AI in Employee Lifecycle Management: Current Practices and Future Prospects

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Abstract: *Artificial Intelligence (AI) is rapidly revolutionizing Human Resource Management (HRM) by enhancing fairness, efficiency, and strategic depth across critical HR functions. Applications such as automated resume screening, chatbots, and asynchronous video interviews streamline hiring processes, improve objectivity, and optimize person-job and person-organization fit. In performance management, AI enables personalized goal setting, continuous feedback, and predictive analytics, enhancing the identification of high-potential employees while minimizing bias. AI-driven learning and development deliver adaptive, immersive, and personalized experiences, often augmented by virtual reality and AI assistants. AI supports employee engagement and retention by predicting turnover, optimizing wellness initiatives, and ensuring equitable recognition. In compensation and benefits, AI promotes fair benchmarking, reduces salary biases, and strengthens strategic alignment. Despite these advances, challenges persist, including ethical concerns, algorithmic bias, data privacy, and limited real-world validation. AI also contributes to Diversity, Equity, and Inclusion (DEI) by mitigating biases and facilitating inclusive communication. Tools like Social Network Analysis (SNA) reveal critical informal communication channels in complex organizations, while frameworks such as AGILE support skills-based mobility. Successful AI integration requires adaptive change management, capable leadership, and workforce competencies, including digital literacy and lifelong learning. To fully realize AI's potential in HRM, a multidisciplinary, ethical, and human-centered approach is essential. This approach must emphasize transparency, regulatory compliance, and continuous human oversight to foster inclusive, high-performing workplaces aligned with evolving organizational goals.*

Keywords: Artificial Intelligence, Human Resource Management, Workforce Planning, Diversity, Equity and Inclusion, Algorithmic Bias, Social Network Analysis