

Generative Artificial Intelligence in Human Resource Management: Transformation of Recruitment, Talent Management and Employee Experience

Narmin Teymurova 

Abstract. *The rapid advancement of Generative Artificial Intelligence (GenAI) is fundamentally transforming contemporary human resource management (HRM) practices. This study aims to identify the key directions and mechanisms through which Generative AI reshapes core HR functions. Particular attention is devoted to the transformation of recruitment, talent management, and employee experience. The research is based on a systematic review of contemporary scholarly publications between 2024 and 2026, focusing on the application of artificial intelligence technologies in HRM. The findings indicate that Generative AI significantly enhances the automation of routine HR operations, improves the quality of human resource decision-making, enables personalized employee interactions, and facilitates the development of innovative approaches to human capital management. At the same time, the study identifies several critical challenges associated with the adoption of Generative AI, including algorithmic bias, limited transparency of AI-assisted decision-making, data privacy concerns, and the necessity of maintaining meaningful human oversight in HR processes. The results suggest that Generative AI should be regarded as a strategic driver of digital transformation in human resource management, enabling organizations to achieve sustainable competitive advantages in the knowledge-based economy. Building upon the existing literature, the study proposes and examines the following research hypotheses.*

Keywords: *generative artificial intelligence, human resource management, recruitment, talent management, employee experience, HR analytics, digital transformation, organizational digital maturity, ethical AI, human capital management*

Rome Business School, Master's student, Rome, Italy
E-mail: narminteymurova04@gmail.com

Received: 9 March 2026; Accepted: 11 May 2026; Published online: 30 July 2026

© The Author(s) 2026. This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

İnsan resurslarının idarə edilməsində generativ süni intellekt: işə qəbulun, istedadların idarə edilməsi və işçi təcrübəsinin transformasiyası

Nərmin Teymurova 

Xülasə. *Generativ Süni İntellektin (Generative Artificial Intelligence – GenAI) sürətli inkişafı müasir insan resurslarının idarə edilməsi (Human Resource Management – HRM) təcrübələrinin əsaslı şəkildə transformasiyasına səbəb olur. Bu tədqiqatın məqsədi generativ süni intellektin insan resurslarının idarə edilməsinin əsas funksiyalarını hansı istiqamətlərdə və hansı mexanizmlər vasitəsilə dəyişdirdiyini müəyyən etməkdir. Tədqiqatda işə qəbul (recruitment), istedadların idarə*

edilməsi (talent management) və əməkdaş təcrübəsinin (employee experience) formalaşdırılması proseslərinin transformasiyasına xüsusi diqqət yetirilmişdir. Araşdırma 2024–2026-cı illərdə insan resurslarının idarə edilməsində süni intellekt texnologiyalarının tətbiqinə həsr olunmuş müasir elmi nəşrlərin sistemli təhlili əsasında aparılmışdır. Tədqiqatın nəticələri göstərir ki, generativ süni intellekt HR sahəsində rutin əməliyyatların avtomatlaşdırılmasına, insan resursları üzrə idarəetmə qərarlarının keyfiyyətinin yüksəldilməsinə, əməkdaşlarla qarşılıqlı əlaqələrin fərdiləşdirilməsinə və insan kapitalının idarə edilməsinin innovativ yanaşmalarının formalaşdırılmasına mühüm töhfə verir. Bununla yanaşı, tədqiqat generativ süni intellektin tətbiqi ilə bağlı alqoritmik qərəzlilik, süni intellekt dəstəyi ilə qəbul edilən qərarların şəffaflığının məhdudluğu, fərdi məlumatların məxfiliyinin qorunması və HR proseslərində insan nəzarətinin qorunmasının zəruriliyi kimi mühüm problemləri də müəyyən etmişdir. Əldə olunan nəticələr generativ süni intellektin insan resurslarının idarə edilməsində rəqəmsal transformasiyanın strateji hərəkətverici qüvvəsi kimi qiymətləndirilməsinə əsas verir. Bu texnologiyalar təşkilatlara bilik iqtisadiyyatı şəraitində davamlı rəqabət üstünlüyü əldə etmək imkanı yaradır. Mövcud elmi ədəbiyyata əsaslanaraq, tədqiqat çərçivəsində aşağıdakı elmi hipotezlər irəli sürülmüş və yoxlanılmışdır.

Açar sözlər: generativ süni intellekt, insan resurslarının idarə edilməsi, iş qəbul, istedadların idarə edilməsi, əməkdaş təcrübəsi, HR analitikası, rəqəmsal transformasiya, təşkilatın rəqəmsal yetkinliyi, etik süni intellekt, insan kapitalının idarə edilməsi

Roma Biznes Məktəbi, magistrant, Roma, İtaliya

E-poçt: narminteymurova04@gmail.com

Daxil oldu: 9 Mart 2026; Qəbul edildi: 11 May 2026; Onlayn dərc edildi: 30 İyul 2026

© The Author(s) 2026. This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0).

Introduction

Digital transformation has become one of the most influential drivers of organizational development in the twenty-first century, fundamentally reshaping business models, management systems, and human resource management (HRM) practices (Parry & Strohmeier, 2014; Bondarouk & Ruël, 2009; Vial, 2019; Strohmeier, 2020). Among recent technological breakthroughs, Generative Artificial Intelligence (GenAI), enabled by large language models and deep learning algorithms, has emerged as one of the most disruptive innovations affecting organizational decision-making and knowledge-intensive work (Malik et al., 2023).

Unlike traditional artificial intelligence systems that primarily analyze existing data and automate predefined tasks, Generative AI is capable of producing new content, including textual documents, analytical reports, recommendations, images, and software code. Consequently, AI systems are evolving from decision-support tools into collaborative partners capable of augmenting human expertise and organizational capabilities (Brynjolfsson et al., 2023; Faraj et al., 2018; Raisch & Krakowski, 2021).

Human Resource Management represents one of the organizational functions experiencing the fastest adoption of artificial intelligence technologies (Vrontis et al., 2022; Budhwar et al., 2023). Organizations increasingly employ Generative AI to automate recruitment processes, predict workforce requirements, personalize employee learning, support talent development, enhance employee experience, and improve strategic workforce planning (Cappelli et al., 2019; Budhwar et al., 2023; Aguinis et al., 2024; Gong et al., 2025). Consequently, Generative AI is becoming a strategic enabler of digital HR transformation rather than merely an operational automation tool (Strohmeier, 2020; Minbaeva, 2021; Kim et al., 2025).

Recent empirical evidence demonstrates that GenAI technologies significantly improve recruitment efficiency, increase the quality of HR decision-making, facilitate personalized employee interactions, and strengthen organizational agility (Venugopal et al., 2024; Marimon et al., 2024; Aguinis et al., 2024). At the same time, the rapid diffusion of AI within HRM has intensified scholarly discussions concerning ethical issues such as algorithmic bias, transparency, accountability, fairness, privacy protection, and responsible AI governance (Andrieux et al., 2024; Khan et al., 2024).

Despite the rapidly expanding body of research, existing studies predominantly investigate isolated HR functions, such as recruitment, talent management, or employee engagement, while relatively few attempts have been made to develop an integrated theoretical framework explaining how Generative AI simultaneously transforms multiple dimensions of HRM (De Silva et al., 2023; Gong et al., 2025; Kim et al., 2025). Furthermore, the mediating role of HR analytics and the moderating influence of organizational digital maturity remain insufficiently explored within contemporary HRM literature (Marler & Boudreau, 2017; Venugopal et al., 2024).

Therefore, this study seeks to address these research gaps by proposing an integrated conceptual framework explaining the impact of Generative Artificial Intelligence on recruitment effectiveness, talent management quality, and employee experience (Vroom, 1964; Marimon et al., 2024; Arora & Ramesh Babu, 2025). The framework additionally incorporates HR Analytics Capability as a mediating construct and Digital Maturity as a moderating factor, thereby providing a comprehensive perspective on the digital transformation of human resource management. The objective of this study is to examine how Generative Artificial Intelligence transforms recruitment, talent management, and employee experience, while identifying the organizational mechanisms through which AI technologies contribute to sustainable competitive advantage in the digital economy (Barney, 1991; Teece, 2007; Vial, 2019).

Theoretical Foundations of Generative Artificial Intelligence in Human Resource Management

Understanding the transformative impact of Generative Artificial Intelligence (GenAI) on Human Resource Management (HRM) requires an interdisciplinary theoretical perspective that integrates strategic management, organizational behavior, information systems, and human resource theories. The present study draws upon four complementary theoretical perspectives: the Resource-Based View (RBV), Dynamic Capabilities Theory (DCT), the Technology Acceptance Model (TAM), and Social Exchange Theory (SET).

The Resource-Based View argues that sustainable competitive advantage arises from valuable, rare, inimitable, and non-substitutable organizational resources (Wernerfelt, 1984; Barney, 1991). In contemporary digital organizations, human capital, organizational knowledge, and advanced AI technologies increasingly represent strategic resources that enhance organizational competitiveness (Minbaeva, 2021; Kim et al., 2025). From this perspective, Generative AI extends organizational capabilities by augmenting employees' analytical capacity, automating knowledge-intensive tasks, and facilitating evidence-based HR decision-making (Jarrahi, 2018; Minbaeva, 2021; Aguinis et al., 2024).

Dynamic Capabilities Theory complements RBV by emphasizing organizations' ability to integrate, build, and reconfigure internal and external competencies in rapidly changing environments (Teece, 2007). As labor markets become increasingly volatile and digitally driven, organizations require adaptive HR systems capable of responding quickly to changing workforce demands. Generative AI strengthens dynamic capabilities by enabling predictive workforce planning, real-time talent analytics, and continuous organizational learning (Venugopal et al., 2024; Gong et al., 2025).

The Technology Acceptance Model (TAM) explains the adoption of new technologies through two principal determinants: perceived usefulness and perceived ease of use. Within HRM, employee trust in AI-supported systems, perceived fairness of algorithmic recommendations, and ease of interaction with intelligent HR applications significantly influence successful technology implementation (Malik et al., 2023; Andrieux et al., 2024).

The Social Exchange Theory (SET) provides an additional explanation of how AI technologies influence relationships between organizations and employees (Homans, 1958; Blau, 1964). Personalized AI-enabled communication, intelligent career support, individualized learning opportunities, and responsive HR services strengthen reciprocal relationships, organizational commitment, and employee engagement (Marimon et al., 2024).

Collectively, these theoretical perspectives provide a comprehensive framework for explaining how Generative AI creates organizational value by simultaneously enhancing strategic resources, organizational adaptability, technology acceptance, and employee relationships.

Generative Artificial Intelligence as a Driver of HR Transformation

Recent research indicates that Generative Artificial Intelligence fundamentally transforms three strategic dimensions of Human Resource Management: recruitment, talent management, and employee experience (Malik et al., 2023; Gong et al., 2025).

Generative AI in Recruitment

Recruitment represents the HR function in which AI adoption has progressed most rapidly due to the structured nature of recruitment processes and the availability of large-scale applicant data (Cappelli et al., 2019; Aguinis et al., 2024).

Generative AI supports recruitment through:

- automated generation of job descriptions;
- intelligent résumé screening;
- AI-assisted candidate assessment;
- personalized applicant communication;
- predictive evaluation of candidate-job fit.

These capabilities substantially reduce recruitment costs, shorten time-to-hire, improve candidate matching accuracy, and enhance applicant experience (Aguinis et al., 2024; Malik et al., 2023).

Generative AI in Talent Management

Talent management is increasingly evolving from reactive personnel administration toward predictive and data-driven human capital development (Collings et al., 2019; Ardichvili et al., 2024).

Generative AI contributes to talent management by enabling:

- identification of high-potential employees;
- competency gap analysis;
- personalized learning recommendations;
- career path simulation;
- predictive retention management.

These AI-driven capabilities facilitate strategic workforce development and contribute to improved long-term organizational performance (De Silva et al., 2023; Kim et al., 2025).

Generative AI and Employee Experience

Employee experience has become one of the central constructs in contemporary Human Resource Management research because it integrates employees' cognitive, emotional, technological, and social interactions throughout the employment lifecycle (Strohmeier, 2020; Malik et al., 2023).

Generative AI enhances employee experience through:

- intelligent HR assistants;
- digital onboarding;
- personalized learning;
- automated feedback systems;
- career coaching;
- continuous employee support.

These applications improve employee engagement, job satisfaction, organizational commitment, and workplace well-being (Vroom, 1964; Marimon et al., 2024; Arora & Ramesh Babu, 2025)

HR Analytics Capability as a Mediating Mechanism

Although Generative AI provides sophisticated analytical capabilities, its organizational value depends largely on the ability of HR departments to transform AI-generated information into evidence-based managerial decisions (Marler & Boudreau, 2017; Venugopal et al., 2024).

HR Analytics Capability enables organizations to:

- integrate multiple HR information systems;
- analyze workforce data;
- identify behavioral patterns;
- predict workforce risks;
- support strategic HR decision-making.

Consequently, HR Analytics functions as a mediating mechanism through which technological capabilities are translated into measurable HR outcomes (Marler & Boudreau, 2017; Gong et al., 2025).

Research Hypotheses

Drawing upon the Resource-Based View, Dynamic Capabilities Theory, Technology Acceptance Model, and Social Exchange Theory, this study proposes an integrated conceptual model explaining how Generative Artificial Intelligence influences organizational HR outcomes.

Generative AI and Recruitment Effectiveness

Recruitment has become one of the earliest and most mature areas of AI implementation in Human Resource Management. Recent studies demonstrate that Generative AI significantly improves recruitment effectiveness by automating job description generation, intelligent résumé screening, candidate communication, and predictive talent assessment. These technologies reduce recruitment costs, shorten hiring cycles, improve candidate matching accuracy, and enhance applicant experience (Cappelli et al., 2019; Budhwar et al., 2023; Aguinis et al., 2024; Venugopal et al., 2024). From the Resource-Based View, AI-assisted recruitment enables organizations to identify and acquire valuable human capital more efficiently, thereby strengthening sustainable competitive advantage (Barney, 1991; Wernerfelt, 1984).

Accordingly, the first hypothesis is proposed:

H1. Generative Artificial Intelligence usage positively influences Recruitment Effectiveness.

Generative AI and Talent Management Quality

Talent management has shifted from administrative workforce planning toward strategic human capital development. Generative AI enables organizations to identify high-potential employees, forecast competency requirements, personalize learning pathways, and recommend career development opportunities based on predictive analytics (Collings et al., 2019; De Silva et al., 2023). Dynamic Capabilities Theory suggests that organizations capable of continuously adapting their human capital strategies through AI-supported learning and workforce analytics are better positioned to respond to environmental change (Teece, 2007).

Therefore, the second hypothesis is formulated:

H2. Generative Artificial Intelligence usage positively influences Talent Management Quality. Employee Experience has become one of the most important determinants of organizational performance in the digital workplace. AI-powered HR assistants, intelligent onboarding platforms, personalized learning systems, and automated employee support services significantly improve employee engagement, satisfaction, organizational commitment, and workplace well-being (Arora & Ramesh Babu, 2025; Marimon et al., 2024). According to Social Exchange Theory, employees respond positively when organizations invest in technologies that facilitate communication, professional development, and personalized support (Blau, 1964; Homans, 1958).

Consequently, the following hypothesis is proposed:

H3. Generative Artificial Intelligence usage positively influences Employee Experience.

The Mediating Role of HR Analytics Capability

Although Generative AI generates extensive organizational data and analytical insights, these technological capabilities create value only when organizations possess sufficient analytical competencies to interpret and utilize AI-generated information effectively. HR Analytics Capability enables organizations to transform raw workforce data into strategic managerial knowledge, thereby improving evidence-based HR decision-making (Marler & Boudreau, 2017; Venugopal et al., 2024). Recent research indicates that HR analytics serves as a critical organizational capability connecting digital technologies with organizational performance (Minbaeva, 2021; Gong et al., 2025).

Therefore, this study proposes:

H4. HR Analytics Capability mediates the relationship between Generative Artificial Intelligence usage and Human Resource Management outcomes.

The Moderating Role of Digital Maturity

The organizational benefits of Generative AI largely depend on digital maturity, defined as the extent to which digital technologies, organizational culture, leadership, and employee competencies support digital transformation initiatives (Vial, 2019; Strohmeier, 2020). Organizations characterized by higher digital maturity demonstrate greater readiness to adopt AI technologies, stronger technological infrastructure, higher employee digital competencies, and superior innovation performance (Kim et al., 2025; Gong et al., 2025). Accordingly, organizations with greater digital maturity are expected to derive stronger benefits from AI implementation.

Thus, the following hypothesis is proposed:

H5. Organizational Digital Maturity positively moderates the relationship between Generative Artificial Intelligence usage and Human Resource Management outcomes.

The Moderating Role of Ethical Risk Perception

Despite substantial organizational benefits, the implementation of Generative AI introduces important ethical challenges, including algorithmic bias, discrimination, privacy concerns, explainability limitations, accountability issues, and transparency of automated HR decisions (Andrieux et al., 2024; Khan et al., 2024). When employees and HR professionals perceive AI technologies as ethically problematic, trust in AI-assisted decision-making decreases, reducing the effectiveness of digital HR transformation (Raisch & Krakowski, 2021; Andrieux et al., 2024).

Therefore, the final hypothesis is formulated:

H6. Ethical Risk Perception negatively moderates the relationship between Generative Artificial Intelligence usage and Human Resource Management outcomes.

Conceptual Research Model

Based on the theoretical arguments presented above, the proposed conceptual framework includes one independent variable (Generative Artificial Intelligence Usage), three dependent variables (Recruitment Effectiveness, Talent Management Quality, and Employee Experience), one mediating construct (HR Analytics Capability), and two moderating variables (Digital Maturity and Ethical Risk Perception). The conceptual model assumes that Generative AI directly improves recruitment effectiveness, talent management quality, and employee experience. Furthermore, the model proposes that HR Analytics Capability serves as a mediating mechanism translating AI capabilities into organizational outcomes, whereas Digital Maturity strengthens and Ethical Risk Perception weakens these relationships. Overall, the proposed framework integrates strategic management, digital transformation, and Human Resource Management theories into a unified model explaining how Generative Artificial Intelligence contributes to sustainable organizational performance in the digital economy.

Methods

This study adopts a quantitative research design to empirically examine the relationships between Generative Artificial Intelligence (GenAI) usage and key Human Resource Management (HRM) outcomes. The proposed conceptual framework is tested using a structural equation modeling (SEM) approach, which enables simultaneous examination of direct, mediating, and moderating relationships among multiple constructs. The quantitative approach was selected because it allows for rigorous hypothesis testing, assessment of causal relationships, and evaluation of the explanatory power of the proposed theoretical model.

The research model includes one independent variable (Generative AI Usage), three dependent variables (Recruitment Effectiveness, Talent Management Quality, and Employee Experience), one mediating construct (HR Analytics Capability), and two moderating variables (Digital Maturity and Ethical Risk Perception). Data are collected using a structured questionnaire consisting of previously validated measurement scales adapted from prior HRM, digital transformation, and artificial intelligence literature (Aguinis et al., 2021; Marler & Boudreau, 2017; Strohmeier, 2020; Gong et al., 2025). All questionnaire items are measured using a seven-point Likert scale ranging from 1=strongly disagree to 7=strongly agree, which is widely recommended in organizational and behavioral research because it provides greater measurement sensitivity and reliability.

Employee Experience (EX) has emerged as one of the fastest-growing research domains within contemporary Human Resource Management. The literature increasingly recognizes employee experience as a multidimensional construct encompassing employees' cognitive, emotional, social, and technological interactions throughout the employment lifecycle. The systematic review indicates

that Generative Artificial Intelligence is transforming employee experience by enabling highly personalized, responsive, and data-driven HR services. Unlike traditional HR information systems, Generative AI provides contextualized support through natural language interaction, adaptive learning, and intelligent recommendations, thereby improving both employee satisfaction and organizational responsiveness (Marimon et al., 2024; Aguinis et al., 2024).

One of the most widely reported applications concerns AI-supported onboarding. Intelligent virtual assistants facilitate organizational socialization by providing real-time guidance on organizational policies, administrative procedures, learning resources, and workplace expectations. Personalized onboarding significantly shortens adjustment periods while reducing administrative workload for HR professionals (Allgood & Musgrave, 2024). Another important application involves continuous employee support. AI-powered HR assistants provide immediate access to HR policies, benefits information, internal regulations, training opportunities, and career development resources. Such systems improve service accessibility while reducing response time for routine HR inquiries (Malik et al., 2023).

Generative AI also contributes to knowledge management and organizational communication. Intelligent systems summarize corporate documents, generate personalized communications, recommend relevant organizational knowledge, and facilitate collaboration among employees. These capabilities strengthen organizational learning and improve knowledge-sharing practices (Aguinis et al., 2024; Andrieux et al., 2024).

Several recent studies further emphasize the contribution of Generative AI to employee well-being. By analyzing communication patterns, workload indicators, and engagement metrics, AI systems can identify early signs of burnout, declining motivation, or reduced organizational commitment. Such predictive capabilities enable HR professionals to implement timely interventions aimed at improving employee well-being and organizational sustainability (Marimon et al., 2024). Overall, the reviewed literature consistently demonstrates that Generative AI contributes to a more personalized, engaging, and supportive employee experience, thereby strengthening employee engagement, job satisfaction, organizational commitment, and workforce retention.

HR Analytics Capability as a Strategic Mediating Mechanism

A central finding of the systematic review concerns the strategic role of HR Analytics Capability (HRAC) in translating AI-generated information into organizational value. Although Generative AI substantially expands organizations' capacity to process large volumes of workforce data, technological capabilities alone do not automatically improve HR performance. Instead, organizational benefits depend on the capability of HR professionals to interpret analytical outputs, integrate diverse information sources, and convert AI-generated insights into evidence-based managerial decisions (Marler & Boudreau, 2017; Minbaeva, 2021). The reviewed studies consistently characterize HR Analytics Capability as a higher-order organizational capability that integrates technological infrastructure, analytical competencies, data governance practices, and strategic decision-making processes (Venugopal et al., 2024; Gong et al., 2025).

Four complementary dimensions of HR Analytics Capability are repeatedly identified throughout the literature:

- workforce data integration across organizational systems;
- predictive modeling of workforce behavior and HR outcomes;
- evidence-based decision support for HR managers;
- continuous monitoring of organizational performance indicators.

These analytical capabilities enable organizations to transform AI-generated information into actionable strategic knowledge supporting recruitment, workforce planning, talent development,

employee retention, and organizational performance. The reviewed evidence therefore supports the proposition that HR Analytics Capability functions as the principal organizational mechanism through which Generative AI influences Human Resource Management outcomes.

The Moderating Role of Organizational Digital Maturity

The systematic review further demonstrates that the organizational benefits associated with Generative AI vary considerably according to the level of Digital Maturity. Digital maturity extends beyond technological infrastructure and encompasses organizational culture, leadership commitment, employee digital competencies, governance structures, and innovation readiness (Vial, 2019; Strohmeier, 2020).

Organizations characterized by higher levels of digital maturity consistently demonstrate:

- faster adoption of AI-enabled HR technologies;
- greater integration of digital platforms across HR functions;
- stronger employee acceptance of AI-supported decision-making;
- superior organizational learning capabilities;
- Higher overall HR effectiveness (Kim et al., 2025; Gong et al., 2025).

Conversely, organizations with limited digital capabilities often experience fragmented implementation, lower employee trust, inadequate data quality, and reduced organizational benefits from AI adoption. These findings suggest that Digital Maturity strengthens the positive relationship between Generative AI implementation and HR outcomes by providing the organizational infrastructure necessary for successful digital transformation.

Ethical Challenges and Responsible AI Governance

Despite the substantial organizational benefits identified throughout the reviewed literature, ethical considerations remain among the most significant barriers to sustainable AI adoption in Human Resource Management. The literature consistently identifies algorithmic bias as one of the primary concerns associated with AI-supported HR decision-making. Because machine-learning models are trained on historical organizational data, they may unintentionally reproduce existing biases related to gender, age, ethnicity, disability, or other protected characteristics (Andrieux et al., 2024; Khan et al., 2024).

A second challenge concerns the lack of transparency and explainability of advanced Generative AI models. Complex deep-learning algorithms often function as "black-box" systems, making it difficult for HR professionals to justify or explain AI-generated recommendations to applicants, employees, and regulatory authorities (Andrieux et al., 2024). The literature also highlights data privacy and cybersecurity as critical governance issues. HR departments process extensive volumes of highly sensitive personal information, requiring organizations to establish robust data protection mechanisms, clear governance policies, and compliance with national and international privacy regulations (Malik et al., 2023).

Finally, numerous authors emphasize the continuing importance of Human-in-the-Loop (HITL) governance. Rather than replacing human expertise, Generative AI should augment managerial judgment by supporting—not substituting—critical HR decisions. Human oversight remains essential for ensuring fairness, accountability, ethical compliance, and contextual interpretation of AI-generated recommendations (Raisch & Krakowski, 2021; Aguinis et al., 2024). Overall, the reviewed literature indicates that organizations capable of integrating technological innovation with responsible AI governance are substantially more likely to realize sustainable long-term benefits from Generative AI adoption in HRM.

Results

The analysis of the reviewed literature indicates that Generative Artificial Intelligence (GenAI) has become an important driver of digital transformation in Human Resource Management. The findings consistently demonstrate that AI technologies positively influence three major HR dimensions: recruitment effectiveness, talent management quality, and employee experience. Regarding recruitment, the reviewed studies show that Generative AI improves recruitment efficiency by automating job description generation, résumé screening, candidate communication, and predictive candidate assessment. These applications contribute to reduced recruitment costs, shorter hiring cycles, improved candidate-job matching, and enhanced applicant experience (Cappelli et al., 2019; Malik et al., 2023; Aguinis et al., 2024; Venugopal et al., 2024).

The literature also indicates that Generative AI plays a significant role in talent management by supporting the identification of high-potential employees, competency gap analysis, personalized learning recommendations, career development planning, and predictive employee retention. These capabilities enable organizations to adopt more proactive and data-driven approaches to workforce development (Collings et al., 2019; De Silva et al., 2023; Kim et al., 2025).

Another important finding concerns employee experience. The reviewed studies demonstrate that AI-powered HR assistants, intelligent onboarding systems, personalized learning platforms, and automated employee support services improve employee engagement, job satisfaction, organizational commitment, and workplace well-being. These technologies contribute to more responsive, personalized, and efficient HR services throughout the employee lifecycle (Marimon et al., 2024; Arora & Ramesh Babu, 2025).

The findings further identify HR Analytics Capability as a key organizational capability that converts AI-generated information into evidence-based HR decisions. Organizations with stronger analytical capabilities are better positioned to integrate workforce data, identify behavioral patterns, predict workforce risks, and support strategic HR decision-making, thereby strengthening the overall impact of Generative AI on HRM outcomes (Marler & Boudreau, 2017; Minbaeva, 2021; Gong et al., 2025). The review also highlights Organizational Digital Maturity as an important contextual factor influencing AI implementation. Organizations with advanced digital infrastructure, supportive leadership, strong digital competencies, and innovation-oriented cultures derive greater organizational benefits from Generative AI adoption than organizations with lower levels of digital maturity (Vial, 2019; Strohmeier, 2020; Kim et al., 2025).

Finally, the literature identifies ethical issues—including algorithmic bias, transparency, explainability, accountability, and data privacy—as significant challenges affecting the successful adoption of Generative AI in Human Resource Management. The reviewed studies consistently emphasize that responsible AI governance and Human-in-the-Loop approaches are essential for ensuring fair, transparent, and trustworthy AI-assisted HR decision-making (Andrieux et al., 2024; Khan et al., 2024; Raisch & Krakowski, 2021).

Overall, the reviewed evidence supports the proposed conceptual framework, suggesting that Generative Artificial Intelligence enhances recruitment effectiveness, talent management quality, and employee experience. Furthermore, HR Analytics Capability serves as an important mediating organizational capability, while Organizational Digital Maturity and Ethical Risk Perception influence the effectiveness of AI implementation within Human Resource Management.

Discussion

The findings of this systematic literature review provide comprehensive evidence that Generative Artificial Intelligence is reshaping Human Resource Management beyond the automation of routine administrative activities. The reviewed studies consistently demonstrate that GenAI has evolved into a strategic organizational capability that enhances recruitment effectiveness, strengthens talent management, enriches employee experience, and supports evidence-based HR decision-making. These findings align with the broader literature on digital transformation, which argues that digital technologies increasingly serve as strategic assets rather than merely operational tools (Vial, 2019; Strohmeier, 2020).

The review also extends current understanding of AI-enabled HRM by integrating previously fragmented research streams into a unified conceptual framework. Whereas much of the existing literature has examined recruitment automation, talent analytics, employee experience, or AI ethics separately, the present study synthesizes these domains within a single model that explains how Generative AI contributes to organizational HR outcomes through interconnected organizational capabilities. This integrative perspective addresses an important gap in the literature and responds to recent calls for more comprehensive theoretical models of AI adoption in HRM (Budhwar et al., 2023; Gong et al., 2025).

From the perspective of the Resource-Based View (RBV), the findings suggest that Generative AI represents a strategic organizational resource whose value depends not only on technological sophistication but also on the organization's ability to combine AI capabilities with human expertise and complementary organizational resources. AI technologies become a source of sustainable competitive advantage when embedded within organizational routines, supported by analytical competencies, and aligned with broader HR strategies (Barney, 1991; Wernerfelt, 1984).

The findings are equally consistent with Dynamic Capabilities Theory, which emphasizes organizational adaptability in rapidly changing environments. Generative AI enables organizations to sense labor market changes, seize emerging opportunities through data-driven decision-making, and continuously reconfigure human capital strategies. Consequently, AI adoption contributes not only to operational efficiency but also to long-term organizational resilience and strategic agility (Teece, 2007).

The review further supports the assumptions of the Technology Acceptance Model (TAM). Across the examined studies, successful AI implementation is strongly associated with employees' and HR professionals' perceptions of usefulness, ease of use, and trust in AI-supported systems. Organizations characterized by higher levels of digital maturity generally exhibit greater acceptance of AI technologies, more effective implementation processes, and stronger organizational outcomes. These findings indicate that technological implementation should be accompanied by investments in digital competencies, organizational learning, and change management (Strohmeier, 2020; Kim et al., 2025).

The findings also reinforce the relevance of Social Exchange Theory (SET) for explaining employee responses to AI-enabled HR practices. Personalized communication, intelligent learning support, adaptive career development, and AI-assisted employee services contribute to employees' perceptions of organizational support, thereby strengthening engagement, organizational commitment, and reciprocal positive behaviors. Accordingly, Generative AI should be viewed not only as a technological innovation but also as a mechanism that reshapes the social relationship between organizations and employees (Raisch & Krakowski, 2021; Marimon et al., 2024).

One of the most significant contributions of the present review is the identification of HR Analytics Capability as the central mechanism linking AI implementation with organizational performance. Although previous studies have emphasized the importance of HR analytics, relatively few have explicitly conceptualized its mediating role in the relationship between Generative AI and HR outcomes. The present framework suggests that AI technologies create organizational value only when analytical capabilities enable HR professionals to transform AI-generated information into evidence-based managerial decisions. This perspective shifts attention from technology itself toward the organizational competencies required for effective AI utilization (Marler & Boudreau, 2017; Minbaeva, 2021).

Another important theoretical implication concerns the moderating influence of Digital Maturity. The reviewed literature consistently demonstrates that organizations differ substantially in their ability to exploit AI technologies depending on the maturity of their digital infrastructure, leadership commitment, organizational culture, and workforce capabilities. Rather than assuming uniform AI benefits across organizations, the proposed framework recognizes digital maturity as a critical contextual condition shaping AI effectiveness. This observation contributes to a more nuanced understanding of organizational digital transformation by emphasizing the interaction between technological innovation and organizational readiness.

At the same time, the review highlights that ethical considerations remain a decisive determinant of sustainable AI adoption. Algorithmic bias, insufficient transparency, privacy concerns, and limited explainability continue to represent major obstacles to organizational trust in AI-supported HR decisions. Consequently, technological advancement should be accompanied by responsible AI governance, transparent decision-making procedures, robust data protection mechanisms, and meaningful human oversight. The Human-in-the-Loop approach therefore emerges as a necessary governance principle that balances technological efficiency with ethical accountability (Andrieux et al., 2024; Raisch & Krakowski, 2021).

Overall, the findings suggest that the future of Human Resource Management lies not in replacing HR professionals with artificial intelligence, but in developing collaborative human–AI systems that combine computational capabilities with human judgment, ethical reasoning, and strategic decision-making.

Theoretical Contributions

The present study makes several important contributions to the contemporary Human Resource Management and digital transformation literature. First, it develops an integrated conceptual framework that explains the role of Generative Artificial Intelligence in transforming Human Resource Management. Unlike many previous studies that examine recruitment, talent management, employee experience, or AI governance independently, this study synthesizes these domains into a unified theoretical model. The proposed framework demonstrates that the organizational value of Generative AI emerges through the interaction of multiple HR functions rather than through isolated technological applications.

Second, the study advances the theoretical understanding of Generative Artificial Intelligence as a strategic organizational capability. Previous HRM research has primarily emphasized AI-driven automation and operational efficiency. In contrast, this review conceptualizes Generative AI as a higher-order organizational capability that supports knowledge creation, strategic decision-making, organizational learning, and long-term human capital development. This perspective extends the application of the Resource-Based View and Dynamic Capabilities Theory to the emerging field of AI-enabled Human Resource Management.

Third, the proposed framework identifies HR Analytics Capability as the principal organizational mechanism through which Generative AI generates organizational value. While previous research has acknowledged the importance of HR analytics, relatively limited attention has been devoted to its mediating role in translating AI-generated information into evidence-based managerial decisions. By positioning HR Analytics Capability as a mediator, the study provides a more comprehensive explanation of how technological innovation contributes to improved HR outcomes.

Fourth, the study emphasizes the contextual importance of Organizational Digital Maturity. Rather than assuming that AI technologies generate universal organizational benefits, the proposed framework demonstrates that the effectiveness of Generative AI depends substantially on organizational readiness, digital infrastructure, employee competencies, leadership commitment, and innovation culture. Consequently, digital maturity is conceptualized as a strategic contextual capability that conditions successful AI implementation.

Fifth, the study contributes to the growing literature on responsible Artificial Intelligence by incorporating Ethical Risk Perception into the conceptual framework. Existing studies frequently discuss ethical challenges descriptively; however, the present model explicitly recognizes ethical perceptions as an organizational factor capable of influencing the effectiveness of AI-supported HR practices. This perspective strengthens the integration of AI ethics within strategic Human Resource Management research. Finally, the study contributes to the broader digital transformation literature by proposing an integrated framework that combines strategic management theories, digital transformation research, and contemporary Human Resource Management into a coherent theoretical explanation of AI-enabled organizational transformation.

Practical Implications

The findings of this review provide several practical implications for organizational leaders, HR executives, policymakers, and digital transformation specialists. First, organizations should develop comprehensive Generative AI implementation strategies aligned with overall Human Resource Management objectives rather than adopting isolated AI applications. Strategic integration across recruitment, talent management, employee development, and workforce analytics is likely to generate greater organizational value than fragmented implementation initiatives. Second, organizations should prioritize investments in HR Analytics Capability. The review demonstrates that advanced analytical competencies constitute a critical prerequisite for transforming AI-generated information into evidence-based managerial decisions. Accordingly, organizations should strengthen analytical infrastructure, improve data integration, and enhance HR professionals' analytical competencies.

Third, successful AI implementation requires continuous investment in digital skills development. HR professionals, managers, and employees should receive systematic training that improves AI literacy, digital competencies, and the ability to collaborate effectively with intelligent systems. Such investments are essential for maximizing organizational acceptance of AI technologies and reducing implementation resistance.

Fourth, organizations should establish robust AI governance frameworks that promote transparency, accountability, fairness, and responsible data management. Internal policies should clearly define acceptable AI applications, mechanisms for human oversight, procedures for algorithmic auditing, and standards for protecting employee privacy. Fifth, the findings strongly support the adoption of the Human-in-the-Loop (HITL) approach. Rather than replacing HR professionals, Generative AI should function as a decision-support technology that enhances human judgment while preserving managerial responsibility for strategic personnel decisions. Maintaining meaningful human oversight remains essential for ensuring ethical compliance, organizational trust, and responsible AI deployment. Finally, organizations should regularly assess their level of digital maturity before

implementing large-scale AI initiatives. Investments in digital infrastructure, organizational learning, leadership development, and innovation culture substantially increase the likelihood of successful digital transformation and sustainable organizational performance.

Conclusion

The rapid advancement of Generative Artificial Intelligence (GenAI) represents one of the most significant technological developments shaping contemporary Human Resource Management. Unlike previous stages of digital transformation, which primarily focused on automating routine administrative activities, Generative AI enables organizations to generate knowledge, create content, support complex decision-making, and facilitate strategic workforce management. Consequently, Human Resource Management has emerged as one of the organizational functions experiencing the most profound transformation through intelligent technologies (Strohmeier, 2020; Budhwar et al., 2023).

This study systematically reviewed recent scholarly literature to examine how Generative Artificial Intelligence influences recruitment, talent management, employee experience, HR analytics, and broader organizational digital transformation. The review demonstrates that Generative AI has evolved beyond operational automation and increasingly functions as a strategic organizational capability supporting evidence-based decision-making and sustainable human capital development (Minbaeva, 2021; Aguinis et al., 2024).

The findings indicate that Generative AI substantially improves recruitment effectiveness by automating job description generation, intelligent résumé screening, candidate communication, and predictive assessment of applicants. AI-assisted recruitment contributes to faster hiring processes, improved candidate matching, enhanced recruitment quality, and more efficient allocation of organizational resources. The review further reveals that Generative AI is transforming talent management by enabling organizations to identify high-potential employees, personalize learning and development programs, forecast workforce requirements, support career planning, and implement predictive employee retention strategies. These capabilities facilitate a transition from reactive personnel administration toward proactive and strategically oriented human capital management.

Employee experience also emerges as a major beneficiary of AI-enabled HR transformation. Intelligent HR assistants, personalized learning environments, digital onboarding platforms, and AI-supported communication systems improve organizational responsiveness, strengthen employee engagement, enhance job satisfaction, and reinforce organizational commitment throughout the employee lifecycle. Importantly, the review demonstrates that the organizational value of Generative AI depends not only on technological capabilities but also on complementary organizational conditions. In particular, HR Analytics Capability functions as a critical mechanism that transforms AI-generated information into evidence-based managerial decisions, while Organizational Digital Maturity strengthens the effectiveness of AI implementation by providing the technological, cultural, and managerial foundations necessary for successful digital transformation (Marler & Boudreau, 2017; Venugopal et al., 2024; Vial, 2019).

At the same time, the study highlights that responsible AI governance remains essential for sustainable implementation. Algorithmic bias, insufficient transparency, data privacy concerns, and limited explainability continue to represent significant challenges for AI-supported Human Resource Management. Accordingly, organizations should adopt robust governance frameworks that ensure fairness, accountability, transparency, regulatory compliance, and meaningful human oversight. The Human-in-the-Loop approach therefore remains fundamental to responsible AI-assisted HR decision-making (Raisch & Krakowski, 2021; Andrieux et al., 2024).

From a theoretical perspective, the study advances the literature by proposing an integrated conceptual framework that combines the Resource-Based View, Dynamic Capabilities Theory, Technology Acceptance Model, and Social Exchange Theory to explain how Generative Artificial Intelligence contributes to Human Resource Management outcomes. The proposed framework also identifies HR Analytics Capability as a mediating organizational capability while recognizing Organizational Digital Maturity and Ethical Risk Perception as critical contextual conditions influencing AI effectiveness.

Overall, the study concludes that Generative Artificial Intelligence should not be viewed as a substitute for Human Resource professionals. Rather, it represents a strategic enabler that augments human expertise, supports evidence-based decision-making, and facilitates sustainable digital transformation of Human Resource Management. This perspective is consistent with the concept of collaborative intelligence, which emphasizes that the greatest organizational value emerges when artificial intelligence complements rather than replaces human capabilities (Wilson & Daugherty, 2018; Raisch & Krakowski, 2021; Barney, 1991; Teece, 2007; Vial, 2019).

References

- Aguinis, H., Beltran, J. R., & Cope, A. (2024). How to use generative AI as a human resource management assistant. *Organizational Dynamics*, 53(1), Article 101029. <https://doi.org/10.1016/j.orgdyn.2024.101029>
- Aguinis, H., Villamor, I., & Ramani, R. S. (2021). MTurk research: Review and recommendations. *Journal of Management*, 47(4), 823–837. <https://doi.org/10.1177/0149206320969787>
- Allgood, M., & Musgrave, P. (2024). Leveraging ChatGPT in public sector human resource management education. *Journal of Public Affairs Education*, 30(3). <https://doi.org/10.1080/15236803.2024.2370455>
- Andrieux, P., Johnson, R. D., Sarabadani, J., & Van Slyke, C. (2024). Ethical considerations of generative AI-enabled human resource management. *Organizational Dynamics*, 53(1), Article 101032. <https://doi.org/10.1016/j.orgdyn.2024.101032>
- Ardichvili, A., Dirani, K., Jabarkhail, S., El Mansour, W., & Aboulhosn, S. (2024). Using generative AI in human resource development: An applied research study. *Human Resource Development International*, 27(3), 388–409. <https://doi.org/10.1080/13678868.2024.2337964>
- Arora, R., & Ramesh Babu, D. (2025). A review on generative AI-powered talent management, employee engagement and retention strategies: Applications, benefits, and challenges. *Procedia Computer Science*, 260, 683–691. <https://doi.org/10.1016/j.procs.2025.03.247>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons.
- Bondarouk, T., & Ruël, H. (2009). Electronic human resource management: Challenges in the digital era. *The International Journal of Human Resource Management*, 20(3), 505–514. <https://doi.org/10.1080/09585190802707235>
- Brynjolfsson, E., Li, D., & Raymond, L. (2023). *Generative AI at work* (NBER Working Paper No. 31161). National Bureau of Economic Research. <https://doi.org/10.3386/w31161>
- Malik, A., Budhwar, P., & Kazmi, B. A. (2023). Artificial intelligence (AI)-assisted HRM: Towards an extended strategic framework. *Human Resource Management Review*, 33(1), Article 100940. <https://doi.org/10.1016/j.hrmr.2022.100940>
- Cappelli, P., Tambe, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and opportunities. *Academy of Management Perspectives*, 33(1), 25–41. <https://doi.org/10.5465/amp.2018.0062>

- Collings, D. G., Mellahi, K., & Cascio, W. F. (2019). Global talent management and performance in multinational enterprises. *Journal of World Business*, 54(2), Article 100998. <https://doi.org/10.1016/j.jwb.2018.11.003>
- De Silva, M., Gifford, J., & Vadera, S. (2023). The role of artificial intelligence in talent management. *Human Resource Management Review*, 33(2), Article 100921. <https://doi.org/10.1016/j.hrmr.2022.100921>
- Faraj, S., Pachidi, S., & Sayegh, K. (2018). Working and organizing in the age of the learning algorithm. *Information and Organization*, 28(1), 62–70. <https://doi.org/10.1016/j.infoandorg.2018.02.005>
- Gong, Q., Fan, D., & Bartram, T. (2025). Integrating artificial intelligence and human resource management: A review and future research agenda. *The International Journal of Human Resource Management*, 36(1), 103–141. <https://doi.org/10.1080/09585192.2024.2440065>
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 63(6), 597–606. <https://doi.org/10.1086/222355>
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human–AI symbiosis in organizational decision making. *Business Horizons*, 61(4), 577–586. <https://doi.org/10.1016/j.bushor.2018.03.007>
- Khan, M. I., Parahyanti, E., & Hussain, S. (2024). The role of generative AI in human resource management: Enhancing operational efficiency, decision-making, and addressing ethical challenges. *Asian Journal of Logistics Management*, 3(2), 104–125. <https://doi.org/10.14710/ajlm.2024.24671>
- Kim, S., Khoreva, V., & Vaiman, V. (2025). Strategic human resource management in the era of algorithmic technologies: Key insights and future research agenda. *Human Resource Management*, 64(3), 447–464. <https://doi.org/10.1002/hrm.22268>
- Marimon, F., Mas-Machuca, M., & Akhmedova, A. (2024). Trusting in generative AI: Catalyst for employee performance and engagement in the workplace. *International Journal of Human–Computer Interaction*, 41(11), 7076–7091. <https://doi.org/10.1080/10447318.2024.2388482>
- Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR analytics. *The International Journal of Human Resource Management*, 28(1), 3–26. <https://doi.org/10.1080/09585192.2016.1244699>
- Minbaeva, D. (2021). Disruption in human resource management. *Human Resource Management Review*, 31(1), Article 100820. <https://doi.org/10.1016/j.hrmr.2020.100820>
- Parry, E., & Strohmeier, S. (2014). HRM in the digital age. *Employee Relations*, 36(4), 335–340. <https://doi.org/10.1108/ER-03-2014-0034>
- Raisch, S., & Krakowski, S. (2021). Artificial intelligence and management: The automation–augmentation paradox. *Academy of Management Review*, 46(1), 192–210. <https://doi.org/10.5465/amr.2018.0072>
- Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. *German Journal of Human Resource Management*, 34(3), 345–365. <https://doi.org/10.1177/2397002220921131>
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
- Venugopal, M., Madhavan, V., Prasad, R., & Raman, R. (2024). Transformative AI in human resource management: Enhancing workforce planning with topic modeling. *Cogent Business & Management*, 11(1), Article 2432550. <https://doi.org/10.1080/23311975.2024.2432550>
- Vial, G. (2019). Understanding digital transformation: A review and research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- Vroom, V. H. (1964). *Work and motivation*. Wiley.
- Vrontis, D., Christofi, M., Pereira, V., Tarba, S. Y., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, and advanced technologies in human resource management: A systematic

review. *The International Journal of Human Resource Management*, 33(6), 1237–1266.
<https://doi.org/10.1080/09585192.2020.1871398>

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180. <https://doi.org/10.1002/smj.4250050207>

Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are joining forces. *Harvard Business Review*, 96(4), 114–123.