NEVŞEHİR HACI BEKTAŞ VELİ ÜNİVERSİTESİ
Ara, bul.

Sosyal Bilimler Enstitüsü Dergisi
Cilt: 15 Sayı: 1 Mart 2025
E-ISSN: 2149-3871

ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCES MANAGEMENT: TRANSFORMATION IN THE WORKPLACE

YAPAY ZEKÂ VE İNSAN KAYNAKLARI YÖNETİMİ: İŞYERİNDE DÖNÜŞÜM

Hakan Vahit ERKUTLU
Nevşehir Hacı Bektaş Veli Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İşletme Bölümü
erkutlu@nevsehir.edu.tr
ORCID: 0000-0003 2441-3603

Geliş Tarihi:
18.01.2025

Kabul Tarihi:
20.03.2025

Yayın Tarihi:
27.03.2025

Anahtar Kelimeler
Yapay Zekâ,
İnsan Kaynakları Yönetimi,
Yetenek Edinimi,
Çalışanların Bağlılığı ve Elde Tutulması,
Performans Yönetimi

Keywords
Artificial İntelligence,
Human Resources Management,
Talent Acquisition
Employee, Engagement and Retention,
Performance Management

ABSTRACT

Artificial intelligence (AI) has redefined the HR function by automating resume screening and candidate assessment and raising employee participation. AI tools like HireVue automate resume reviews, and sentiment analysis technology pervades employees' comments to optimize human resources. AI has changed performance management in a number of ways, involving the analysis of employee data, which enables the identification of patterns and trends that lead to targeted development plans and objective performance assessments. The domain of human resource management (HRM) applications of AI includes talent acquisition, employee engagement, performance management, and workforce analytics. Algorithmic bias, problems of personal data privacy, and ethical dilemmas are just a few that continue to be problematic. For AI benefits to be harnessed while mitigating risks, organizations must embed technological innovation with ethical principles and human-centered approaches. Based on AI, predictive analytics have great potential in human resource management, allowing HR departments to predict future workforce trends and base decisions effectively. AI implementation presents ethical and privacy issues requiring companies to ethically employ AI technologies to build trust and promote employee confidence.

ÖZ

Yapay zeka (YZ), özgeçmiş taramasını, aday değerlendirmesini otomatikleştirerek ve çalışan katılımını artırarak İK işlevini yeniden tanımlamıştır. HireVue gibi YZ uygulamaları, özgeçmiş incelemesini otomatik hale getirmekte ve duygu analizi teknolojisi, insan kaynaklarını optimize etmek için çalışanların görüşlerini ele almaktadır. Yapay zeka, hedeflenen gelişim planlarına ve objektif performans değerlendirmelerine yol açan kalıpların ve eğilimlerin belirlenmesini sağlayan çalışan verilerinin analizini içeren performans yönetimini çeşitli şekillerde değiştirmiştir. YZ'nın insan kaynakları yönetimi (İKY) uygulamaları arasında yetenek kazanımı, çalışan bağlılığı, performans yönetimi ve işgücü analitiği yer almaktadır. Algoritmik önyargı, kişisel veri gizliliği sorunları ve etik ikilemler, sorun olmaya devam edenlerden sadece birkaçıdır. YZ'nın faydalarından yararlanmak ve riskleri azaltmak için, kuruluşların teknolojik inovasyonu etik ilkeler ve insan merkezli yaklaşımlarla birleştirmesi gerekmektedir. YZ'ya dayanan öngörüsel analitik, insan kaynakları yönetiminde büyük bir potansiyele sahiptir ve İK departmanlarının gelecekteki işgücü eğilimlerini tahmin etmesine ve kararları etkili bir şekilde temel almasına olanak sağlar. YZ kullanımı, şirketlerin güven oluşturmak ve çalışan güvenini artırmak için YZ teknolojilerini etik bir şekilde kullanmalarını gerektiren etik ve gizlilik sorunları ortaya çıkarmaktadır.

DOI: https://doi.org/10.30783/nevsosbilen.1622590
Atıf/Cite as: Erkutlu, H. V. (2025). Artificial intelligence and human resources management: transformation in the workplace. *Nevşehir Hacı Bektaş Veli Üniversitesi SBE Dergisi, 15*(1), 346-357.

Introduction

Artificial intelligence (AI) is swiftly transforming human resources management (HRM), instigating a fundamental change in organizational recruitment, management, and workforce development. As companies endeavor to maintain competitiveness in a more digital marketplace, AI provides novel methods to enhance efficiency and decision-making in human resource positions. Artificial intelligence, equipped with predictive analytics and natural language processing abilities, is prepared to tackle issues such as talent shortages, employee engagement, and labor optimization (Guenole and Feinzig, 2018).

Artificial intelligence is extensively utilized in human resource management for talent acquisition. Conventional recruitment techniques need considerable human involvement and are susceptible to subjectivity, leading to inefficiencies and possible biases (Albert, 2019). HireVue's AI-powered solutions enhance these prospects by automating resume evaluations and applicant assessments through video interviews. These technologies analyze speech patterns, tone, and facial expressions to give insights about candidate appropriateness, allowing businesses to make faster and more accurate recruiting decisions (Meister, 2021). Aside from recruiting, AI improves employee engagement by giving real-time feedback and help via platforms like chatbots. These AI-powered assistants handle routine HR requests, freeing HR professionals to focus on important tasks. Furthermore, sentiment analysis systems scan employee remarks to estimate workplace morale, allowing businesses to proactively address problems and improve the overall employee experience (Sharma and Chahal, 2024). These tools cultivate a more adaptive and supportive HR environment, enhancing employee happiness and retention.

AI has transformed performance management (Chukwuka and Dibie, 2024). AI technologies analyze employee data to discern patterns and trends that guide individualized development programs and objective performance assessments. Platforms like ADP Workforce Now employ AI to suggest personalized learning opportunities based on individual requirements. According to Guenole and Feinzig (2018), this technique boosts productivity and gives individuals control over their professional progress.

Despite AI's significant benefits, integrating it into HR management presents various challenges. Algorithmic discrimination, data privacy concerns, and ethical quandaries remain serious obstacles. Amazon's AI hiring tool revealed a bias toward male candidates over female candidates, emphasizing the importance of equal training data and effective governance structures (Dastin, 2018). Addressing these challenges is critical to ensuring AI's fair and appropriate use in human resource operations.

Organizations using AI in HRM must reconcile technology advancement with a dedication to ethical standards and human-centered methodologies. By doing so, they may utilize AI to improve operational efficiency and foster inclusive and empowered workplace cultures. The future of HRM is utilizing AI to enhance human talents instead of supplanting them, hence maintaining the human element as key to corporate success.

The Role of AI in HRM

AI applications in HRM span a wide range of functions, including talent acquisition, employee engagement, performance management, and workforce analytics. Here are some key areas where AI is making a significant impact:

Talent Acquisition

Automation of resume review, candidate alignment with job criteria, and bias mitigation are ways via which AI-driven solutions improve recruiting. Video interview platforms like HireVue use artificial intelligence to assess candidates' linguistic, tonal, and facial expression abilities to predict how well they would fit the position (Guenole and Feinzig, 2018; Jha and Janardhan, 2024).

The application of artificial intelligence is transforming talent acquisition by simplifying and automating several aspects of the recruiting process. The capacity of AI to swiftly evaluate applications and identify competent individuals is a significant advantage in this field. Sifting through numerous applications using traditional methods is time-consuming and prone to human error. AI-powered systems, such as Pymetrics, use machine

learning to match a candidate's skills and knowledge to job needs, significantly lowering the time it takes to hire (Meister, 2021).

Video interview analysis is one area where AI is making a significant impact. Platforms like HireVue utilize artificial intelligence algorithms to assess interviews' verbal and nonverbal signs. These systems use signs such as facial expressions, language patterns, and distinctive tonal features to provide hiring managers with suggestions about whether candidates are qualified for a position. This data-driven approach enhances fairness in the hiring process and leads to better outcomes (Guenole and Feinzig, 2018).

Another way in which AI assists with human resource acquisition is to minimize implicit bias. AI technologies tend to standardize candidate selection and emphasize criteria related to the job in order to provide a recruiting process that is more egalitarian and more inclusive. The effectiveness of AI for mitigating bias depends on the quality of the training data. Skewed data sets can reinforce existing injustices, as seen by Amazon's abandoned AI recruiting tool, which exhibited a preference for male candidates owing to skewed input data (Dastin, 2018).

An additional benefit of the use of AI for talent acquisition is the potential to improve applicant sourcing. AI-powered solutions, e.g., LinkedIn Recruiter, use large-scale databases to pinpoint and interact with passive job seekers who, although not searching for a job, are prepared with the skills and qualifications needed for a job opening. This preventive strategy broadens the labor pool with the added benefit of more easily attracting the right person (Sharma and Chahal, 2024).

Predictive analytics is one of the valuable applications of Artificial intelligence in recruiting (Gurusinghe et al., 2021). By analyzing historical recruiting data, AI algorithms predict individuals' likely performance in certain areas, thus enabling HR professionals to make more informed selections. AI can discern patterns that signify good employee retention or robust performance, assisting organizations in recruiting persons who are more likely to excel in their positions (Meister, 2021).

Although AI has several benefits in talent acquisition, it also engenders ethical and operational dilemmas (Khan et al., 2024). Organizations must confront critical challenges such as privacy concerns, the potential for algorithmic bias, and the necessity for transparency in AI-driven decisions. Adhering to data protection standards and establishing strong ethical frameworks are critical measures to optimize AI's advantages while minimizing its hazards (Guenole and Feinzig, 2018).

Employee Engagement and Retention

AI-based sentiment analysis technologies analyze employee feedback and engagement signals and empower HR managers to intervene early in case of distress calls. Tools such as those created by Talla offer human resources (HR) department workers round-the-clock assistance with their HR inquiries, which can lead to job satisfaction and increased productivity (Meister, 2021; Veshne and Jamnani, 2024).

Employee engagement and retention are fundamental issues of business success, and artificial intelligence is an exciting solution that is rapidly emerging. AI provides HR managers with valuable information on employee needs and behaviors through the help of machine learning and deep analytics. That is, organizational advances such as this permit proactive approaches that can enhance job satisfaction and reduce both the proportion of people who leave the workplace as well as number of people who quit their jobs (Sharma and Chahal, 2024). AI offers a data-driven approach to build long-term employee loyalty when the workforce itself changes.

One of the key applications of AI in this field is sentiment analysis. AI-based tools, e.g., those offered by Qualtrics) collect employee feedback through surveys, e-mails as well as many other communication channels to determine the morale and engagement levels. These insights enable organizations to detect potential issues early and implement remedial measures to address employee concerns, fostering a more supportive work environment (Meister, 2021).

Customized learning and developmental opportunities are another way through which AI enhances employee engagement. Platforms like Degreed utilize AI to provide customized training programs aligned with personal career objectives and skill deficiencies. This tailored strategy improves employee satisfaction and matches workforce skills with organizational goals (Guenole and Feinzig, 2018). By investing in employee development, organizations demonstrate a commitment to their prosperity, fostering loyalty and retention. The

implementation of artificial intelligence markedly improves the efficiency of communication within the workplaces. Chatbots and virtual assistants, such as Talla, provide prompt support for employees' HR inquiries, including payroll information and benefits enrollment. These tools improve employee experience and alleviate frustration stemming from administrative delays by facilitating access to information (Sharma and Chahal, 2024). Effective communication serves as a cornerstone for engagement, with AI-driven solutions ensuring that employees experience recognition and appreciation. Predictive analytics represents a crucial application of artificial intelligence in advancing engagement and retention strategies. By analyzing past data, AI systems can discern trends and forecast elements contributing to employee turnover. IBM Watson Analytics has been utilized to predict attrition risk, allowing HR teams to execute targeted retention tactics prior to employee departures (Meister, 2021). This strategy facilitates the retention of top talent and promotes workforce stability within organizations.

Despite its advantages, the application of AI in engagement and retention poses challenges. Ethical considerations are essential, particularly given the requirement for transparency in AI-generated decisions and the protection of employee data privacy. Organizations must align technological innovation with a human-centric approach, ensuring that AI tools enhance rather than replace the human element in HR practices (Ajayi and Udeh, 2024; Guenole and Feinzig, 2018). Addressing these challenges is essential for building trust and fostering a culture of engagement.

Organizations may leverage AI to cultivate a more engaged and supportive workplace that addresses the changing needs of their employees. As AI technology progresses, its function in improving employee engagement and retention will certainly expand, which will present new prospects for developing stronger, more resilient organizations.

Performance Management

AI solutions provide data-backed insights into employees' performances, allowing managers to identify top performers and those who may need extra support. ADP Workforce Now utilizes AI to notice performance trends along with custom development programs (Thirunagalingam et al., 2025). Human resources management will not be complete without performance management, and it is being transformed by artificial intelligence into this vital function. Artificial intelligence, with the help of advanced data analytics and machine learning algorithms, gives a more objective and nuanced evaluation of employee performance. This technology enables organizations to shift away from traditional yearly assessments to continuous feedback and real-time performance visualization (Sharma and Chahal, 2024). Solutions that leverage artificial intelligence for performance management redefine the standards of fairness, accuracy, and effectiveness in quantifying employee contributions."

One great advantage of AI in performance management is its capability to analyze big data sets to detect patterns and trends. Platforms like ADP Workforce Now use artificial intelligence to measure performance parameters, providing managers and employees with actionable data. These data enable firms to make informed decisions about promotions, awards, and professional development opportunities, fostering a meritocratic culture (Meister, 2021).

AI enables individualized feedback, which is essential for employee growth and satisfaction. Conventional feedback approaches are typically generic and may not address specific needs. AI-powered solutions, such as Betterworks, give employees personalized feedback based on their performance indicators, strengths, and areas for improvement. This personalized strategy boosts employee engagement and aligns personal goals with company objectives (Guenole and Feinzig, 2018).

A notable application of AI in performance management is predictive analytics. Examining previous data enables AI systems to predict future performance trends and recognize possible obstacles. IBM Watson Analytics has been utilized to forecast elements leading to underperformance, allowing companies to make prompt modifications (Sharma and Chahal, 2024). This proactive strategy improves individual performance and boosts overall organizational efficiency.

AI also mitigates prejudices that often influence performance evaluations. Also, human evaluation may be subjective, subject to implicit bias or personal idiosyncrasies. These algorithms generate data-driven clues,

permitting performance judgments to be derived from objective measures instead of expert judgments (Meister, 2021). This promotes a more equitable and fair workplace atmosphere.

However, there are certain challenges in adopting AI to performance management (Yawalkar, 2019). There remain issues with respect to data privacy, employee trust, and the risk of abuse of AI-driven outputs. Organizations will have to adopt open practices and employees' understanding of how to use the AI tools in the assessments. Developing ethical principles and conducting training on performance management using Artificial Intelligence (AI) techniques are important steps in building trust and acceptance among employees (Guenole and Feinzig, 2018).

As artificial intelligence (AI) technology grows and advances, its role in performance management will expand and provide new opportunities for the enhancement of employee development and organizational performance. Organizations can utilize AI to the fullest extent and create a more efficient and equitable performance management system by combining technological advancement with an ethos of equity and transparency.

Workforce Analytics

Using AI-based predictive analytics, HR personnel can forecast workforce behaviors and such aspects as turnover prospects and skill shortages. This is possible for the planning and decision-making process to be strategic and well-informed (Alabi et al., 2024; Sharma and Chahal, 2024).

Workforce analytics plays a vital role in strategic HR management, and AI further extends its possibilities. Through the use of machine learning algorithms and big data, organizations can gain a deeper understanding of the patterns and behavior of their workforce. This data-based approach enhances the decision-making process and enables HR managers to bring employee activities in tandem with the business targets (Sharma and Chahal, 2024). AI-enabled workforce analytics technologies allow HR to be more proactive and strategic.

Predictive modeling is one of the key applications of artificial intelligence to workforce analytics. If an AI system analyzes historical employee data, it can forecast workforce patterns such as turnover, skill shortfalls, and future talent needs. Tools like Visier use predictive analytics to let companies predict and prevent problems ahead of time, thus guaranteeing workforce resilience and preparedness (Meister, 2021).

With the help of artificial intelligence, workforce planning is enhanced by the detection of skill shortages, and the proposed solution is a training program. Artificial intelligence applications, including eightfold.ai, have also been used to match employees' skills with the needs of the organization, thus enabling HR departments to create and implement reskilling and upskilling programs. This method promotes professional development and satisfaction while preparing staff to meet changing organizational demands (Guenole and Feinzig, 2018).

AI's capability to deliver real-time data represents a considerable benefit in workforce analytics. Traditional workforce analytics often depend on recurring data, potentially hindering timely decision-making. AI-driven tools such as Tableau facilitate real-time evaluation of workforce data, enabling HR executives to promptly address emerging trends and challenges (Sharma and Chahal, 2024). This flexible approach enhances the company's ability to respond to a rapidly changing business environment.

Artificial intelligence greatly enhances diversity and inclusion of initiatives. AI algorithms analyze demographic data to identify disparities and provide actionable suggestions to promote a more equitable workplace. Pymetrics uses AI to assess hiring and promotion data, eliminating bias and attaining diversity goals (Meister, 2021). These insights aid organizations in fostering a more inclusive culture essential for enduring success.

Although implementing AI in workforce analytics is beneficial, it raises ethical and privacy concerns (Bar-Gill et al., 2024). The collection and analysis of employee data must be conducted honestly and according strictly to data protection regulations. Organizations must use AI tools properly to foster trust and maintain employee confidence (Guenole and Feinzig, 2018; Krauter, 2024). Addressing these challenges is crucial for realizing the full potential of AI in workforce analytics.

As AI technology progresses, its influence on workforce analytics will provide new avenues to refine workforce strategies and improve organizational performance. By integrating AI's analytical capabilities with a dedication to ethical practices, organizations may realize the whole potential of their workforce and foster sustainable growth.

The Role of AI in HRM

The integration of AI in HRM offers several advantages (Wei-Liang and Mei Ling, 2018):

- Efficiency: AI automates repetitive tasks, freeing up HR professionals to focus on strategic initiatives.
- Improved Decision-Making: Data-driven insights reduce reliance on intuition, leading to more objective decisions.
- Enhanced Employee Experience: AI tools personalize learning and development programs, catering for individual needs.
- Cost Savings: AI reduces hiring costs and turnover rates by optimizing recruitment and retention processes.

Integrating artificial intelligence (AI) into human resources management (HRM) has various advantages, including altering how organizations manage their workforce. One of the most notable benefits is increased efficiency in administrative activities. AI-powered tools automate monotonous procedures like resume screening, payroll management, and scheduling, allowing HR professionals to concentrate on strategic objectives. For example, AI-powered solutions such as Workday enhance administrative operations, lowering operational expenses and increasing overall productivity (Sharma and Chahal, 2024).

Artificial intelligence aids individuals in making improved decisions by providing data-driven insights. Predictive analytics technologies enable HR departments to anticipate workforce patterns, including employee turnover and skill deficiencies, and then implement preventative measures. IBM Watson Analytics utilizes machine learning to identify factors that lead to employee attrition, enabling firms to implement preventive measures (Meister, 2021). This capacity improves the organization's ability to adapt to changing personnel dynamics while maintaining a competitive advantage.

Another advantage of AI in Human Resource Management is the enhancement of talent acquisition procedures. AI-powered systems such as Pymetrics use machine learning algorithms to match candidates' skills and experiences regarding job needs, minimizing bias and improving recruitment quality. These tools accelerate recruitment by automating resume screening and application evaluations, leading to shorter hiring cycles and better candidate experiences (Guenole and Feinzig, 2018).

Artificial intelligence technology dramatically improves employee engagement and retention. Sentiment analysis solutions like Qualtrics analyze employee feedback to discover areas of unhappiness or disengagement (Rastogi et al., 2025). Organizations can enhance employee happiness and provide a more supportive work environment by proactively addressing these concerns (Sharma & Chahal, 2024). Moreover, AI-driven learning platforms such as Degreed provide personalized training recommendations, enabling employees to enhance their abilities and achieve their professional objectives, fostering long-term retention.

Artificial intelligence facilitates the establishment of a more inclusive and equitable workplace by reducing unconscious bias in human resources processes. Recruitment and promotion choices often exhibit biases, which AI may help mitigate by focusing only on facts and established criteria. AI systems built for diversity recruiting assess recruitment data to assure equity and compliance with diversity objectives, enabling a more inclusive organizational culture (Meister, 2021).

AI in HRM provides additional benefits like real-time feedback and performance management. Conventional performance assessments may lack relevant insights; however, AI-driven solutions such as Betterworks provide constant feedback based on real-time performance measurements. This strategy promotes openness, assists individuals in improving performance, and connects their aspirations with corporate objectives (Guenole & Feinzig, 2018).

AI improves workforce planning by predicting future skill needs and recommending reskilling programs. Platforms like Eightfold.ai use market trends and organizational data to forecast skill shortfalls, allowing HR departments to build tailored training campaigns. This prepares individuals to face future challenges while increasing morale and engagement (Sharma and Chahal, 2024).

Finally, AI enhances employee experiences by facilitating communication and providing personalized assistance. Talla and other chatbots address basic HR difficulties, giving quick solutions and allowing HR professionals to focus on more complex issues. These tools increase access to HR services, making employees feel supported and appreciated (Meister, 2021).

As AI evolves, its benefits in human resource management will grow. AI will provide organizations with new opportunities to improve efficiency, fairness, and employee satisfaction. HR professionals can use AI strategically to promote innovation, enhance workforce results, and build a more resilient and agile firm.

Challenges and Ethical Considerations

Despite its potential, the application of AI in human resource management presents various challenges:

1. Algorithm bias: When AI systems are educated on biased data sets, they might perpetuate prejudices. For example, Amazon's AI recruiting tool was suspended after it was discovered to prefer male candidates over females owing to biased training data (West et al., 2019).
2. Privacy Concerns: Using AI to track employee behavior raises data privacy and permission concerns. Organizations must comply with the requirements of data protection regulation (Alosi and Gramano, 2019).
3. Resistance to Change: Employees and HR professionals may reject AI adoption due to worries about job displacement or a lack of knowledge (Shankar and Nigam, 2022).
4. Ethical Dilemmas: Using AI for surveillance and decision-making can lead to ethical conflicts, particularly if it compromises employee autonomy (Mettler, 2024).

Integrating AI into Human Resources Management (HRM) brings challenges and ethical dilemmas, necessitating careful study to guarantee responsible adoption (Bankings, 2019). A significant concern is data privacy. AI systems need substantial amounts of employee data for optimal performance, prompting concerns around data collection, storage, and utilization methods. To safeguard employee privacy and foster trust, firms must comply with standards of data protection regulation (Sharma and Chahal, 2024).

A significant concern is bias in artificial intelligence systems. Although AI might mitigate human prejudice, it may also exacerbate existing prejudices if the training data is unrepresentative or the algorithms are poorly constructed. Amazon's AI recruiting tool was terminated after evidence revealed it favored male candidates owing to biased training data (Dastin, 2018). Algorithms must be checked and updated regularly to maintain fairness in AI-powered HR operations.

Transparency is essential respecting the ethical use of AI in human resource management. Employees must understand how AI tools are used, particularly in performance appraisals, recruiting, and workforce analytics. Employee skepticism and resistance may stem from a lack of openness. Organizations must prioritize clear communication and teach staff how AI-driven choices are made (Guenole and Feinzig, 2018).

Job displacement is another ethical worry with AI in HRM. As AI automates regular operations, many HR roles may become obsolete, resulting in workforce cutbacks. While AI provides opportunities for upskilling and reskilling, organizations must consider the human effect of automation and assist employees affected by these changes (Meister, 2021). Balancing efficiency benefits with social responsibility is critical for sustaining a strong organizational culture.

Accountability is a critical ethical consideration when implementing AI in HRM. When AI systems make mistakes or create unexpected results, it can be difficult to discern who is to blame. Organizations will need to establish clear accountability structures and people will be central to critical decision-making (Sharma and Chahal, 2024). This method can be used to mitigate the risks and to guarantee the ethical use of AI).

AI-based monitoring and surveillance technologies, however, generate questions about employee freedom and the ethics of the workplace. Although these techniques may enhance productivity and security, excessive surveillance might infringe upon employees' rights and foster a culture of mistrust. Organizational requirements and employee rights need to be balanced to avoid ethical violations (Guenole and Feinzig, 2018).

The digital divide is yet another consequence of incorporating AI into human resource management. Not all organizations have equal access to innovative AI technologies, widening the gap between companies and labor forces. Small businesses can struggle to compete with larger corporations with the financial ability to implement advanced AI tools, resulting in unequal opportunities and outcomes (Meister, 2021). Towards inclusive growth, fair access to AI technology must be guaranteed.

Ultimately, ethical considerations should span AI's enduring effects on organizational values and workplace culture. Too much dependence on AI may lead to dehumanization in the workplace since a data-driven approach to decision-making leads to the devaluation of empathy and human experience. Organizations should

confirm that AI is a support mechanism and, rather than substituting it, should maintain HRM of a human-centered nature (Sharma and Chahal, 2024).

Facing these challenges and ethical issues, companies can use AI to its full potential in HRM while preserving fairness, transparency, and trust. Responsible AI adoption is both a technological problem and a strategic imperative, influencing the future of work and organizational performance.

Conclusion

AI is a transformative force impacting human resource management (HRM), which progresses rapidly, changes, and transforms the recruiting, managing, and retaining functions of organizations. Automating routine clerical work such as resume searching, timetabling interviews, and payroll release humans from those activities, allowing them to concentrate on tasks that generate business value. This movement puts the HR professional at the center of shaping and strengthening employee relationships while managing an environment of cooperation and innovation. AI's power and accuracy allow HR departments to process larger volumes of data, reduce errors, and improve adherence to the rules in better compliance with regulatory requirements.

Predictive analytics and artificial intelligence will forever alter the paradigm of human resource decision-making behind automation. By employing highly advanced algorithms, the function of managing human resources may be considered as the pattern recognition of worker performance, turnover prediction of employees, and the implementation of training and development programs tailored to each employee's needs. This enables a corporation to engage successfully in data-driven, semantically informed organizational decisions, hence improving workforce planning and strategically aligning the personnel strategy with organizational needs. Artificial intelligence (AI) is a means by which to gain a deep understanding of organizational culture and employee engagement using sentiment analysis in conjunction with natural language processing methods. This will enable the building of a society that supports high-performance growth and increases flourishing within the workplace.

There are several ethical concerns to take into account while embedding AI and other technologies into HR systems. If AI systems do not behave with integrity, equity, and responsibility, then humans will find it impossible to trust them. Unfair algorithms and vulnerabilities in the data privacy armor can lead to a loss of trust and a tarnished reputation. Hence, it is recommended that companies establish robust governance structures to regulate the generation of AI, allow continuous bias checking, and guarantee compliance with data protection legislation. With the growing importance of fairness and trust in ethical AI, human resource management has a strategic opportunity and responsibility to promote and advance it.

It is clear that there is a need for technology to be supported by human interaction, as exemplified by the emergence of artificial intelligence in people management. Despite the promise of added efficiency, AI cannot, all on its own, substitute for some of the characteristics of human beings, such as empathy, creativity, and sound judgment. Human resource managers have the task of ensuring that technology supports humans in surmounting challenges, cultivating relationships, and becoming leaders, as opposed to inhibiting them. AI should be applied as a tool for human enhancement, not as a substitute for it.

The key is to educate and develop competencies of the HR people to use AI tools effectively. Increasingly, as AI systems advance, HR teams will need to be able to interpret insights from AI, monitor complex technologies, and address issues of an ethical nature. Organizations that enhance their HR teams' digital literacy and competence in AI will be well prepared to use it most effectively in the creation of flexible, future-ready workspaces. This human-AI collaboration will be imperative in ensuring that technology acts as a catalyst for innovation rather than a cause of disruption.

In short, the confluence of AI and HRM is a promising space to help reimagine work's future. Organizations able to proactively tap into the potential of AI in their HR functions could build nimbler, more inclusive, and employee-friendly ecosystems. Fully realizing the benefits of AI requires that the project look closely into the ethical, cultural, and operational challenges. When properly utilized, AI is likely to improve HR operations and work experiences in general and potentially benefit employees and organizations over time.

Declaration of Conflicting Interests

The author declares no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author did not receive any financial support for the research, writing, and/or publication of this article.

Statements of Publication Ethics

I hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

Researchers' Contribution Rate

The study was conducted and reported by a researcher.

Ethics Committee Approval Information

Ethics committee approval was not obtained for this study because I declare as the responsible author that this study is one of the studies that does not require ethics committee approval.

References

Ajayi, F. A., & Udeh, C. A. (2024). Innovative recruitment strategies in the IT sector: A review of successes and failures. *Magna Scientia Advanced Research and Reviews*, *10*(2), 150-164.

Alabi, K. O., Adedeji, A. A., Mahmuda, S., & Fowomo, S. (2024). Predictive Analytics in HR: Leveraging AI for Data-Driven Decision Making. *International Journal of Research in Engineering, Science and Management*, *7*(4), 137-143.

Albert, E. T. (2019). AI in talent acquisition: a review of AI-applications used in recruitment and selection. *Strategic HR Review*, *18*(5), 215-221.

Aloisi, A., & Gramano, E. (2019). Artificial intelligence is watching you at work: Digital surveillance, employee monitoring, and regulatory issues in the EU context. *Comparative Labor Law & Policy Journal*, *41*(1), 95–122.

Bankins, S. (2021). The ethical use of artificial intelligence in human resource management: a decision-making framework. *Ethics and Information Technology*, *23*(4), 841-854.

Bar-Gil, O., Ron, T., & Czerniak, O. (2024). AI for the people? Embedding AI ethics in HR and people analytics projects. *Technology in Society*, *77*(1), 102527.

Chukwuka, E. J., & Dibie, K. E. (2024). Strategic role of artificial intelligence (AI) on human resource management (HR) employee performance evaluation function. *International Journal of Entrepreneurship and Business Innovation*, *7*(2), 269-282.

Dastin, J. (2018). *Amazon scraps secret AI recruiting tool that showed bias against women*. Reuters. https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G

Guenole, N., & Feinzig, S. (2018). *The Business Case for AI in HR*. IBM Smarter Workforce Institute.

Gurusinghe, R. N., Arachchige, B. J., & Dayarathna, D. (2021). Predictive HR analytics and talent management: a conceptual framework. *Journal of Management Analytics*, *8*(2), 195-221.

Jha, S., & Janardhan, M. (2024). Transforming Talent Acquisition: Leveraging AI for Enhanced Recruitment Strategies in HRM and Employee Engagement. *Library Progress International*, *44*(3), 8857-8867.

Khan, M. I., Parahyanti, E., & Hussain, S. (2024). The Role Generative AI in Human Resource Management: Enhancing Operational Efficiency, Decision-Making, and Addressing Ethical Challenges. *Asian Journal of Logistics Management*, *3*(2), 104-125.

Krauter, J. (2024). Bridging the uncanny valley: Improving AI chatbots for effective leadership mentoring. *Open Journal of Leadership*, *13*(3), 342-384.

Meister, J. C. (2021). *The Future of Work: AI, Robotics, and the Evolution of HR*. McGraw-Hill.

Mettler, T. (2024). The connected workplace: Characteristics and social consequences of work surveillance in the age of datification, sensorization, and artificial intelligence. *Journal of Information Technology*, *39*(3), 547-567.

Rastogi, P., Khandelwal, S., Khurana, R., Gupta, H., & Singh, P. (2025). *Revolutionizing HR: The AI-Powered Guide to Modern HR Practices*. Academic Enclave.

Shankar, A., & Nigam, A. (2022). Explaining resistance intention towards mobile HRM application: the dark side of technology adoption. *International Journal of Manpower*, *43*(1), 206-225.

Sharma, K. & Chahal, B. P. (2024). Harnessing Predictive Analytics for Workforce Optimization in a Transhuman Age. In J. Kaur (Ed.), *Embracing Transhumanism and Genomics in Human Resources Management* (pp. 311-326). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-7668-3.ch015.

Thirunagalingam, A., Addanki, S., Vemula, V. R., & Selvakumar, P. (2025). AI in Performance Management: Data-Driven Approaches. In F. Özsungur (Ed.), *Navigating Organizational Behavior in the Digital Age With AI* (pp. 101-126). IGI Global Scientific Publishing. https://doi.org/10.4018/979-8-3693-8442-8.ch005.

Veshne, N., & Jamnani, J. (2024). Enhancing Employee Engagement Through Artificial Intelligence. In Vinod Kumar Shukla, Praveen Kulkarni, Deepika Gaur, Pradeep N, Jean Paolo G. Lacap, & Amina Omrane (Eds.), *Industry 4.0 and People Analytics* (pp. 131-152). Apple Academic Press.

Wei-Liang, T., & Mei Ling, C. (2018). Seamless HCM Integration: Aligning Tools, Processes, and Cloud Platforms for Maximum Efficiency. *International Journal of Trend in Scientific Research and Development*, *2*(4), 3068-3081.

West, S., Whittaker, M., & Crawford, K. (2019). *Discriminating systems: Gender, race and power in AI*. AI Now Institute. https://ainowinstitute.org/publication/discriminating-systems-gender-race-and-power-in-ai-2.

Yawalkar, M. V. V. (2019). A study of artificial intelligence and its role in human resource management. *International Journal of Research and Analytical Reviews (IJRAR)*, 6(1), 20-24.

GENİŞLETİLMİŞ ÖZET

Yapay zeka (YZ), insan kaynakları yönetiminde (İKY) devrim yaratarak İK görevlerinde verimliliği ve karar alma süreçlerini geliştirmektedir. Tahmine dayalı analitik ve doğal dil işleme becerileriyle donatılmış yapay zeka, yetenek kıtlığı, çalışan bağlılığı ve işgücü optimizasyonu gibi sorunların üstesinden gelebilir. HireVue gibi yapay zeka odaklı araçlar, video görüşmeler yoluyla aday değerlendirmelerini ve özgeçmiş analizlerini otomatikleştirerek adayın uygunluğunu değerlendirir. Yapay zeka ayrıca sohbet robotları aracılığıyla gerçek zamanlı destek ve geri bildirim sağlar, bu da İK uzmanlarının stratejik görevlere odaklanmasına olanak tanır.

Performans yönetimi, kalıpları ve eğilimleri ayırt etmek için çalışan verilerini analiz ederek, objektif performans değerlendirmeleri ve bireyselleştirilmiş gelişim programları yoluyla ilerlemiştir. ADP Workforce Now gibi platformlar, çalışanların üretkenliğini artırır ve kişiselleştirilmiş öğrenme seçenekleri sunar.

İKY'de yapay zeka, performans yönetimi, çalışan bağlılığı, yetenek edinimi ve işgücü analitiği gibi çok çeşitli amaçlarla kullanılabilir. Yapay zekanın önemli etkileri arasında önyargıların azaltılması, adayların iş gereksinimlerine uyması, özgeçmiş incelemelerinin otomatikleştirilmesi ve başvuru kaynağı bulma yer alıyor. Pymetrik gibi yapay zeka destekli sistemler, adayların becerilerini ve bilgilerini iş ihtiyaçlarıyla eşleştirmek için makine öğrenimini kullanarak işe alım sürecini kısaltıyor ve sonuçları iyileştiriyor.

Yapay zeka, çalışanların bağlılığı ve elde tutulması için veri odaklı içgörüler sağlar. İnsan kaynakları yöneticileri, çalışan memnuniyetini artıran ve işten ayrılma oranlarını azaltan proaktif eylemlere katılmalarını sağlar. Qualtrics gibi yapay zeka destekli araçlar, anketler, e-postalar ve çeşitli iletişim yolları aracılığıyla çalışanların geri bildirimlerini değerlendirerek kuruluşların sorunları erken tespit etmesini ve endişelerini gidermek için iyileştirici önlemler almasını sağlar.

Yapay zekanın çalışan bağlılığını artırmasının bir başka yolu, özelleştirilmiş öğrenme ve gelişim fırsatlarıdır. Degreed gibi platformlar, çalışan memnuniyetini artırır ve işgücü becerilerini kurumsal hedeflerle eşleştirir. Eğitim programları, çalışanların kariyer hedeflerine ve beceri eksikliklerine göre özelleştirilir. Sohbet robotları ve sanal asistanlar da işyerinde etkili iletişimi geliştiriyor. Katılım ve elde tutma stratejilerinin geliştirilmesinde yapay zekanın önemli bir uygulaması tahmine dayalı analitiktir.

Yapay zeka çözümleri, veriye dayalı olarak çalışan performansı hakkında içgörüler sağlar. Bu içgörüler, yöneticilere yüksek performans gösteren çalışanları ve daha fazla yardıma ihtiyaç duyan çalışanları belirlemelerine yardımcı olur. Performans eğilimlerini değerlendirmek ve özelleştirilmiş gelişim stratejileri sağlamak için yapay zekayı kullanan ADP Workforce Now gibi platformlar kullanılır. Yapay zeka odaklı performans yönetim sistemleri, çalışanların katkılarını değerlendirmede eşitlik, hassasiyet ve etkinlik için yeni bir ölçüt sunmaktadır.

Çalışanların gelişimi ve memnuniyeti için çok önemli olan kişiselleştirilmiş geri bildirim, yapay zeka tarafından kolaylaştırılır. Betterworks gibi yapay zeka odaklı çözümler, çalışanların performans ölçümlerine, güçlü yönlerine ve iyileştirme alanlarına göre özelleştirilmiş geri bildirim sağlar. Tahmine dayalı analitik, gelecekteki performans eğilimlerini tahmin eder ve olası engelleri tanıyarak daha adil ve eşitlikçi bir çalışma ortamını geliştirir.

İnsan kaynakları departmanları, yapay zeka destekli tahmine dayalı analitik kullanarak stratejik planlama ve bilinçli kararlar alabilirler. İşgücü davranışlarını ve eğilimlerini anlamak için büyük veri kümelerini ve makine öğrenimi algoritmalarını kullanır. Bu, insan kaynakları yöneticilerinin çalışanların faaliyetlerini şirket hedefleriyle uyumlu hale getirmelerine olanak tanır. İşgücü analitiği teknolojileri, insan kaynaklarının daha stratejik ve proaktif bir yaklaşım benimsemesini sağlar.

Tahmine dayalı modelleme, kuruluşların işgücü eğilimlerini tahmin etmesine ve sorunları proaktif olarak azaltmasına olanak tanır. Bu nedenle, yapay zekanın işgücü analitiğinde önemli bir kullanımı vardır. İşgücü planlamasını yapay zeka, beceri eksikliklerini belirleyerek ve uygun eğitim planlarını önererek geliştirir. Visier gibi platformlar, çalışanların hazırlığını ve istikrarını sağlamak için tahmine dayalı analitiği kullanır.

İşgücü analitiği için yapay zekanın gerçek zamanlı veri sağlaması da önemli bir avantajdır. Geleneksel araçlar genellikle yinelenen verilere dayanır ve bu da zamanında karar vermeyi engelleme potansiyeline sahiptir. Tableau gibi yapay zeka odaklı araçlar, işgücü verilerinin gerçek zamanlı olarak değerlendirilmesini kolaylaştırır ve bu da İK yöneticilerinin yeni eğilimleri ve sorunları hemen çözmesini sağlar.

Çeşitlilik ve kapsayıcılık girişimleri, eşitsizlikleri belirlemek için demografik verileri analiz eden ve daha adil bir çalışma ortamını teşvik etmek için eyleme geçirilebilir öneriler sunan AI algoritmaları kullanılarak büyük ölçüde

geliştirilmiştir. Bununla birlikte, işgücü analitiğinde yapay zekanın kullanımıyla ilgili etik ve gizlilik konusundaki endişeler artıyor. Bu nedenle, kuruluşlar, yapay zeka araçlarını güven oluşturmak ve çalışanların güvenini korumak için doğru şekilde kullanmalıdır.

Algoritma önyargısı, gizlilik endişeleri, değişime direnç ve etik ikilemler, insan kaynakları yönetimine yapay zeka entegrasyonuna yönelik çeşitli zorlukların bir sonucudur. YZ sistemleri en iyi performanslarını sağlamak için çok sayıda çalışan verisine ihtiyaç duydukları için veri gizliliği büyük bir endişe kaynağıdır. YZ, eğitim verileri temsil edici değilse veya algoritmalar kötü yapılandırılmışsa mevcut önyargıları daha da kötüleştirebilir. Çalışanların YZ araçlarının İKY'de etik kullanımı için şeffaflık çok önemlidir. YZ'nin işten çıkarmaya neden olabileceği başka bir etik kaygısı var. Çalışanların özerkliği ve işyeri etiği ile ilgili endişeler, YZ tarafından desteklenen izleme ve gözetim ile artmaktadır. YZ'nın kültür ve kurumsal değerler üzerindeki uzun vadeli etkileri, etik kaygıların bir parçası olmalıdır. Kuruluşlar, adalet, şeffaflık ve güven sağlarken, bu zorlukları ve etik kaygıları ele alarak İKY'de YZ'nın potansiyelini en üst düzeye çıkarabilirler.

Yapay zeka, İK personelinin stratejik hedeflere odaklanmasına ve idari görevleri otomatikleştirmesine yardımcı olur. Yapay zekanın tahmine dayalı analitiği, veriye dayalı karar verme sürecini değiştirerek işgücü planlamasını ve yetenek stratejilerini iş hedefleriyle uyumlu hale getirir. YZ ayrıca duygu analizi yoluyla kurum kültürü ve personel bağlılığı hakkında bilgi sağlar. Yapay zeka entegrasyonu, çalışanların güvenini korumak ve veri gizliliğini korumak gibi etik sorunlara neden olabilir. İnsan kaynakları yöneticileri, insan-teknoloji etkileşimini dengelemek için teknolojinin sorunları çözmesine, ilişkiler kurmasına ve lider olarak gelişmesine yardımcı olmasına izin vermelidir. İnsan kaynakları ekiplerinin dijital okuryazarlığını ve yapay zeka yetkinliğini geliştirmek, yapay zekanın tüm yeteneklerinden yararlanarak geleceğe hazır ve esnek iş yerleri oluşturmak için çok önemlidir. İnsan kaynakları yönetimi (İK) operasyonlarını ve iş deneyimini iyileştirmek için yapay zeka ve İKY'nin entegrasyonu, işin geleceğini yeniden keşfetmek için cazip fırsatlar sunmaktadır.