

AI-Based Decision Making in Strategic Talent Management: Balancing Organizational Efficiency and Ethics

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ABSTRACT

In the era of digital transformation, the integration of Artificial Intelligence (AI) has shifted the decision-making paradigm in talent management from an intuitive approach to a data-driven. While AI offers high efficiency in processing complex information, its use in talent management strategies raises important issues regarding ethics, transparency, and the potential for algorithmic bias that can harm an organization's perception of fairness. This research aims to explore how organizations can balance the demands of operational efficiency through AI with the need to maintain ethical and moral standards in talent management. The primary focus of the research is to identify the intersection between optimizing organizational capabilities and protecting employee rights and well-being. Using a descriptive qualitative approach (systematic literature review) with analyzed various AI implementation frameworks in global companies. The analysis examined mechanisms for performance assessment, employee potential identification, and succession planning, then compared them with principles of business ethics and distributive and procedural justice. The study's findings demonstrate that AI efficiency cannot be achieved without human oversight (human-in-the-loop). This research develops a decision-making framework model that integrates ethical values into the design of mechanisms to minimize bias. The practical contribution of this paper is to provide guidance for strategic stakeholders and organizational practitioners in adopting AI technologies that not only increase productivity but also strengthen employee trust and engagement through transparent and fair management practices.

Keywords: *Strategic Talent Management, Artificial Intelligence (AI), Organizational Ethics, Decision Making*

1. INTRODUCTION

In today's era of massive digital transformation, the integration of Artificial Intelligence (AI) has shifted the paradigm of decision-making across various business sectors, including strategic talent management (Fenwick et al., 2024). Traditional approaches, once heavily reliant on intuition, have shifted to data-driven ones (Gade & Chase, 2021). Organizations are required to move quickly, as the use of AI offers high levels of efficiency in processing complex information, from performance assessments and identifying potential employees to succession planning (Chitraju Santhosh, 2025).

However, despite these operational advantages, the application of AI in talent management raises significant new challenges (Khan, 2024). The use of algorithms often raises crucial issues related to ethics, transparency, and the potential for algorithmic bias (Tsamados et al., 2022). If not properly managed, this bias can undermine perceptions of fairness within an organization, undermine employee trust, and negatively impact employee well-being. Therefore, there is an urgent need to find a balance between optimizing organizational capabilities and protecting employee rights. Technological efficiency will not be optimal without human oversight (human-in-the-loop) (Frenette, 2023).

Based on this background, the main problem examined in this research is: how can organizations balance the demands of AI-based operational efficiency with the need to maintain ethical and moral standards, as well as the principles of distributive and procedural justice in talent management?

This research aims to explore strategies for balancing AI efficiency and ethical standards in talent management. Specifically, it aims to identify the intersection between enhancing organizational capabilities and protecting employee rights, and to develop a decision-making framework model that integrates ethical values to minimize algorithmic bias.

Practically, this research is expected to provide strategic guidance for stakeholders and organizational practitioners in adopting AI technology. By implementing the right framework, organizations can not only increase productivity but also strengthen employee trust and engagement through transparent, fair, and ethical management practices (Vemuri, 2024).

2. RESEARCH METHODS

This research employs a descriptive qualitative approach using a Systematic Literature Review (SLR) method. This method was chosen to investigate, disseminate, and interpret all relevant scientific evidence related to the application of Artificial Intelligence (AI) in talent management strategies and its impact on organizational ethics. Through this descriptive approach, this research does not aim to test statistical hypotheses, but rather to provide an in-depth overview, critical analysis, and synthesis of how various global companies integrate ethical values into AI-based decision-making systems.

The data used in this study are secondary data obtained from reputable scientific journal articles, international conference proceedings, books, and relevant industry official reports. To ensure the quality and relevance of the required data, the following selection criteria were established:

Inclusion Criteria:

This article discusses a framework for implementing AI in talent management in global companies. This study specifically explores performance assessment mechanisms, employee potential identification, and technology-based succession planning. This literature links technology to the principles of business ethics, distributive justice, and procedural justice.

Exclusive Criteria:

Articles that discuss AI outside the context of human resource management or talent management and Articles that do not provide full-text access.

2.1 Data Analysis Stages

This qualitative document analysis process is carried out through several systematic stages, namely:

1. Collection and Screening: Eliminating articles that are duplicates or do not meet the inclusion criteria based on the title and abstract.
2. Comparison and Grouping: Comparing various AI implementation models from global companies, then grouping them into three main pillars of talent management: performance assessment, potential identification, and succession planning.
3. Critical Evaluation (Ethical Analysis): Assess the working mechanisms of AI by comparing them to the principles of business ethics, workers' rights, and distributive and procedural justice.
4. Synthesis and Modelling: Formulate findings regarding the importance of human oversight (human-in-the-loop) and develop a decision-making framework model that is able to minimize algorithmic bias.

3. RESULT AND DISCUSSION

3.1. Analysis of AI Implementation in Global Talent Management

Based on an analysis of various AI implementation frameworks in global companies, this technology is predominantly applied in three strategic areas of talent management:

1. Performance Assessment Mechanism: AI is used to track KPIs in real-time, analyze digital productivity, and provide instant feedback (Article, 2024).
2. Employee Potential Identification: Using predictive analytics to assess employees' future competencies and promotion readiness based on historical work patterns (Fakhar et al., 2025).

3. Succession Planning: AI algorithms help map career paths and the best internal candidates for upcoming leadership positions (Johnson, 2023).

While these systems offer remarkable data efficiency, findings suggest significant risks associated with biased algorithms. Algorithms mined with unequal historical data tend to replicate gender, racial, or socioeconomic biases, thus violating the principles of distributive justice (fairness in decision outcomes) and procedural justice (fairness in the decision-making process).

3.2. The Importance of Human-in-the-Loop

The key findings of this study emphasize that the efficiencies offered by AI cannot be implemented in isolation and require human oversight (human-in-the-loop) (Laux, 2024). AI should be positioned as a decision-support system (DSS), not the sole final decision-maker.

The involvement of human managers is essential to:

1. Contextualizing AI recommendations often ignores emotional factors or employees' personal situations.
2. It acts as a failsafe when the algorithm shows indications of bias or procedural unfairness.
3. Maintaining aspects of empathy and morality that artificial intelligence does not have.

3.3. Ethical Decision-Making Framework Model

To bridge the gap between operational efficiency and moral standards, this research develops a decision-making framework model that integrates ethical values into the design of AI mechanisms. The model consists of four main pillars:



1. The first pillar emphasizes the use of AI algorithms to improve talent management efficiency. which works for processing employee performance data, identifying employee potential, assisting with succession planning and automatically accelerating HR analysis processes. However, before data is processed by AI, the following steps are taken data cleansing, data bias filtering and Data quality validation
2. Transparency Algorithm (Explainable AI): Organizations must ensure that employees understand how AI assesses them, so that the transparency aspect is met.
3. This pillar demonstrates that AI cannot completely replace humans. Managers and HR practitioners still have a role to play in overseeing AI outcomes, conducting moral validation, considering social and cultural contexts, and adjusting final decisions accordingly. AI only functions as a decision support system, not the sole decision-maker.
4. Distributive and Procedural Justice: System design should be audited periodically to ensure that no group of employees is systemically disadvantaged by decision algorithms.
5. If all four pillars are implemented in balance, the organization will achieve three main outcomes: increased productivity due to faster HR decisions, more appropriate talent placement, and more accurate employee

development. Employees have greater trust in the organization because AI systems are transparent, there is human oversight, and decisions are perceived as fair. Employee engagement increases because they feel respected, treated fairly, and have equal opportunities.

3.4. Literature Discussion and Integration

The ethical challenges in AI found in this study align with research suggesting that while AI provides massive scalability for HR, complete reliance on algorithms without regular audits can create systemic discrimination that organizations are unaware of (Tolici, 2025).

Reinforcing the concept of human engagement, AI's analytical capabilities combined with human intuition and empathy (augmented intelligence) result in talent management decisions that are far more accurate and acceptable to employees than fully automated systems. This reinforces the understanding that human engagement is crucial for building trust (Mwita & Andrew, 2025).

From an organizational justice perspective, employee perceptions of fair procedures are significantly influenced by technological transparency. When employees know the parameters used by AI to assess their performance, their engagement and trust in management are maintained, even if the assessment results do not always meet their expectations (Stofberg et al., 2026).

Therefore, the ethical framework model proposed in this study is an applicable solution that bridges the corporation's need for efficiency and provides employees' moral rights in a balanced manner.

4. CONCLUSION

This research successfully explores and describes the dynamics of Artificial Intelligence (AI) integration into talent management strategies, focusing on finding the balance between operational efficiency and organizational ethical standards. Based on a systematic literature analysis of AI implementation frameworks in various global companies, several crucial points can be concluded:

1. Significant Paradigm Shift: AI integration has successfully changed the paradigm of human resource management, particularly in the aspects of performance assessment, potential identification, and succession planning from an intuitive approach to a data-driven approach with a very high level of information delivery efficiency.
2. The Threat of Organizational Bias and Injustice: Despite its operational advantages, complete reliance on algorithms without regular audits has the potential to significantly increase the emergence of algorithmic bias. This risk not only undermines the principles of distributive and procedural justice but can also undermine employees' perceptions of fairness and reduce their trust and engagement with the organization.
3. The Absoluteness of Human Oversight (Human-in-the-Loop): The efficiencies offered by AI technology will never achieve optimal and ethical results without direct human involvement and oversight. AI should be positioned as a decision-support system, while the final decision and moral contextualization remain in the hands of managers or HR practitioners.
4. Solution Through a Four-Pillar Framework Model: As a mitigation measure, this study formulated a framework model for ethical decision-making that integrates moral values into AI systems through four main pillars: Algorithm & Data Efficiency, Transparency & Accountability (Explainable AI), Human-in-the-Loop Evaluation, and Organizational Justice. This model has proven to be an applicable solution in minimizing bias while protecting the rights and welfare of employees.

4.1 Practical Implications

Practically, this paper provides a tangible contribution in the form of strategic guidance for stakeholders and organizational management practitioners. By implementing the proposed framework, organizations do not need to sacrifice human values for the sake of digitalization. Instead, companies can adopt AI technology to increase productivity while strengthening emotional bonds, trust, and employee loyalty through transparent, objective, and fair management practices.

4.2 Limitations and Future Research

As a qualitative study based on a secondary literature review, this study has limitations in terms of direct empirical evidence in the field. Therefore, further research is recommended to:

1. Testing the effectiveness of this four-pillar framework model using quantitative methods or empirical case studies in specific industries (e.g., banking or technology).
2. Exploring variations in employee perceptions across generations (such as Gen Z and Millennials) towards the procedural fairness of decisions made by AI.

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