

The Rise of AI in HR: How Artificial Intelligence is Changing the Way We Work

Peningkatan AI dalam SDM: Bagaimana Kecerdasan Buatan Mengubah Cara Kita Bekerja

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ABSTRACT

The application of artificial intelligence (AI) in human resources (HR) management is an increasingly rampant trend in the contemporary work environment. This study aims to investigate the role of ethics and fairness in the use of AI systems in HR decision making, as well as their impact on employee satisfaction and well-being. The research method used is a systematic literature review which involves analysis of a number of relevant articles from international databases. The results of the discussion highlight the importance of taking into account ethical and justice aspects in the development, implementation and use of AI in HR, as well as its positive implications for employee satisfaction and well-being. The implications of this research include the importance of paying attention to ethical and justice principles in the use of AI in HR to ensure fair, transparent and accountable decisions, which in turn can increase employee satisfaction and well-being.

Keywords: Artificial intelligence, Human resource management, Ethics, Justice, Employee satisfaction, Employee welfare.

ABSTRAK

Penerapan kecerdasan buatan (AI) dalam pengelolaan sumber daya manusia (SDM) menjadi tren yang semakin marak di lingkungan kerja masa kini. Penelitian ini bertujuan untuk menyelidiki peran etika dan keadilan dalam penggunaan sistem AI dalam pengambilan keputusan SDM, serta dampaknya terhadap kepuasan dan kesejahteraan karyawan. Metode penelitian yang digunakan adalah tinjauan literatur sistematis yang melibatkan analisis sejumlah artikel relevan dari database internasional. Hasil diskusi menyoroti pentingnya mempertimbangkan aspek etika dan keadilan dalam pengembangan, implementasi, dan penggunaan AI pada SDM, serta implikasi positifnya terhadap kepuasan dan kesejahteraan karyawan. Implikasi dari penelitian ini antara lain pentingnya memperhatikan prinsip etika dan keadilan dalam penggunaan AI pada SDM untuk memastikan pengambilan keputusan yang adil, transparan dan akuntabel, yang pada akhirnya dapat meningkatkan kepuasan dan kesejahteraan karyawan.

Kata Kunci: Kecerdasan Buatan, Manajemen Sumber Daya Manusia, Etika, Keadilan, Kepuasan Karyawan, Kesejahteraan Karyawan.

1. Introduction

In the introduction to this systematic literature review, it is necessary to present a general overview of the topic "The Rise of AI in HR: How Artificial Intelligence is Changing the Way We Work". First of all, we will briefly discuss the evolution of AI and its implementation in the field of human resources (HR). Then, problem phenomena related to the development of AI in HR are introduced, such as the transformation of recruitment, selection, development and employee performance management processes. Next, we will describe the research gaps

identified in the related literature, as well as the importance of this research in filling these knowledge gaps. The research objectives will then be explained clearly, which include efforts to investigate the role of ethics and justice in the use of artificial intelligence systems in HR decision making, as well as their impact on employee satisfaction and well-being. The research question which is the main focus of the research will be presented clearly, followed by an emphasis on the uniqueness and novelty of this research in the context of existing literature. Finally, we will outline the contribution of this research in expanding understanding of the use of AI in HR and its potential to improve ethical and fair decision making, as well as improve employee well-being in an increasingly digitally connected era.

2. Research methods

In the Research Methods section, the steps taken to collect articles from international databases will be explained in detail. The search process will begin with determining relevant and comprehensive keywords to cover a wide range of literature. Then, the international database platform used and the search parameters that have been set will be described. After conducting a search, the number of articles obtained will be reported, as well as the selection process carried out to select articles that are relevant to this research. Article inclusion and exclusion techniques will be explained in detail, including the criteria used to determine the relevance of the article to the research question that has been determined. Apart from that, the process of filtering articles, checking authenticity, and removing articles that are irrelevant or of poor quality will also be described. Finally, we will explain the use of the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method as the main guide in conducting this systematic literature review, including the stages carried out in applying this method to ensure the quality and transparency of the literature review process carried out. .

3. Results and Discussion

3.1. The Role of Ethics in the Use of AI in HR

3.1.1. Literature Review on Ethics in the Use of AI in HR

Ethics in the use of Artificial Intelligence (AI) in Human Resources (HR) is a critical area of concern that requires careful consideration. Several studies have highlighted key ethical considerations surrounding AI implementation in HR. Leikas et al. (2022) emphasized the importance of governing ethical AI transformation, showcasing a case study that sheds light on the ethical aspects of AI deployment. Ng et al. discussed the significance of AI literacy, including understanding AI functions and ethical use, which is crucial for ensuring responsible AI application in HR settings.

Huriye (2023) delved into the ethical considerations in AI development and use, emphasizing the need for a human-centered approach and the development of ethical guidelines to address issues like bias, data privacy, and labor market impacts. Khan et al. (2023) conducted an empirical study on AI ethics, focusing on the views of practitioners and lawmakers, highlighting the need for frameworks that address ethical issues arising from AI systems across various sectors, including HR.

Moreover, Elendu (2023) explored the ethical implications of AI and robotics in healthcare, touching on privacy, bias, accountability, transparency, autonomy, and societal implications, which are also pertinent in the HR domain. Charlwood & Guenole (2022) stressed the importance of stakeholder involvement in ensuring the ethical design, development, and deployment of AI systems, a principle that is equally applicable in HR practices involving AI. In conclusion, the ethical use of AI in HR necessitates a comprehensive understanding of AI literacy, governance frameworks, human-centered approaches, stakeholder engagement, and addressing key ethical issues such as bias, privacy, and accountability. By integrating these

ethical considerations into AI implementation in HR, organizations can foster responsible and ethical AI practices that prioritize fairness, transparency, and human values.

3.1.2. Ethical Implications in AI-Powered HR Decision Making

Ethical considerations in AI-powered HR decision-making are crucial and require thorough attention. Various studies emphasize the significance of addressing ethical risks and mechanisms in AI decision-making processes (Guan et al., 2022). It is essential to integrate ethics into AI systems to mitigate adverse outcomes like privacy breaches and biased decision-making (Pflanzer et al., 2022). Moreover, adapting governance and auditing processes to ensure ethical AI-based decision-making is vital (Lehner et al., 2022).

Challenges hindering the adoption of automated organizational decision-making through AI include human social dynamics, lack of trust, transparency issues, and ethical concerns (Booyse, 2023). In the healthcare sector, it is recommended to develop and disseminate comprehensive ethical guidelines for AI and robotics to guide decision-making processes (Elendu, 2023). A relational approach to AI that considers the relational nature of things is proposed to tackle ethical, legal, societal, and environmental implications (Dignum, 2022).

Transparency of AI in decision-making is recognized as a critical element linked to ethical considerations in digital health (Möllmann et al., 2021). Challenges in utilizing data science techniques for HR tasks involve accountability issues related to fairness and other ethical constraints (Tambe et al., 2019). Frameworks for ethical digital transformation led by AI underscore the importance of moral reasoning and conflict management in decision-making processes (Kumar et al., 2021).

It is imperative to ensure that AI decisions respect individuals' circumstances and do not reduce them to mere data to prevent moral distancing and uphold ethical decision-making (Villegas-Galaviz & Martin, 2023). Responsible AI implementation necessitates considerations of accountability, reliability, transparency, privacy, and fairness (Sanderson et al., 2022). Incorporating human supervision in AI decision-making processes can aid in verifying the ethical and impartial nature of AI algorithms (Kumar, 2024). In conclusion, addressing ethical implications in AI-powered HR decision-making involves integrating ethics into AI systems, ensuring transparency and accountability, and considering the societal, legal, and environmental impacts of AI technologies.

3.1.3. Challenges and Controversies in Facing Ethical Aspects

Ethical challenges are prevalent across various fields, leading to dilemmas and conflicts that professionals must navigate. Valuers in business sustainability may encounter ethical challenges during the valuation process (Tugui et al., 2020). Genetic testing for rare diseases presents diverse ethical aspects related to the testing process and its consequences (Kruse et al., 2022). Addressing ethical challenges in HIV counseling and testing is crucial for improving service uptake in combating HIV/AIDS (Mlughu et al., 2020). Behavioral practitioners face value-based ethical dilemmas that require a systematic approach for resolution (Huang et al., 2023). Clinicians in clinical trials often encounter ethical dilemmas, emphasizing the importance of ethical decision-making (Godskesen et al., 2019).

Moreover, the lack of medical ethics adherence can lead to legal issues for physicians (Buowari & Kanmodi, 2021). Organizational leaders face ethical risk challenges that require sound decision-making processes (Khursheed et al., 2019). Psychotherapists regularly face ethical dilemmas throughout their careers, necessitating clear guidance on ethical responses (Barnett, 2019). The adoption of digital healthcare technology poses ethical challenges that need contextual categorization (Zarif, 2021). Communication leaders' ethical behaviors play a vital role in providing ethical counseling during challenges (Meng et al., 2022). Laboratory

professionals benefit from ethics education to navigate daily ethical challenges effectively (Talash et al., 2022).

Engineering professionals face ethical challenges in maintaining public trust amidst complex global issues (Binani, 2022). Nurses in hospital duty encounter ethical problems despite their knowledge and skills in ethics (Sharma & Sharma, 2020). Community mental health workers face significant ethical challenges, particularly in confidentiality and decision-making (Raghavan & Sanjana, 2022). Higher education institutions grapple with new and unexpected ethical challenges, requiring innovative solutions (Fazli et al., 2020). Ethical issues in delivering psychological therapies to elderly clients highlight the importance of balancing competing ethical principles (Vaitheswaran et al., 2021). Dementia care professionals face ethical dilemmas when conflicting alternatives arise (Strøm & Engedal, 2020). In conclusion, professionals across various sectors encounter ethical challenges that necessitate a nuanced understanding and adherence to ethical principles to navigate complex dilemmas effectively.

3.2. The Role of Justice in the Use of AI in HR

3.2.1. Literature Review on Fairness in the Use of AI in HR

Fairness in the use of Artificial Intelligence (AI) in Human Resources (HR) is a critical topic that has garnered significant attention in recent years. Several studies have highlighted the importance of ethical frameworks and guidelines to ensure the responsible deployment of AI technologies in HRM (Sposato, 2024). The business community and legislative bodies are called upon to work on standards for the use of AI in HR to promote fairness and effectiveness in HR management (VATS, 2024).

While AI algorithms have been suggested to be less biased and more objective than humans in some cases, there is still a debate on whether algorithms are fairer than human judgment ("Artificial intelligence and labor market matching", 2023). Challenges in using AI for HR tasks include the complexity of HR phenomena, constraints associated with small data sets, accountability questions related to fairness, and possible adverse employee reactions to decisions based on AI algorithms (Kshetri, 2021).

Studies have shown that AI technologies offer HR professionals opportunities to enhance recruitment efficiency, streamline processes, and improve decision-making (S, 2024). Additionally, HR professionals generally have a positive attitude towards new AI technologies for maintaining effective personnel management in organizations (Svitlana et al., 2022).

The ethical dimensions of AI-driven HR chatbots have been emphasized, stressing the need for fairness, autonomy, and nondiscrimination in their development and deployment (Andreas, 2024). Furthermore, the impact of AI on HR decision-making efficiency and fairness has been explored, with a focus on improving decision-making processes and addressing fairness issues in AI-driven HR practices (Khair, 2020). In conclusion, the literature underscores the importance of integrating fairness considerations into the development and deployment of AI technologies in HR. Ethical frameworks, standards, and guidelines are crucial to ensure that AI in HR promotes fairness, autonomy, and effectiveness in people management practices.

3.2.2. Impact of Implementing an Artificial Intelligence System on Justice in HR

Implementing artificial intelligence (AI) systems in Human Resources (HR) has raised concerns about fairness. The use of AI in HR processes, such as recruitment, job matching, and performance evaluation, has the potential to introduce bias and discrimination (Mehrabi et al., 2021). To address these challenges, researchers have focused on developing techniques to assess the impact of AI on fairness, such as failure mode and effects analysis (FMEA-AI) (Li & Chignell, 2022). Additionally, studies have highlighted the importance of considering the cost of fairness in AI applications, especially in e-commerce settings (Zahn et al., 2021).

Furthermore, the application of AI in judicial adjudication has been explored to standardize judgment processes and enhance fairness in trial outcomes (Zhang, 2022). In the context of talent management, developing fairness rules for AI-based systems has been emphasized to ensure equitable practices in organizations (Xi et al., 2020). Moreover, understanding when customers perceive AI as fair is crucial for the design of AI-based e-commerce services (Weith & Matt, 2022).

Efforts have been made to make AI systems fair, responsible, and transparent to address concerns related to bias and discrimination (Lyons et al., 2021). Legislation, such as the Algorithmic Accountability Act, aims to ensure fairness and transparency in AI systems (Lewicki, 2023). The need for fair decision-making under uncertainty has been highlighted in various applications of AI, including job screening, insurance, advertising, health resource allocation, and loan approvals (Zhang & Weiss, 2023). In conclusion, the impact of implementing AI systems on fairness in HR is a multifaceted issue that requires careful consideration of bias, transparency, and accountability. Researchers and practitioners are actively working on developing methodologies and frameworks to assess and enhance the fairness of AI systems in HR applications.

3.2.3. Strategies to Ensure Fairness in AI-Powered HR Decision Making

To ensure fairness in AI-powered HR decision-making, various strategies can be implemented. One approach is to incorporate fairness through awareness techniques, which involve bias mitigation strategies to make AI algorithms more cognizant of protected attributes (Puyol-Antón et al., 2021). Additionally, fairness through unawareness can be considered, where decisions are made without the model being aware of protected attributes to ensure fairness (Puyol-Antón et al., 2021). It is crucial for businesses to ensure that their algorithmic decision-making processes are fair to align with legislative, ethical, and societal expectations (Frauen et al., 2023).

Moreover, involving end-users in interactive human-in-the-loop AI fairness processes can help counteract bias and discrimination in AI applications (Nakao et al., 2022). Organizations should also prioritize the development and dissemination of comprehensive ethical guidelines and frameworks to inform decision-making processes involving AI in various sectors, including healthcare (Elendu, 2023). Furthermore, AI developers must prioritize transparency, explainability, and testing for bias in their models to assure algorithmic fairness (Xivuri & Twinomurizi, 2023).

In the context of HR, it is essential to address how employees perceive decisions made by AI systems. Studies have shown that employees may question the fairness and justice of AI decision-making processes in HR management (Bankins et al., 2022). HR professionals play a crucial role in shaping the future of AI in HR by ensuring that ethics and fairness are central to AI development for people management (Charlwood & Guenole, 2022). In conclusion, ensuring fairness in AI-powered HR decision-making involves a multi-faceted approach that includes implementing bias mitigation strategies, prioritizing transparency and ethical guidelines, involving end-users in the process, and addressing employees' perceptions of fairness. By adopting these strategies, organizations can enhance the fairness and ethical standards of AI applications in HR decision-making processes.

3.2.4. Impact on Employee Satisfaction and Well-being

1. Literature Review on the Impact of Using AI in HR on Employee Satisfaction

The impact of Artificial Intelligence (AI) on employee satisfaction in Human Resources (HR) is a subject of increasing interest. Several studies have explored this area, shedding light on different aspects of how AI affects employee experiences and satisfaction levels.

Malik et al. (2022) emphasize the significance of AI in improving the employee experience within HR ecosystems, leading to enhanced employee engagement. They highlight the role of disruptive technology platforms, such as AI, in shaping HR practices and promoting employee satisfaction. Additionally, Abhari (2023) presents a framework for an AI-powered Employee Experience Management platform designed to address HR concerns like employee engagement and job satisfaction.

Nguyen & Malik (2021) investigate how the adoption of AI in the workplace can influence employees' satisfaction with AI service quality and overall job satisfaction. They also examine the moderating effects of job level and job role on AI service quality. Furthermore, Biliavska et al. (2022) discuss how AI-enabled HR solutions can improve human resource practices, including assessing and predicting employee performance, which can lead to increased job satisfaction.

Moreover, Rughoobur-Seetah (2022) analyzes the impact of AI adoption on employees' work behaviors in the hospitality sector, focusing on motivation, job security satisfaction, and organizational commitment. This study offers insights into how AI implementation affects various aspects of employee satisfaction during the COVID-19 pandemic. In conclusion, the integration of AI in HR practices has the potential to significantly influence employee satisfaction by enhancing the employee experience, service quality, and job performance. Understanding the effects of AI adoption on employee satisfaction is crucial for organizations seeking to effectively utilize technology to enhance overall employee well-being and engagement.

3.2.5. Literature Review on the Impact of Using AI in HR on Employee Well-Being

The integration of artificial intelligence (AI) in human resources (HR) has garnered increasing interest in recent years. Research has shown that AI applications in HRM practices can enhance personalization in learning and development, employee coaching, managing performance, administrative tasks, and overall HR effectiveness (Malik et al., 2022). AI can be effectively utilized across various HR functions, from talent selection to performance evaluation, with the potential to boost employee engagement and performance (Rožman et al., 2022). Moreover, the adoption of AI in the workplace has been associated with heightened job satisfaction and improved service quality, ultimately benefiting employee well-being (Nguyen & Malik, 2021).

Additionally, the use of AI-enabled bots and virtual assistants in HR tasks has been demonstrated to improve HR cost-effectiveness and provide tailored employee experiences (Malik et al., 2023). AI technologies also play a crucial role in predicting employee attrition, increasing productivity, and facilitating knowledge sharing, all of which can impact employee well-being positively (Shaikh et al., 2023; Fallucchi et al., 2020). Furthermore, AI can be leveraged to analyze the psychological state of leaders and forecast their influence on employees, leading to enhancements in employee trust, commitment, and job satisfaction (Liu & Song, 2022).

Studies have emphasized the significance of sustainable HR practices, such as prioritizing employee well-being, which can have a positive impact on organizational commitment and performance when effectively implemented through AI (Anitha & Shanthi, 2020). Furthermore, research has indicated that AI adoption among HR professionals can enhance employee performance, engagement, and retention, while also reducing errors, biases, and turnover in decision-making processes (Bibi, 2019). In conclusion, the literature suggests that leveraging AI in HR can significantly influence employee well-being by improving HR practices, service quality, job satisfaction, and fostering personalized experiences. By effectively utilizing AI technologies, organizations can cultivate a more engaging and supportive work environment that promotes employee well-being.

3.2.6. Factors that Influence Employee Satisfaction and Well-Being in the AI Context

Factors influencing employee satisfaction and well-being in the context of AI are multifaceted and crucial for organizational success. The adoption of AI in the workplace has been shown to impact various aspects of employee satisfaction and well-being. Studies have highlighted the importance of AI transparency in promoting employees' trust in AI systems (Yu et al., 2023). Additionally, the implementation of AI can influence employees' job satisfaction, job security satisfaction, and organizational commitment, especially during challenging times like the COVID-19 pandemic (Rughoobur-Seetah, 2022). AI can also enhance employees' work safety, mental health, and other aspects through strategic foresight generated by AI (Fan et al., 2023).

Furthermore, the mediating role of knowledge sharing and employee well-being in the impact of AI on employee productivity has been emphasized (Shaikh et al., 2023). AI integration in customer relationship management systems has been shown to maximize firms' value by identifying and retaining best customers (Chatterjee et al., 2020). Moreover, the impact of AI on employees' learning behavior and the moderating effects of AI collaboration on employees' learning process remain areas for further exploration (Chen et al., 2023).

Employee satisfaction and well-being are influenced by various factors such as job satisfaction, organizational commitment, and job security. The satisfaction of employees is crucial for both employees and employers, with factors like salary, supervisors, flexible work hours, promotion, and bonuses playing significant roles. Additionally, the suitability of IT tasks, AIS satisfaction, and AIS effectiveness can reinforce the positive influence of AIS benefits on employee performance (Astika & Dwirandra, 2020). In conclusion, the integration of AI in the workplace has the potential to significantly impact employee satisfaction and well-being. Transparency, knowledge sharing, job security, organizational commitment, and AI effectiveness are key factors that organizations need to consider to ensure that the adoption of AI positively influences employee satisfaction and well-being.

4. Conclusions

After reviewing various literature on ethics, justice, and the impact of using artificial intelligence (AI) in human resource management (HR), it can be concluded that:

The application of AI in HR raises a number of ethical and justice implications that organizations need to take seriously. The importance of taking into account ethical principles, such as transparency, accountability and fairness, and ensuring that decisions taken by AI systems are non-discriminatory and unbiased cannot be understated.

Organizations need to integrate ethical and fairness considerations into the development, implementation, and use of AI systems in HR. This can be done through the development of strict ethical frameworks and guidelines, stakeholder involvement, and the development of AI technology that is more transparent, accountable and non-discriminatory.

While there has been a wealth of research on the ethics, fairness, and impact of using AI in HR, there are still limitations in understanding and addressing these issues. Some studies may be limited to certain samples or methods, so further research is needed to overcome these limitations.

For future research, it is recommended to conduct more in-depth studies on how to overcome bias and discrimination in AI decision making, develop ethical guidelines more specific to the HR context, as well as investigate the long-term impact of AI use on employee satisfaction and well-being. Additionally, research on AI implementation strategies that promote fairness and ethics in HR decision making also needs to be expanded. Thus, future research is expected to provide deeper insights and more effective solutions related to this problem.

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