making HR processes more efficient and effective, improving decision-making and providing added value to companies. Artificial intelligence helps HR professionals collect, analyze and present data in a more user-friendly way, meeting organizational and HR professionals' requirements (Malik et al., 2021).

AI-based tools and machine learning methods are making it easier for companies to manage HR resources by predicting and optimizing HRM strategies. AI's ability to analyze, diagnose and make predictions improves HR operations and supports a changing workplace. Artificial intelligence (AI)-based technologies in HRM make it possible to customize job training, improve employee engagement and evaluate data to make critical decisions. Overall, artificial intelligence is revolutionizing HR processes by using data to increase productivity, communicate at scale, provide suggestions and predict outcomes.

Artificial intelligence can be used to streamline the recruitment and selection process in several ways. AI can streamline the application process, saving HR managers time and effort. It can also analyze candidate profiles and conduct interviews, helping to identify the best prospects (Rathore, 2023). Artificial intelligence (AI)-based recruiting strategies, such as resume screening, candidate matching, video interviewing, chatbots, predictive analytics, gamification, virtual reality assessments and social media screening, can improve the efficiency and quality of the recruitment and selection process, influencing better quality hiring (Albassam, 2023). Additionally, artificial intelligence can provide candidates with more fair assessment opportunities, allowing access to a wider pool of candidates (Blumen, Martines Cepellos, 2023). However, the use of artificial intelligence in recruitment also raises ethical and legal concerns, such as algorithmic bias and discrimination (Gupta, Mishra, 2023). Further research and development are needed to ensure that recruitment strategies based on artificial intelligence are effective, unbiased and comply with ethical and legal standards.

For HR, digitization means bringing a deep digital discipline to all processes and systems and achieving operational efficiency and cost optimization through the use of digital tools. However, as Conroy and Minbaeva (2020) argue, this "digital facelift" of HR is insufficient, because "doing digital" (as a result of digitization) is very different from "being digital" (as a result of digitization of the business model). For HR, the starting point of the digital transformation to "being digital" should be the centrality of the customer of HR services. The next steps need to modernize HR's processes through continuous innovation and experimentation to provide new opportunities for employees.

4. Selecting selection methods under changing conditions

Research conducted by Golej et al. (2023a, 2023b) shows that an important element in the recruitment process is to meet the expectations of job candidates or even encourage them to apply for vacant positions. This phenomenon is particularly important in industries where there is a shortage of highly qualified personnel. Here we can also see the expectations placed on AI to develop ways and means of recruiting talent. Studies have also shown that recruiters are using simple database functionalities, not taking full advantage of AI's capabilities. Part of the publication focuses on talent acquisition as a primary research topic. Mirowska and Mesnet, (2021) and van Esch and Black (2019), conducted research that showed the importance of digital recruitment to raise the level of interest in job opportunities by a new generation increasing the potential of talent in the recruitment process. This means, the need for continuous changes in the ways and forms of recruitment. Many authors emphasize the need for AI solutions to reduce internal pressure among employees (Pillai, Sivathanu, 2020; Johnson et al., 2020). This is due to the fact that there is no external influence on the results of the AI algorithm, which should be widely known, leading to a reduction in evaluation bias, especially in internal recruitment processes. AI systems can also assess information that might otherwise be ignored by recruiters who resort only to conventional methods (Pessach et al., 2020).

5. Digital efficiency and duality

Rab-Kettler and Lehnervp (2019) obtained interesting results in their study. Their findings concern the reduction of tedious and repetitive activities carried out by the recruiter while freeing up the HR department to evaluate candidates from the perspective of social skills (behavioral and psychological predispositions) and the implementation of career management activities for employees. Similarly, the aspect of efficiency in the execution time of the recruitment and selection process is emphasized by Black and van Esch (2019).

Avgoustaki and Bessa (2019), state that there is an emphasis on "digital duality" - the need to make fundamental changes in the way we deliver business value while digitally transforming the core of the business. In this context, Minbaeva (2021) poses the question, "What paradigm shift is needed within HRM research to provide HR professionals with the knowledge required to deal with the disruption caused by the digitization of business models and, leading to the need to manage digital duality?"

Minbaeva (2021) suggests a return from a dead end in which "HR practices are subordinated to organizational effectiveness". Dogmatic thinking that focuses on improving short-term financial and operational performance distances HR professionals from digital duality. It distracts them from exploring and discovering new ways to create value, as all priorities point in one direction - to achieve operational efficiency by "doing better and not necessarily doing differently". According to this author, logic needs to be developed and convincing arguments formulated to steer HR away from continuous optimization of HR processes with the help of digitization ("doing digital") and redirect attention to new methods of creating customer value through digitization ("being digital").

6. Unifying

An important voice that has been noted, and which has connotations of organizational climate, is AI's limitation of diversity in organizations. A study by Blumen and Martines Cepellos (2023) found that technology and artificial intelligence bring ambiguous diversity issues. The interviews examined whether technology, especially AI, can make it more difficult to select candidates who belong to minority groups and are underrepresented in companies. This can happen because there is a risk that algorithms will be biased in selecting candidates, choosing people with the same attributes. The cited authors argue that algorithms may select people similar to those already working at a company and considered suitable because they have the cultural fit and competencies that lead to expected performance. As a result, the company is becoming more homogeneous. Organizations should pay attention when implementing the filters used in the artificial intelligence system so as not to exclude candidates and replicate social biases. Depending on how these tools are used, diversity can be further compromised.

7. Applications

It is not difficult to see that, in general, researchers in their considerations undertook an analysis of the benefits and risks of using AI methods in R&S. This meant finding a vector of the impact of the AI activity area on the implementation of this task. Tasks described by typical variables for evaluating process execution such as time, cost, quality, and safety became essential perspectives for evaluating R&S task execution by AI. However, in the case of modern organizations, where value is created from knowledge and innovation, which are largely motivated by social interactions taking place in a specific place and time, a creative atmosphere

is needed. So, will homogeneous corporate employees, selected by predictive algorithms, be able to be creative as a team, will the polarization of creative debates leading to new solutions disappear, will someone in a unified organization be able to challenge existing solutions and propose other, better ones? These are the dilemmas we face, do we want to renounce social relationships, creative debates, excitement over a new solution, the things that also make us human, at the cost of simple efficiency improvements.

The issue of AI's impact on organizational climate has not been found in the ongoing literature research. It can be said that the research generally focuses on analyzing the possibility of using AI to improve organizational effectiveness in the broad sense of the term (economic, organizational, etc.). The research also points to the challenges facing HR departments and professionals in the age of the digital revolution.

The results of the conducted analysis encourage the identification and study of the relationship between concepts such as organizational culture, organizational climate, creativity, creativity, innovation, commitment, and the application of artificial intelligence in HRM. It is particularly important to demonstrate how and to what extent artificial intelligence should support HRM activity. How the human-machine relationship runs and what effects it will have on the employee.

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