

Employee Well-Being in The Era of Artificial Intelligence: A Systematic Literature Review

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Abstract—Employee well-being has become a strategic issue in modern organizations due to its correlation with productivity, retention, and work performance. The rapid development of digital technology, particularly artificial intelligence (AI), has changed work processes, task structures, and patterns of interaction between employees and technology, presenting both new opportunities and challenges for employee well-being. This article aims to systematically examine the relationship between AI implementation and employee well-being in the context of modern organizations. The method used is a systematic literature review with reference to the PRISMA 2020 guidelines. Literature searches were conducted through the Scopus, Web of Science, Google Scholar databases, and relevant national sources. Through a gradual selection process, 38 articles published in the last eight years were obtained for qualitative analysis. In addition, bibliometric analysis using VOSviewer was used to map research trends, keyword correlations, and thematic clusters. The results of the study show that the application of AI has a dual impact on employee well-being. On the one hand, AI contributes to task optimization, reduction of routine workloads, and increased work efficiency. However, on the other hand, AI implementation that is not human-oriented can trigger technostress, job insecurity, and perceptions of excessive surveillance. These findings emphasize the importance of organizational policies, supportive leadership, and skills development in supporting sustainable AI integration.

Keywords: Employee Well-Being; Artificial Intelligence; Technostress; Human Resource Management; Digital Transformation

1. INTRODUCTION

Employee well-being is increasingly seen as a strategic element in the success of modern organizations. Various studies show that high levels of well-being correlate positively with productivity, work engagement, employee retention, and overall organizational performance. In the context of global competition and rapid changes in the work environment, organizations are required not only to achieve operational efficiency, but also to create a work environment that supports the physical, psychological, and social well-being of employees (Guest, 2021; Pfeffer, 2020).

The development of digital technology has become one of the main factors changing the way organizations work. The digitization of work processes, task automation, and the use of data-based systems are becoming increasingly widespread in various industrial sectors. In recent years, artificial intelligence (AI) has become the technology with the most significant impact on human resource management. AI is utilized in various organizational functions, ranging from work scheduling and performance evaluation to algorithm-based decision making (Vrontis et al., 2021; Stone et al., 2020).

Although AI offers various benefits, such as increased efficiency, accuracy, and flexibility at work, its implications for employee well-being remain a subject of academic debate. A number of studies show that AI can help reduce routine workloads and provide better decision-making support, thereby potentially improving employee well-being (Marler & Fisher, 2021; Noe et al., 2021). However, on the other hand, the use of AI is also associated with increased work pressure, anxiety about job security, and the emergence of technostress due to the intensity of human interaction with technology (Angrave et al., 2020; Cavanagh et al., 2023).

The organizational behavior literature asserts that employee well-being is a multidimensional construct influenced by interactions between individuals, technology, and the organizational context. Factors such as organizational culture, leadership style, and human resource management policies play an important role in determining whether the application of technology will have a positive or negative impact on employee well-being (Guest, 2021; Budhwar et al., 2023). Thus, AI cannot be understood as a single determinant, but rather as part of a broader work system.

In the context of developing countries, including Indonesia, the challenges of implementing AI for employee welfare are becoming increasingly complex. Digital competency gaps, organizational readiness, and regulatory limitations often influence how technology is adopted and perceived by employees. National studies show that the quality of human resources, organizational support, and adaptive leadership have a significant impact on performance and work well-being amid technological change (Hasanuddin et al., 2023; Ramadhan et al., 2023).

Although the number of studies on AI and employee well-being continues to increase, existing findings remain fragmented and show mixed results. Some studies emphasize the benefits of AI for well-being, while others highlight the risks and negative impacts that arise. This situation highlights the need for a systematic literature synthesis to gain a

more comprehensive understanding of the patterns of findings, dominant themes, and remaining research gaps (Huang & Zhang, 2023; Úbeda-García et al., 2025).

Based on this background, this study aims to systematically examine the relationship between the application of artificial intelligence and employee well-being through a systematic literature review approach based on PRISMA guidelines. By integrating findings from reputable national and international literature, this study is expected to contribute theoretically to the development of employee welfare studies in the digital era and provide practical implications for organizations in designing human resource management policies that are oriented towards welfare and sustainability.

2. RESEARCH METHODS

This study uses a systematic literature review (SLR) approach to comprehensively examine the relationship between the application of artificial intelligence (AI) and employee well-being. The SLR approach was chosen because it is able to synthesize empirical findings objectively, transparently, and structurally, thereby providing a comprehensive overview of research developments and patterns of findings in a field of study. The systematic review process refers to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA 2020) guidelines, which are widely used in management and social science research to improve the quality and replication of literature studies (Page et al., 2021; Kitchenham et al., 2020).

The data collection process was carried out by searching for scientific articles in reputable international and national databases, namely Scopus, Web of Science, and Google Scholar. The inclusion criteria included articles published between 2017 and 2025, focusing on the topics of AI, digital technology, and employee welfare in the organizational context, and available in full text. Articles that were not relevant to the research focus, did not undergo peer review, or were non-scientific were excluded from the analysis. Through the stages of identification, screening, and eligibility assessment, 38 articles were obtained that met the criteria for further qualitative analysis (Huang & Zhang, 2023; Úbeda-García et al., 2025).

This study also utilizes bibliometric analysis to map research trends, keyword correlations, and thematic clusters in AI and employee welfare studies. Bibliometric analysis is used as a complement to strengthen the interpretation of literature review results and identify research focuses and gaps that remain open. The combination of a systematic literature review and bibliometric analysis enables this study to produce a more comprehensive understanding of the impact of AI implementation on employee well-being and its implications for human resource management in the digital age (Donthu et al., 2021; Vrontis et al., 2021).

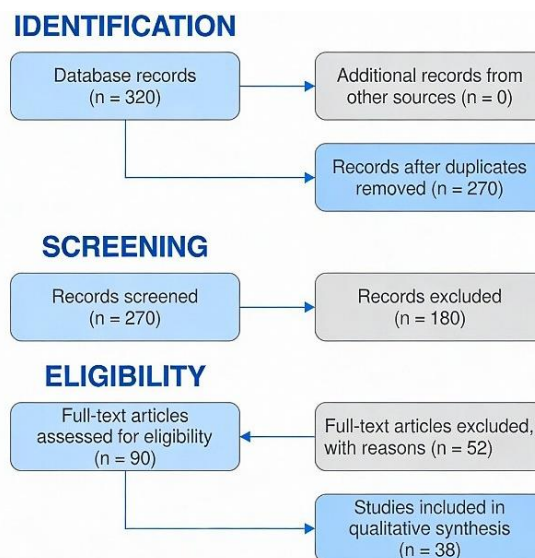


Figure 1. Prisma flow diagram

3. RESULTS AND DISCUSSION

3.1 Result

Bibliometric analysis was conducted on 38 selected articles using VOSviewer software to map the conceptual structure, thematic connections, and temporal development of research related to employee well-being in the era of artificial intelligence. The results of the analysis were visualized through three main types of mapping, namely network visualization, overlay visualization, and density visualization, each of which provided a different perspective on the research landscape being analyzed.

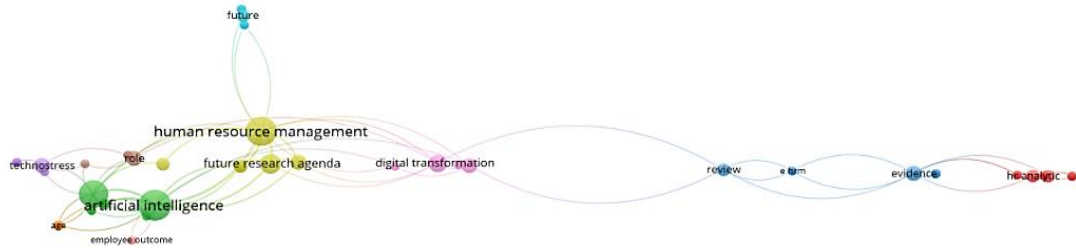


Figure 2. Network Visualization

The results of network visualization show that employee well-being is a core node that has strong connections with a number of key words, such as artificial intelligence, technostress, mental health, job satisfaction, work engagement, and human resource management. These connections indicate that the study of employee well-being in the context of AI is understood as a multidimensional phenomenon that simultaneously involves psychological, organizational, and technological aspects. The network visualization also shows the formation of several overlapping thematic clusters, reflecting cross-disciplinary integration between human resource management, organizational behavior, and digital technology systems.

The cluster related to technostress and mental health emerged as one of the dominant clusters, indicating that the psychological impact of AI implementation is a major concern in the literature. Meanwhile, other clusters centered on AI adoption, automation, and digital transformation show a research focus on changes in work design and organizational processes resulting from the adoption of intelligent technology.

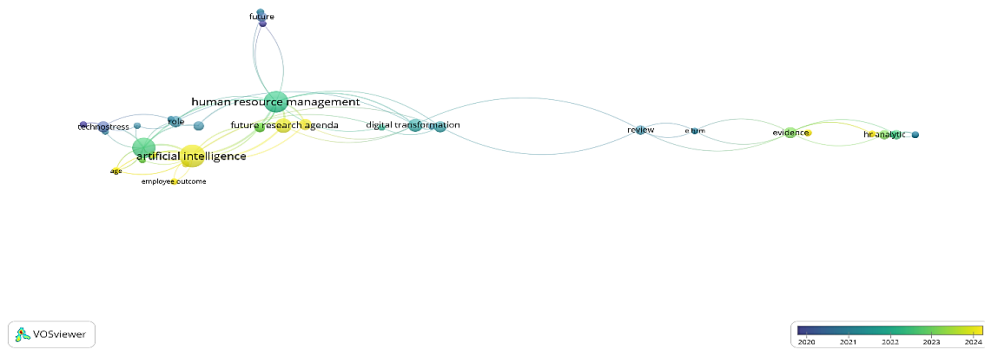


Figure 3. Overlay Visualization

The overlay visualization results illustrate the temporal development of research topics based on publication year. Keywords in darker colors represent topics that were researched earlier, such as job satisfaction, occupational stress, and work engagement. Conversely, keywords in lighter colors, such as generative AI, algorithmic management, AI ethics, and remote work, indicate topics that have been increasingly researched in recent years.

This pattern indicates a shift in research focus from conventional work welfare issues to more specific and contextual issues related to the increasingly complex implications of AI technology. Thus, the literature shows the dynamic evolution of studies from a general approach to a more in-depth analysis of the social, ethical, and psychological consequences of AI implementation in the workplace.

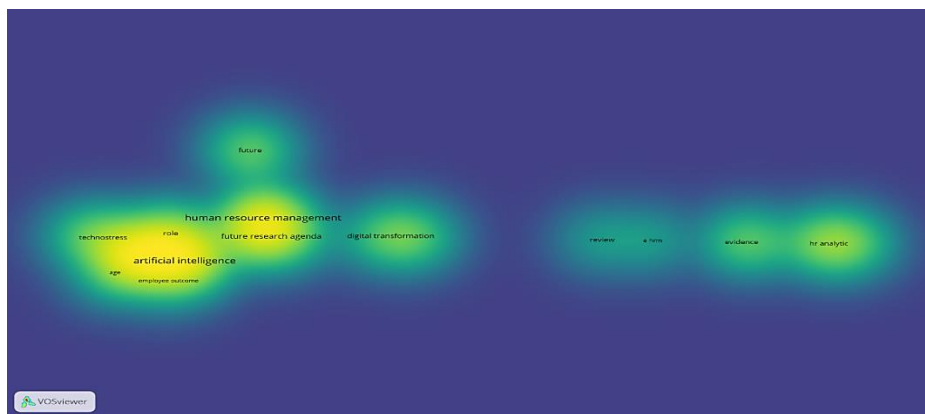


Figure 4. Density Visualization

The density visualization results show the level of density of keyword appearances in the analyzed literature. The area with the highest density is concentrated at the intersection of employee well-being, artificial intelligence, and

digital transformation, confirming that the combination of these three themes is the main focus of current research. Medium density is seen in the themes of technostress, organizational support, and human resource management, indicating potential for further research development. Conversely, themes such as AI governance, ethical AI, and long-term well-being outcomes are still in areas with lower density, indicating opportunities for research that have not been explored empirically.

3.2 Discussion

Bibliometric mapping results show that employee well-being is a central concept in studies of the impact of artificial intelligence (AI) implementation in modern work environments. These findings confirm that AI adoption is not only understood as technological transformation, but also as social and psychological change that directly affects working conditions, mental health, and employee engagement. Global literature places employee well-being as a key indicator of the success of sustainable digital transformation (Guest, 2021; Korzynski et al., 2023; Strohmeier, 2020).

Further discussion shows that technostress emerges as a dominant theme that bridges the relationship between AI and employee well-being. Several studies confirm that the intensification of smart technology use can increase cognitive load, work anxiety, and psychological fatigue if not accompanied by adaptive work design and adequate organizational support (Tarafdar et al., 2019; Cañibano et al., 2021; Li & Wang, 2023). This reinforces the view that technology is ambivalent, with the potential to increase efficiency while also posing risks to employee well-being.

On the other hand, the results of VOSviewer also show that AI can contribute positively to work well-being through task optimization, reduction of routine work, and increased work flexibility. Recent studies show that when AI is used as a decision support tool and job enrichment, employees tend to experience increased job satisfaction and work engagement (Wang et al., 2020; Salas et al., 2021; Noe et al., 2021). Thus, the impact of AI on well-being is largely determined by the context of implementation and managerial orientation.

This finding is in line with the socio-technical system perspective, which emphasizes that the success of technology integration is highly dependent on the alignment between the technical and social systems of an organization. The digital HRM literature confirms that AI implemented without considering human aspects can actually worsen the quality of working life (Bondarouk & Brewster, 2021; Margherita & Bua, 2021; Zhang et al., 2022). Therefore, employee well-being must be placed as a key design principle in AI-based transformation.

In the context of human resource management, the results of the discussion show that the role of strategic HRM is becoming increasingly crucial in mitigating risks and maximizing the benefits of AI. HRM plays a role in designing policies, training systems, and communication mechanisms that can reduce job uncertainty and employee anxiety (Becker & Huselid, 2021; Rasmussen & Ulrich, 2022). These findings are consistent with national literature that emphasizes the importance of human resource quality and organizational support for work performance and satisfaction (Hasanuddin et al., 2023; Siregar et al., 2023).

In addition, leadership and organizational culture also emerge as key factors in maintaining employee well-being in the AI era. Studies show that supportive and participatory leadership can reduce the negative impact of technostress and increase employees' psychological safety (Ramadhan et al., 2023; Guest, 2021). This shows that digital transformation cannot be separated from the quality of work relationships and organizational climate.

The discussion also highlighted the issue of job insecurity as an important consequence of AI adoption. Fears of automation and job replacement have been shown to have a negative impact on employees' psychological well-being (Li & Wang, 2023; Salgado et al., 2024). However, the literature also shows that well-planned reskilling and upskilling programs can reduce such anxiety and improve employees' readiness to face change (Noe et al., 2021; Kraiger et al., 2021).

From the perspective of developing countries, the results of the study indicate a gap in empirical research. Relevant national literature indicates that challenges in digital infrastructure, technological literacy, and human resource readiness remain major obstacles in ensuring work welfare amid digitalization (Nabila et al., 2025; Rahayu et al., 2025; Noor et al., 2023). This confirms that findings from developed countries cannot be fully generalized without considering local institutional conditions.

Furthermore, this discussion shows that ethical and governance issues surrounding AI are still relatively unexplored in relation to employee well-being. In fact, algorithm transparency, data protection, and fairness in AI use have direct implications for employee trust and well-being (Úbeda-García et al., 2025; Zhang et al., 2022). Therefore, ethical aspects need to be explicitly integrated into digital HRM policies.

Overall, this discussion confirms that the relationship between AI and employee well-being is complex and contextual. AI can be a source of well-being or work pressure, depending on system design, organizational readiness, and managerial approach. The integration of global and national findings shows that HRM has a strategic role in ensuring that AI-based transformation not only improves organizational performance but also maintains and strengthens employee well-being in a sustainable manner.

4. CONCLUSION

This study presents a systematic literature review of the relationship between the application of artificial intelligence (AI) and employee well-being in the context of modern organizations. Based on an analysis of 38 selected articles, the

results of the study show that employee well-being is a central issue in the discourse on AI-based digital transformation. These findings confirm that the implementation of AI not only has an impact on organizational efficiency and performance, but also directly affects the psychological condition, job satisfaction, and engagement of employees. The results of bibliometric mapping reveal that the impact of AI on employee well-being is ambivalent. On the one hand, AI has the potential to improve well-being through work design optimization, reduction of routine tasks, and increased flexibility and decision-making support. On the other hand, the implementation of AI that is not human-centered can trigger technostress, job insecurity, and perceptions of excessive surveillance, which ultimately reduce the quality of working life. Therefore, employee well-being is highly dependent on the context of implementation, organizational readiness, and the managerial approach used. This study also emphasizes the strategic role of human resource management in bridging the gap between technology and human aspects. Adaptive HRM, supported by supportive leadership, transparent policies, and continuous reskilling and upskilling programs, has proven to be capable of mitigating the negative risks of AI while maximizing its benefits for employee welfare. These findings are relevant not only for organizations in developed countries, but also for developing countries that face additional challenges related to digital infrastructure and human resource readiness. This study contributes theoretically by enriching the literature on employee well-being in the AI era and offers practical implications for policymakers and HR practitioners. Further research is recommended to develop cross-sector and cross-cultural empirical studies and to further explore the ethical and governance dimensions of AI in maintaining sustainable employee well-being.

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