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Abstract:

This chapter outlines the challenges of people management in the 21st century, pertaining to the use of artificial intelligence (AI). AI can have a substantial impact and create significant changes in how organizations manage their staff. Topics such as AI procedures in recruitment and selection, professional training and in performance management will be addressed, as also the advantages and disadvantages of using AI in each one of these topics. Finally, ethical aspects concerning the use of AI on people management will additionally be covered. Overall, efficiency, personalization, and prediction are just a few of the beneficial effects of AI in people management. Although the application of AI in people management may undoubtedly improve and simplify the life of HR stakeholders, precautions must be taken when applying this new technology.

Keywords: Artificial Intelligence; People Management; Recruitment and Selection; Professional Training; Performance Management; Ethics.

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Glossary:

AI- Artificial Intelligence.

HRM – Human Resource Management.

Artificial Intelligence and people management in the 21st century

1. Introduction

All facets of society have been transformed by the digital era, and human resources are no exception. Artificial Intelligence (AI), which has become more prevalent in people management, becomes a potent tool in this situation. AI enables businesses to evaluate massive amounts of data, spot trends, and reach conclusions using complex algorithms. These capabilities are giving businesses the tools they need to handle the human component and change how they operate (Santana & Díaz-Fernández, 2023). AI is becoming more prevalent in people management, having a huge impact and causing significant changes in how businesses manage their employees. The technological revolution has the power to fundamentally alter how work is performed, with implications for employment, unemployment, performance, interpersonal interactions, and workplace emotions (Santi Muthuswamy, 2023). AI will be crucial in reorganizing work organization and people management in the context of revolution 4.0.

AI's potential to optimize and automate several processes in human resource management could lead to more precise and effective decision-making. AI can be used, for instance, to analyze resumes, find promising applicants, and perform virtual interviews in the recruiting and selection process (Huang et al., 2023). This speeds up the hiring procedure and increases the chance of discovering the talent that the company requires (Ore & Sposato, 2021). Concerns concerning the effects on employment are however also brought up by these changes. Some jobs may become obsolete as previously performed by humans functions are automated, leading to structural unemployment (Brynjolfsson et al., 2017). On the other hand, AI also creates new job opportunities, especially in the area of developing and implementing AI technologies (Bughin, 2018). Organisations need to prepare for these changes by ensuring that

workers have the necessary skills to adapt to an increasingly technological work environment.

Aside from the influence on employment, AI can also have an impact on workplace relationships and emotions. Interactions between coworkers and between workers and their supervisors may change if mundane jobs are automated and chatbots and virtual assistants are introduced (Calvaresi et al., 2022). While AI can help workers with feedback and advice, the lack of human interaction can hurt emotional well-being and job happiness (Ore & Sposato, 2021). As a result, it is critical to strike a balance between automation and human connection to maintain a healthy and productive work environment. AI will have a huge impact on people management and work organization as part of the 4.0 revolution (Asfahani, 2022). Organizations may utilize AI to collect massive amounts of data and use it to make educated decisions regarding recruitment, development, and performance management. Furthermore, AI can assist in identifying trends and patterns that might lead to increased productivity and efficiency at work. Predictive analytics and the application of advanced algorithms can also assist organizations in identifying hazards and taking proactive measures to avoid workplace difficulties (Fakihi & Miah, 2023).

However, implementing AI in human resource management raises problems and ethical concerns. Data collection and analysis, for example, can raise issues about the privacy and security of employees' information (Sakka et al., 2022). Furthermore, if algorithms and AI are not carefully built and managed, they can lead to bias and discrimination (Varsha, 2023). Organizations should be aware of these challenges and take steps to guarantee that AI implementation is ethical, transparent, and responsible.

AI is changing human resource management, bringing significant changes to employment, interpersonal interactions, and workplace emotions. AI will play a critical role in redesigning people management and work organization as part of the 4.0 revolution (Chen, 2023). Organizations must be prepared to address the challenges and opportunities presented by AI, while also ensuring that deployment is done ethically and responsibly, to maximize human potential in the workplace.

This chapter aims to explore the importance and relevance of AI in people management, as well as to analyze its main applications and the associated ethical and social implications. We will address four key areas that are impacted by AI in people management: recruitment and selection, training, performance management, and the ethical and social implications of utilizing AI in people management.

AI has played an important role in optimizing employment processes in the realm of recruitment and selection. Based on established criteria, AI systems may analyze CVs, appraise skills, and discover promising applicants. Furthermore, AI can be used to conduct virtual interviews, perhaps making the process more efficient and inclusive (Fulk et al., 2022). However, to minimize prejudice and injustice in the selection process, it is critical to address the limitations and algorithmic biases that may exist in such automated systems (Goretzko & Israel, 2021).

In the context of training and talent development, AI provides new opportunities to identify skill gaps and tailor training programs to the needs of individual workers (Asfahani, 2022). AI can recommend customized courses, workshops, and mentorships based on data analysis, to maximize each worker's professional growth. However, it is critical to ensure that the use of artificial intelligence in talent development does not replace human connection and the valorization of social and emotional abilities.

Performance management is another area benefiting from AI. AI tools can collect data on workers' performance, analyze key indicators and provide valuable insights to enhance individual and collective performance (France et al., 2023). In addition, AI can assist in identifying patterns of behaviour that can positively or negatively affect the performance of individuals and teams, allowing for the implementation of more effective corrective actions (Borges et al., 2021). However, it is necessary to ensure transparency and ethics in the use of these tools, avoiding excessive surveillance and manipulation of workers. It is essential to reflect on the ethical and social implications of AI in people management. As AI becomes more present in decision-making on hiring, promotions, bonuses, and performance evaluation, concerns related to privacy, algorithmic discrimination, and loss of employment arise (Kogali & Mekid, 2023). Responsible implementation of AI in people management requires adopting ethical guidelines and considering its long-term societal impacts (Lefkowitz, 2021).

In this chapter, we will address these issues by examining the impact of AI on recruitment and selection, training, and performance management, and its ethical and social implications. We will seek to identify the benefits and limitations of AI, as well as propose guidelines for the ethical and responsible use of this technology in people management.

2. Artificial Intelligence in Recruitment and Selection

The recent technological advances in artificial intelligence (AI) have pushed organizations to adapt their processes in a way that can both personalize and respond to the actual demands and uncertainties. John McCarthy (1956) a pioneer in the use of AI

procedures, described it as the science and engineering of making intelligent machines, especially intelligent computer programs.

Human resources management processes are an example of the adoption of AI procedures. For instance, organizations have adopted new processes to recruit and select candidates - e-recruitment - and are using each time more AI as a resource to improve the outcomes and get the candidate that best fits the vacancy. E-recruitment has been defined as the use of "the internet to attract potential employees to an organisation and then employing them" (Heery & Noon, 2001, p. 122) and includes benefits such as a decreased cost and increased efficiency (Sylva & Mol, 2009), quick decisions, less paperwork, (Kim & O'Connor, 2009) and the ability to find and select the right candidate efficiently (Parry & Tyson, 2008).

These advances are evident in the digital tools that leverage AI capabilities, such as machine learning, natural language processing, deep learning, and neural networks (Eubanks, 2018). Thus, the use of AI in recruitment and selection is an innovative way of conducting the process in smart ways and achieving better results. Indeed, the use of AI in the process of recruiting and selecting candidates has become increasingly common in organizations all over the world (Ore & Sposato, 2022).

The use of AI in the process of recruitment and selection of candidates aims to facilitate the achievement of business objectives (Köchling et al., 2023). Through the integration of AI, many routine recruitment and selection tasks can now be automated and improve efficiency and fairness (Bafna et al., 2019). Further, with the adoption of AI, e-recruitment has significantly evolved and has made many organizations realize that there are significant improvements in the process when AI is used. Plus, considering the use of AI in e-recruitment, other advantages have been highlighted, including the change of monotonous selection tasks – such as applicant profile reviews and screening interview

scheduling (Taylor, 2018) - that can be automated and thereby leave more time for employees focus more on strategic human resources procedures (Upadhyay & Khandelwal, 2018). Apart from the increased efficiency in the process of recruiting and selecting, Leong (2018) also asserted that AI allowed for a gain of deeper and valuable insights into talent requirements through AI strategies, such as candidate sourcing; indeed, using AI in sourcing candidates, for instance through social networks, could be facilitated by resume scanning and the elimination of unconscious human bias (Ore & Sposato, 2022).

This innovative approach uses AI tools and algorithms to assist with the automated screening of resumes, administering AI-based cognitive tests, and conducting virtual interviews. Although this technology offers benefits in terms of efficiency and agility and seems to be well accepted by candidates (Esh et al., 2022), it also has ethical and legal implications, in addition to possible biases introduced by AI (França et al., 2023).

2.1 Artificial intelligence procedures in recruitment and selection

There are different ways of using AI in recruitment and selection tasks. One of the most used is the *automated screening of resumes*. AI tools analyze resumes submitted by candidates, identifying keywords and criteria predetermined by the recruiters that are relevant to the organization and the function itself (Smith, 2019). This allows for quick and efficient screening, reducing the time spent manually reviewing each CV – a monotonous and demotivating task - and allowing for other human resources-related tasks, such as strategic tasks (Bafna et al., 2019). However, this approach can introduce biases if the algorithms are trained on historical data that already have biases or if discriminatory criteria are included in the automated screening process (Taylor, 2018).

To overcome such limitations, organizations must be aware of these risks and adopt algorithm development and monitoring practices that ensure impartiality and diversity. Moreover, if one considers that algorithms are developed by humans, it is likely that they become biased and potentially lead to biased decisions – even when using AI procedures.

In addition to automated resume screening, AI-based *cognitive testing* has proven to be a valuable tool in the candidate selection process. These tests assess cognitive skills such as logical reasoning, problem-solving, and analytical ability, among others. Some AI-supported tools can analyze candidate responses and generate competency scores and profiles that are useful for the selection process. This type of approach allows for a standardized and objective assessment of candidates which enables an impartial comparison between candidates (Ore & Sposato, 2022). However, care must be taken to ensure that tests are scientifically validated and do not introduce cultural or socioeconomic biases (Gupta & Mishra, 2023). In addition, it is critical that candidates are informed about the use of AI before the test procedures, and that they can challenge the results if they feel disadvantaged.

Virtual interviews are another growing application of AI in the recruitment and selection process. AI tool enables one to book meetings, schedules, and even place orders for food without having to do a single thing – which spares time to do other tasks. Furthermore, organizations can conduct remote interviews through tools that analyze candidates' verbal and non-verbal language (Geetha & Bhanu, 2018). AI algorithms can identify facial expressions, tone of voice, and other characteristics that may be relevant to evaluating candidates. However, it is important to consider the ethical and legal implications of this type of approach. Candidates' privacy must be protected, and they must be informed of how their information will be used and stored. Furthermore, care must be taken to avoid introducing bias, as interpretations of facial expressions may vary

culturally, and algorithmic “unconscious bias” errors may occur (Upadhyay & Khandelwal, 2018). Ethical concerns in the recruitment and candidate selection process are discussed in section 5.3.

3. Artificial intelligence and professional training.

Artificial Intelligence (AI) plays an increasingly important role in professional training. Organizations can benefit from the potential of AI to improve professional training and efficient management. The use of AI in training is already a reality and will tend to increase, being increasingly used as a tool to support the continuous development of workers.

The use of AI in training has some advantages (Aggarwal & Payal, 2023), among which stand out the personalization of learning, the improvement of real-time feedback, simulation, tutoring, and training accessibility (Faqihi & Miah, 2023). These advantages, which involve the use of technological means, can involve different types of resources, such as the analysis of large volumes of data, the use of AI through chatbots, and the use of predictive analyzes to identify individual development needs.

In professional training, AI allows for various types of improvements that reinforce the learning process, among which personalization, simulation, tutoring, and feedback stand out (Morandini et al., 2023).

3.1 Learning Personalization.

The personalization of professional training is the process of adapting the content and training activities to the individual characteristics, needs, and interests of the trainees. One of the main advantages of AI for professional training and human

factor development is the ability to personalize learning based on the analysis of available information (data). AI can analyze data about workers' performance and skills, as well as their learning preferences, to offer personalized training programs (Fakihi & Mia, 2023). For example, algorithms used with AI can allow the recommendation of training actions, learning resources, and specific activities to respond to the needs and interests of each worker. With AI, it is possible to customize vocational training in various ways, such as offering content and activities tailored to individual needs, interests, and even learning styles.

This personalized approach to training that AI facilitates allows you to increase the effectiveness of training, ensuring that workers develop the skills relevant to their roles and career goals. The personalization of professional training can help trainees to learn faster, more effectively and contribute to the consolidation of learning. This can lead to better results, greater satisfaction with training, and greater employability. The personalization of professional training using AI involves data analysis, identification, and selection of training content for recommendation, real-time feedback, and simulation (Aggarwall & Payal, 2023).

By allowing the treatment of a large volume of data and the analysis of information supported by algorithms, AI facilitates the analysis of the information available to the trainees (academic path, training results, learning habits, etc..) and the use of the results obtained can go through the creation of profiles of the trainees and identification of their individual needs and interests, which in turn allow the recommendation of training contents (Clifton et al., 2020). Thus, AI can be used to recommend training content that is relevant to the individual needs and interests of workers, optimizing training planning and helping trainees acquire skills faster and more effectively (Morandini et al., 2023).

The use of AI in training facilitates the feedback process, namely real-time feedback. Real-time feedback is the process of providing feedback to trainees on their progress during the training process (Faqihi, & Miah, 2023). AI can be used to provide real-time feedback to trainees about their progress, helping them to identify and correct mistakes, prevent future mistakes, and improve their performance.

AI can be used to provide real-time feedback to students in several ways:

• Grading: AI can be used to grade students' work and provide feedback on their performance. This can help students identify and correct mistakes and improve their performance.

• Tutoring: AI can be used to create virtual tutors that can provide support and guidance to trainees. This can help students learn more independently and overcome challenges.

• Personalized Feedback: AI can be used to provide personalized feedback to students based on their individual needs and interests. This can help students learn more quickly and effectively.

3.2 Simulation in the teaching/learning process.

Training simulation is the process of using simulations of reality to train learners to acquire knowledge or skills. AI can be used to create simulations that are more realistic and engaging, which can help learners achieve better results (Darvishi, 2022). Creating simulations of real-world situations that can be used to train trainees, brings training scenarios closer to real experience, can provide an advantage in preparing trainees for work, and contribute to reducing the risk of errors. allowing students to learn through experience.

In training, simulation is an important tool for the development of trainees, as it provides the possibility of simulating practices in contexts where it is not possible to

carry out training in real situations (e.g., health), and also provides the possibility of diversifying training courses. simulation scenarios. As AI and its application continue to evolve, we can expect to see more and more innovations in the field of formative simulation, making it more realistic, engaging, and accessible, contributing even more to the development of specific skills and knowledge, which can be difficult to learn in real life (Chen, 2023). In the field of safety in a training context, the importance of AI is also highlighted, as it allows the creation of safe and risk-free learning environments.

3.3 Tutoring in the teaching/learning process.

In training, mentoring is the use of tutors to provide support and guidance to trainees. With AI it is possible to create intelligent and efficient virtual tutors, to provide support and guidance to trainees. Virtual tutoring can help trainees learn more, more independently, and overcome challenges (Chen, 2023).Virtual tutoring has some advantages, including availability/accessibility due to the possibility of obtaining tutorial support any day, time, and place; the possibility of providing feedback in real-time (Darvishi et al., 2022); the personalization of support and guidance; the liberation of human tutoring, which can thus be channeled to the most important tasks and where virtual tutoring may not be effective or advisable; cost reduction; Virtual tutoring is a tool that can help improve both the training process and its results. In the future, we can expect to see even more innovations in the field of virtual tutoring in training.

3.4 Advantages and disadvantages of using AI in training.

The implementation of AI in training has benefits for both organizations and workers. Although advantages such as personalization of learning and improved

accessibility of training are highlighted, many other benefits can be identified, among which we highlight the following:

• Use of real data and predictive analysis: the analysis of large volumes of data and the performance of predictive analyzes allows offering training that offers workers the possibility of acquiring relevant skills applicable to their functions and professional aspirations, also increasing their motivation and engagement (Yang et al., 2023). The use of predictive analysis allows identifying individual development needs, helping organizations to direct training resources more efficiently and effectively, optimizing investments.

• Better interaction and availability: Improving interaction and availability in training, offers an interactive and accessible learning experience, allowing workers to learn at their own pace and in their preferred environment.

• Possibility of Cost Reduction: It can help to reduce the costs of professional training by automating tasks that are currently carried out by humans (e.g., Tutoring). This can free up resources for humans to focus on more creative and strategic tasks.

• Quality improvement: AI can contribute to improving the quality of vocational training by providing students with high-quality content and activities (Darvishi et al., 2022). AI can also help students learn more efficiently and effectively, which can lead to better outcomes.

• Increased Accessibility: AI can help increase the accessibility of vocational training by making it more available and accessible to people from all backgrounds. AI can do this by allowing students to learn at their own pace and in their own time, and by providing content and activities in a variety of formats.

In general, AI has the potential to make professional training more personalized, effective, accessible, and accessible. As AI continues to develop, we can expect to see even more innovations in the field of professional training.

3.5 Disadvantages of AI in Training.

The introduction of AI in training does not only result in benefits. There are associated disadvantages associated with some potential disadvantages to be considered.

- Employment reduction: AI can lead to the loss of training jobs. As machines become more advanced, they may be able to perform tasks that are currently performed by humans.
- Discrimination of Trainees: AI may result in discrimination against trainees. If AI algorithms are not carefully designed, they can perpetuate existing biases. For example, an algorithm that is trained on a dataset of students who are predominantly white, and wealthy may be more likely to recommend courses and programs to graduates with these characteristics over others belonging to other groups.
- High costs: Developing and implementing AI systems can be expensive. Not all organizations will be able to afford this upfront cost easily. This can lead to an imbalance between workers and organizations that have and do not have access to this training technology.
- Complexity: Finally, AI can be complex and difficult to understand. AI systems are often based on complex algorithms that can be difficult for humans to understand. This can make it difficult to perceive that AI systems are being used ethically and fairly.

Ultimately, the benefits and drawbacks of using AI in education need to be carefully weighed. AI has the potential to revolutionize training, but it is important to ensure it is used ethically and fairly.

In short, AI is initiating a transformation in vocational training. The ongoing changes will become consistent and intensify (Langran et al., 2020). The personalization of learning, real-time feedback, and accessibility are just some of the most obvious consequences of AI applications in this context. However, less obvious aspects of this use today, such as the use of large databases, predictive analysis to identify individual development needs, and the use of AI-based chatbots, show great potential for the evolution of the use of this technology in training. Professional (Calvaresi et al., 2022). The implementation of AI brings significant benefits, such as personalized learning, accessibility, and efficiency in the investment in training and talent development. Despite the benefits, implementing AI in talent development also presents challenges. Firstly, the collection and use of workers' personal data to personalize learning requires care with data privacy and security. Organizations must ensure that workers' information is protected and used ethically and transparently, in compliance with applicable laws and regulations.

Additionally, introducing AI can raise concerns about replacing human interactions in the talent development process (Santana & Díaz-Fernández, 2023). While AI is effective in providing information and guidance, human interaction plays a crucial role in developing workers' social and emotional skills.

It is important to balance the use of AI with preserving human interaction in the talent development process (Lefkowitz, 2021). It is also important to bear in mind the challenges related to privacy, replacement of human interactions, and algorithmic biases.

These aspects must be carefully considered and analyzed to ensure the ethical and responsible use of AI in training.

4. AI in performance management: assessment, feedback, and predictability.

As it has been mentioned earlier, innovative technologies are dynamically reinventing the human resource management (HRM) landscape on a global scale (Ancarani et al., 2019). Another area with the increasing adoption of AI has been employee performance management. In performance management procedures, AI has improved procedures due to its process automation, automated assessment, real-time feedback, and prediction of future performance in a reliable way.

Performance management is a process that includes data tracking and observing tools to detect problems or issues that threaten the performance of employees. It consists in evaluating and managing employees' performance against their task duties and responsibilities. The use of AI in performance management has been related to extremely time-consuming and expensive methods, such as 360-degree feedback (Gui et al., 2014). Thus, AI and the use of machine learning or algorithms may help to overcome such difficulties.

AI can be used to automate the process of evaluating employee performance. Through AI algorithms, organizations can collect and analyze data on employees' performance, such as quantitative metrics and qualitative feedback (Sharma & Goyal, 2015). This automation allows for more objective and impartial analysis, eliminating subjectivity and human biases present in traditional assessments. Additionally, AI can identify patterns and trends in data, providing valuable insights into individual and collective performance.

4.2.Performance management usefulness.

4.2.1 Real-time feedback based on algorithms.

AI can provide real-time feedback to workers based on algorithms. For example, organizations can utilize chatbots or virtual assistants equipped with AI algorithms to provide continuous feedback to workers in a way that, regularly, they know about their position in organizational goals (Sharma & Goyal, 2015). These systems can analyze real-time data, such as performance metrics, and provide immediate, personalized feedback to employees. This allows them to track their performance and quickly adjust their levels to what is expected, promoting continuous personal and occupational development. For instance, research has shown that the use of algorithms can cluster employee performance indicators into distinct groups based on their performance level and job satisfaction level (Aktepe & Ersoz, 2012). Furthermore, based on these results, managers can thereby delineate strategies to strengthen the performance of low performers and boost the morale of less satisfied employees (Garg et al., 2022).

4.3 Future performance predictions.

The use of AI in performance management has also been associated with the use of machine learning algorithms to predict employees' future performance; this is done based on characteristics that include past performance indicators and employees' characteristics (Li et al., 2016). Through machine learning algorithms and predictive analytics, AI can analyze historical performance data, as well as contextual factors, to predict the future performance of workers (Huang et al., 2006). Besides the quick and efficient process that lies beneath, this allows organizations to identify trends, anticipate

problems and take preventive measures to improve individual and collective performance.

Additionally, the use of machine learning may include detecting subjectivity in performance appraisals with text analysis and natural language processing (Abed & El-Halees, 2017). Likewise, it can also be useful for the analysis of the relationship between financial incentives and employees' efficiency through classification algorithms (Massrur et al., 2014). Additionally, data mining and ordinal regression clustering may help to estimate the expertise levels of employees (Horesh et al., 2016). Lastly, the use of classification techniques can be very useful to profile employees and develop customized incentives that motivate them even further (Petruzzellis et al., 2006).

4.4 Benefits of AI in performance management.

Some advantages have been associated with the use of AI in performance management: (1) smooth data gathering; (2) quick access to the data which saves time and costs in the process; and (3) minimizing potential psychological prejudice that may bias performance evaluation results and feedback (Sahlin & Angelis, 2019). First, automation and objective data analysis promote a fairer and more accurate assessment of workers' performance, avoiding bias and subjectivity that usually occurs (Sandhya & Sulphey, 2020). In addition, real-time feedback based on algorithms allows workers to receive immediate guidance to improve their performance, facilitating continuous professional development (Horesh et al., 2016). Forecasting future performance also helps organizations to strategically plan the development of their workers and take preventive measures to achieve better results.

In addition, the use of AI in performance management can lead to operational efficiency, as it automates previously manually performed tasks, such as collecting and

analyzing performance data (Li et al., 2016). This allows managers to focus more on strategic activities and the elaboration of personalized development plans for each employee which is an added value to their motivation and performance indicators.

4.5 Negative effects and challenges in the use of AI in performance management.

While AI in performance management offers significant benefits, it also presents challenges and negative impacts that must be considered before considering its use. An important challenge is to ensure the quality and impartiality of the AI algorithms used in data analysis and feedback generation (Sharma & Goyal, 2015). It is essential to avoid introducing algorithmic biases that could discriminate against certain groups of workers or lead to unfair decisions. Transparency and auditing of algorithms are key to mitigating these risks.

Another challenge is the acceptance and adaptation of workers to the use of AI in performance management. Some workers may feel that the AI intervention takes the subjectivity and humanity out of the assessment and feedback process, raising concerns about a lack of empathy and understanding (Gupta & Mishra, 2023). It is important to clearly and transparently communicate how AI will be used before its implementation, highlighting its benefits, and ensuring that the role of managers and human interaction is valued and maintained throughout the process.

5. AI in HRM – ethical concerns and data protection.

As seen so far in the preceding sections of this chapter, the application of AI in people management may undoubtedly improve and simplify the life of HR stakeholders. However, the employment of these new technology will likely bring harm, affecting not

just the employees, but also their families and even the surrounding community. In this vein, radical changes in the ethical context of HRM inevitably begin to emerge, raising concerns about data privacy and security (Wasserman & Fisher, 2020). Although there is an ethical code for HR professionals (SHRM, 2014), it does not yet address the ethical challenges of technology use, particularly when it comes to the use of AI. This issue highlights the gaps that still exist in this area and emphasizes the importance of developing an ethics code that addresses the implications of using AI in HRM.

Before recently, only HR personnel had direct access to and interaction with personal and confidential data. The same data is now accessible to employees, managers, insurers, senior executives, and even regulatory bodies. Debates regarding privacy hazards to users and staff are frequently in the news due to identity thefts and revelations of data breaches. Everyone still clearly remembers incidents like the infamous Cambridge Analytica case.

When HR applications are typically linked to systems outside the organization, such as online job search sites and distance learning services, managing these risks becomes much more challenging (Johnson & Gueutal, 2011). These technological platforms can store vast amounts of vital information for HR managers while also enabling advanced data analysis methods. In some ways, what HR professionals can do with this data depends only on their own analytical creativity and intentions. However, what can and should be done with employee data are two very different things (IBM, 2018). How can employee data be safeguarded? What legal frameworks are in place for AI in HRM? And, most importantly, how workers will react to AI-related changes? These are important and tough questions, but there are no simple answers. We'll try to get some clarity below.

5.1 Theoretical and legal frameworks in ethical decisions.

When applying technology advancements in HRM on a global scale, issues of data protection and movement must be considered (Johnson & Gueutal, 2011). Countries worldwide don't have laws and regulations governing the legal frameworks governing the boundaries of AI in HRM, and the majority do not even think to explore this critical problem. This becomes an even more significant issue when one considers that the usage of AI in HRM is constantly expanding and does not appear to be slowing down. HR managers are currently dealing with new types of decisions about the usage of new digital technologies in organizations of all sizes and across all sectors. As a result, significant conflicts are emerging between the new realities of digital technologies in use and existing business paradigms (Wasserman & Fisher, 2020). As a result, questions about who is accountable for making ethical decisions—organizations or the technology manufacturers from whom organizations purchase and apply digital services within their own businesses—become clear. There is an urgent need to review the ethical guidelines that guide HRM and adapt them to the new digital era of HRM.

In this context, some guiding principles for the ethical use of technology in HRM, such as AI, must be considered when utilizing technologies that transform the interaction between organizations and employees. Guidelines must be developed to handle ethical considerations regarding employee and consumer data gathering, AI-based hiring algorithms, and workplace privacy concerns. Essentially, HR professionals should take into account the fact that the new technologies used in HR should not only permit economic gains but also higher well-being for pertinent stakeholders in organizations. The decisions made should have clear parameters that are in line with moral principles and the applicable legal requirements. Also, researchers in HRM should try to contribute to the identification of the best ethical and legal principles to be embraced, which is just as crucial as data protection legislation. To promote discussion of the ethical dimension

of HRM, which is inherent to the very nature of HRM, this debate may be brought up, for instance, in scientific studies dealing with technologies applied to HRM.

5.2 Using personal data.

The current societal context heightens individuals' proclivity to recognize ethical difficulties and conflicts of interest, leading to increased worry about these issues. However, this is also one of the most difficult challenges, because different countries and cultures have distinct ethical and legal norms that must be considered. In the European Union, for example, the General Data Protection Regulation (GDPR) has guaranteed citizens the security and safekeeping of their personal data since 2018, thanks to a legal framework accountable for data protection legislation. Nowadays, it is safe to say that few employees are unconcerned with the privacy of their personal data. HR professionals must ensure that they do not violate rules and regulations on the appropriate use of employee and customer data when using employee data. Working under these rules necessitates understanding employees' opinions regarding how and why personal data will be used. This expertise is critical for a variety of stakeholders throughout the company landscape, including HR managers, data analytics specialists, and employees (Guenole, 2018).

To properly address the ethical dilemmas of using employee data, organizations should make concerted attempts to document these challenges, whether in internal reports or professional regulating bodies such as the Society for Human Resource Management (SHRM). However, it is vital to remember that judgments on these ethical and legal problems are often unclear and are likely incapable of encompassing all of the technologies and breakthroughs that AI currently makes available to HRM. Despite the importance of this official regulation, as legislation often does not reach all possible scenarios, decision-making based on risks and damages for the company (such as

external investigations) should be avoided by HR professionals. Safeguarding the interests of employees should always be the main goal, aligned with the ethical perspectives of the culture in which the organisation is embedded (Guenole, 2018). In addition, HR managers have a critical role in addressing these new concerns of digital ethics in HR, as their behavior must begin by applying these ethical principles to the data of their teams and employees.

Some strategies that can be used to help with decision-making include:

1. Articulate the organization's culture and code of ethics through data use: for example, if innovation is a key part of the company's culture, how can you set limits on data use while continuing to innovate in the use of AI in recruitment and selection, performance management, and training?
2. Identify and learn from partners: communication is crucial amongst all stakeholders accountable for data, whether they are HR experts, leaders, or outsourced partners. What data is used and how is it used? What people have access to it, and where is it kept? What rules and regulations apply to the company? All actors, including stakeholders, will benefit from this discourse and knowledge exchange.
3. Employee communication is clear: most employees understand the benefits of using personal data to personalize HR services. Transparency in how data is handled is therefore critical to creating trust, and employees must grasp the benefits of sharing their data on an individual and organizational level. It is critical to involve employees in reviewing (and revising) their own data.

Despite these efforts, legislation may be unable to keep up with the pace of technological advancements. As a result, the best way for organizations to act is to consider their own culture, as well as the policies and laws of their respective countries.

When they act with this in mind, their data privacy policies will reflect the organization's and community's local policies and ethical ideologies. While a cross-border policy is not possible when it comes to data privacy issues, a commitment to full transparency and integrity in analyzing and processing employee, user, and customer data seems like a prudent and feasible measure to implement. Additionally, employees can also be instructed to constantly be careful with the data they release to the public, making sure they do not release any information that they would prefer to remain unanalyzed. In the same way that companies handle employee data ethically, people should be reminded to consider if the information they disclose about themselves is information they want to share.

5.3 AI in the recruitment and selection process and its potential disadvantages.

It is important to emphasize that the use of AI in the recruitment and selection process has significant ethical and legal implications. The major concerns related to the distrust in the accuracy and reliability of AI are related to its generation of bias-free decisions. AI algorithms can reproduce and amplify existing biases and prejudices in society, such as gender, race, age, and ethnic origin (Hogg, 2019). Indeed, there can exist biases in how the algorithms are programmed because humans program the related software, so if humans feed the software with information that is discriminating against certain people or groups of people, then AI would lead to the same bias (Hogg, 2019). Therefore, there are significant concerns regarding the transparency and clarification of the algorithms used, since decisions made by AI can have a direct impact on candidates' lives. Organizations should be aware of these implications and ensure that the use of AI complies with ethical and legal principles, seeking equity and diversity in the selection process (Barocas & Selbst, 2016).

All in all, AI is a technology that when applied correctly, can work smartly as equal to the human brain in different situations. As noted by both practitioners and researchers, AI is increasingly being used in the recruitment and candidate selection process, through automated resume screening tools, AI-based cognitive testing, and virtual interviews (Johnson et al., 2020; Ore & Sposato, 2022). While these approaches appear to bring benefits for organizations in terms of efficiency and objectivity, it is critical to consider the associated ethical and legal implications for the candidates. For instance, the risk of bias and discrimination introduced by AI must be carefully monitored and mitigated to ensure a fair, inclusive, and impartial selection process – as it is done without the use of AI.

5.4 AI critical points.

According to data from Deloitte's Global Human Capital Trends Report (2018), 42% of the companies have reported having fully implemented or have made significant progress in adopting cognitive and AI technologies within their workforce. With no sign that this number will diminish in the future, the majority of organizations globally will undoubtedly use AI technology, with major impacts on HRM policies. The market for AI solutions is quickly developing. There are freely available algorithms and frequently numerous solutions with similar characteristics, with more complex combinations of different methods to AI use in organizational contexts. For this reason, the important thing is not to get caught up in selecting a tool, but rather to find where these technologies may be put to use in a specific company and begin to employ them. It's important to consider what solutions are already in use in other parts of the organization outside of HR and collaborate to apply them to the company's needs (Deloitte, 2018).

Particularly, some critical points arise when using AI in HRM processes. First of all, for recruitment and selection processes, the use of AI provides on a broader scale,

the use of new data sources including video features from automated interviews, automated analyses of role-plays in assessment centers, presentations on social media, and gamified assessments (Goretzko & Israel, 2021). This implies that moral and legal considerations should be made, as stated earlier in this section. Moreover, even when using AI sources in the recruitment processes, data quality should be guaranteed. Using measures of psychological characteristics such as personality or cognitive ability that are trustworthy and valid, measured with standardized questionnaires and tests should be the standard (Goretzko & Israel, 2021). Another concern regarding the use of AI in recruitment and selection processes is the fairness of this process. This means that the outcomes of AI algorithms should be unaffected by sensitive variables such as age, gender, religion, or even sexual orientation. The use of AI in HRM should not be a way to discriminate against any individual, so methods that allow transparent automated personnel selection data must be used by organizations. Notwithstanding, making fair and accurate automated employee selection models is still a challenging concern within the application of AI in HRM.

6. Conclusion

Over the course of the last five sections, we have examined the implications and uses of artificial intelligence (AI) in people management. We have examined issues including the use of AI in hiring and selecting candidates, professional training, performance management, and the ethical and societal ramifications of this technological advance. The primary results can now be summarized by reviewing the below key aspects.

In the section concerning the use of AI in recruiting and selection, we highlighted the use of AI-based cognitive tests, automated CV screening tools, and virtual interviews. These methods increase process agility and efficiency, but they also

bring up moral issues like biases and discrimination in algorithms. To guarantee a fair and inclusive selection process, transparency, monitoring, and algorithm validation are essential.

In the essay regarding AI in talent development, we looked at the personalization of data-driven learning, the use of chatbots for training, and the use of predictive analytics to identify specific needs. AI presents the chance to give individualized, accessible, and ongoing training. The privacy of employee data must be protected, algorithmic discrimination must be avoided, and a healthy balance between human engagement and automation must be maintained.

Automated evaluation, real-time feedback, and the prediction of future employee performance were all included in the section on the use of AI in performance management. With AI, it is possible to perform more objective evaluations, ongoing feedback, and predictive analysis. But we also have to deal with issues like algorithmic bias, impacts on the labor market, and privacy issues. To solve these issues, transparency, moral accountability, and careful preparation are essential.

We place a strong focus on the value of protecting the privacy and security of employee data while discussing the ethical and social ramifications of AI in people management. Transparency, sufficient consent, and strong security precautions are required for the gathering and use of personal information. The influence on the labor market and algorithmic discrimination are also major issues. The fairness of algorithms must be guaranteed, diversity in AI development and implementation teams must be encouraged, and policies supporting employee technological change adaption must be implemented.

In summary, AI in human resource management brings useful benefits including efficiency, personalization, and prediction. But we also have restrictions and problems that need to be handled in a morally responsible way.

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