

# Catalyzing Organizational Development and Enhancing Employee Satisfaction: The Transformative Influence of Artificial Intelligence Software

Sally Saleh\* A.GAJENDRAN\*\*

\* Research Scholar, College of Management, SRM Institute of Science and Technology, Kattankulathur – 603203, Chengalpattu District, Tamil Nadu, India, in

\*\* Associate professor, College of Management, SRM Institute of Science and Technology, Ktr Campus, Chengalpattu Dist, Tamil Nadu, India

#### Abstract

Human resource management (HRM) encompasses many critical tasks, beginning with the daunting responsibility of reviewing and selecting candidates from various resumes, sometimes numbering in the hundreds or even thousands. This initial screening and selection process, followed by the meticulous undertaking of interviews to identify the most suitable candidates, constitutes a pivotal phase in HRM. Furthermore, HR professionals must diligently manage various employee-related obligations, including onboarding, training, and continuous development.

Recently, HR departments have been grappling with a burgeoning influx of inquiries about benefits, insurance, and vacation days. This relentless barrage of administrative tasks has prompted a significant shift towards integrating artificial intelligence (AI) solutions, thus aiding HR professionals in their daily undertakings. The integration of AI systems now permeates nearly every facet of HRM, offering efficiencies and time-saving advantages. AI's footprint is particularly discernible in recruitment, candidate selection, and onboarding. It is a highly effective means of addressing frequently asked questions and automating repetitive tasks that traditionally consumed substantial amounts of HR personnel's time.

This transformative technology adoption has enabled HR departments to redirect their newfound time towards more value-driven endeavors, focusing on employee engagement and productivity enhancement. The central objective of this research is to comprehensively investigate the role of artificial intelligence in contemporary human resources practices. It aims to elucidate the manifold benefits AI brings to the field and the extent to which organizations have embraced it as an integral part of their daily operations.



In addition, this study also seeks to gauge the awareness and utilization of AI applications among HR professionals and the workforce in general. A meticulously designed questionnaire has been crafted for this purpose, and responses have been meticulously collected from individuals representing diverse organizations.

#### Key words

Artificial intelligence, Human Resources Management, HR Tasks, Employee Engagement, Job satisfaction.

#### Introduction

Artificial intelligence (AI) represents the computer's capability to execute tasks and processes that precisely mirror human actions. It bestows machines with the capacity to emulate human cognition and behavior, ushering in a new era of computational capabilities. The profound advantages associated with artificial intelligence are multifaceted, with transformative implications for organizations.

Among these advantages is AI's capacity to enhance decision-making processes within organizational frameworks. By sifting through vast datasets and discerning patterns, AI empowers organizations to make more informed, data-driven decisions. This, in turn, elevates the quality of strategic choices and enhances the overall efficacy of operations.

One of the most significant benefits of AI is the time-saving potential it brings to the table. AI systems are adept at automating routine tasks liberating human resources to focus on more complex and strategic activities. As a result, work processes are expedited, and the overall operational tempo is heightened.

Additionally, AI is pivotal in mitigating unconscious biases that might creep into human decision-making. It operates purely data-driven and impartial, reducing the risk of subjective judgments. This impartiality contributes to more equitable and objective decision-making processes within organizations.

However, it's crucial to recognize that while AI is a powerful tool, it operates within predefined parameters. It excels in optimizing existing processes and executing tasks precisely, but it cannot formulate overarching strategies or make holistic decisions. In essence, it is a valuable assistant, but the ultimate authority for decision-making remains vested in human hands. AI is a tool that operates on the data it has been supplied and can only offer insights and recommendations within those constraints.

The overarching objective of this study is to delve into the transformative impact that AI has had on the realm of Human Resource Management (HRM). By exploring the intricate ways AI has shaped HRM

practices, this research aims to shed light on the evolving dynamics of the modern workforce and the role of technology in shaping HRM's future.

## Literature View

(Wijayati et al., 2022) This article aims to understand employees' perceptions of companies operating in the service and banking sectors about change leadership's role in applying artificial intelligence. (AI), which will rapidly impact employee performance and engagement.Conditions change. In their study, respondents were employees of companies operating in East Java, Indonesia's service and banking sectors. Their results show that AI has a significant positive impact on employee performance and work engagement. Leadership change will positively moderate the effects of AI on employee performance and engagement. Their results show that employee performance is an essential deciding factor in the organization as it will improve organizational performance. Additionally, AI adoption in organizations will face disruption, so the critical role of leaders will be needed to inspire employees to succeed at work.

(Wang & Zheng, 2022) According to the authors, digital human resource management (HRM) practices have received more attention in recent years. However, the impact of digital HRM practices is still poorly understoodbypractitionersandresearchers. Drawing on Adaptive Structures Theory (AST), they propose that the maturity of HRM capabilities is a critical boundary condition for understanding the effectiveness of digital HRM practices. They sampled 1,770 companies in China, and their research showed that digital HRM practices have an impact on HRM performance through the internal consistency of practices: HR and social media external association of human resource managers with hierarchical superiors. The positive or negative impact of digital human resources activities depends on the maturity of the company's human resources.

**Pawan et. al (2022),** According to their research, the application of AI technology in human resource management is increasing in domestic and international companies. It also provides opportunities and opportunities for employees and organizations to improve themselves, make better work-related decisions, and increase the use of company resources.

(Heslina & Syahruni, 2021) This study explores how these factors interact and contribute to overall employee performance. The authors study the role of information technology in improving employee performance and how information technology affects other variables. Additionally, the study explores the



impact of employee engagement on performance and highlights the importance of creating a work environment that promotes high levels of engagement. The results provide valuable insights into the impact of these factors on employee performance. Contribute to the field of human resource management by emphasizing the importance of information technology, soft skills and employee engagement in achieving optimal levels of organizational performance.

Marwan & Saeed (2020), In their research, they showed how HR has a great opportunity to add enormous value by using AI across its functions and entering the digital realm. They also spoke about the importance of AI for organizations in overcoming the challenges they face every day and increasing their ability to deliver greater productivity. They also discussed how HR should know how to use AI applications and how they can provide valuable insights to management.

**Eric & Arun (2019)** The main objective of their research is to explore the applications, benefits, challenges, and limitations of AI in human resource management in Indian organizations. They explain the importance of applying AI in HR management functions to reduce human efforts. Their study also shows the need for more information on AI in the Indian context.

**Barani & A. Hemalatha (2019),** their research has provided a good understanding of AI technologies used in organizations today. It also looked at how participants perceived artificial intelligence technology. They found that participants had a very positive impression of AI and were very comfortable using AI technology in their HR practices.

#### Statement of the problem

Repetitive routine tasks encountered throughout an HR professional's workday often consume a substantial portion of their valuable time, diverting their focus from critical employee-centric responsibilities. This diversion prevents HR from effectively addressing employee issues, comprehending their needs and requirements, and implementing strategies to enhance employee engagement. The introduction of artificial intelligence (AI) emerges as a highly effective solution to this challenge and is already demonstrating significant benefits within the realm of Human Resource Management (HRM).



## **Research Objectives**

1. Assessing the Impact of Artificial Intelligence on HRM Processes and Tasks: This study seeks to evaluate the influence of AI on HRM practices and tasks.

2. Examining the Adoption of AI in HRM Practices: The research aims to investigate how organizations embrace AI in their HRM functions.

3. Uncovering the Barriers to AI Implementation in HRM: It aims to identify the reasons behind the challenges some organizations face in integrating AI into their HRM tasks effectively.

## **Research Hypothesis**

1. The Nexus Between AI and Employee Engagement: This study posits a direct relationship between AI implementation and enhanced employee engagement within organizations.

2. AI's Time and Decision-Making Advantages: It postulates that integrating AI into organizational processes saves time and improves decision-making capabilities.

3. Pervasive Use of AI in HRM Practices: The hypothesis suggests that organizations increasingly adopt AI as a fundamental component of their HRM practices.

#### **Results and Discussions**

## AI in HRM:

Information gathered from secondary sources and previous studies is a valuable foundation for comprehending AI's role in HRM, offering insights into how AI-driven advancements shape modern HRM practices.

## AI in Recruitment and Selection:

AI is significantly streamlining the recruitment process, necessitating HR professionals to acquire expertise in utilizing AI applications. Its introduction has yielded several key advantages:

1. It expedites the identification of ideal candidates by efficiently distinguishing the most qualified applicants based on the data at its disposal.

2. AI prioritizes resumes and applications, facilitating HR professionals' progress in the selection process.

3. It elevates the quality of recruitment by matching candidates to appropriate positions, ultimately enhancing their experiences with the organization. Notably, AI's role in recruitment mitigates the risk of talent loss due to prolonged hiring processes.

4. It identifies candidates suited to interviews based on their qualifications and alignment with job requirements.

AI is instrumental in conducting unbiased interviews, eliminating unconscious biases, thus contributing to fair and equitable recruitment.

# AI in Onboarding:

During onboarding, new employees acquaint themselves with the organization's culture, expectations, and responsibilities. It encompasses numerous standardized, repetitive steps applicable to each new hire. AI simplifies this process by aiding HR professionals through dedicated applications and platforms. Incorporating AI into onboarding enhances employee retention and diminishes turnover rates while ensuring precision and accuracy.

## **Training and Development:**

AI enables customized training programs tailored to individual employees' needs and objectives. The adaptability of AI in training contributes to more effective learning and development, minimizing the likelihood of forgetfulness, ineffective training applications, and time wastage.

## Well-being and Employee Engagement:

AI's role extends to identifying shifts in employee behavior, particularly those that may lead to stress or negative conduct. By detecting these behavioral changes, AI notifies HR professionals, enabling timely interventions to replace negative behavior with positive engagement. Consequently, employees often become more satisfied and engaged, enhancing overall well-being.

## **Other HR Daily Tasks:**

Chatbots have emerged as a favored solution for employees seeking quick and accessible answers to their questions. From an HR professional's perspective, AI streamlines responses to frequently asked questions,



covering paid-time-off policies, open enrollment, leaves of absence, and organizational policies. Moreover, AI reduces the administrative burden by efficiently managing and organizing employee-related paperwork, freeing HR personnel from manual data entry, and ensuring accuracy and efficiency.

These AI-driven enhancements significantly elevate the efficacy of HRM practices, freeing HR professionals to dedicate their expertise to more strategic and value-added activities.

## **Challenges in Implementing AI in HR Practices**

Organizations embarking on the integration of Artificial Intelligence (AI) into their Human Resources (HR) practices often encounter a myriad of challenges. To address the critical question of why these challenges persist, we conducted focus groups, engaging in insightful discussions that unveiled key insights.

According to our findings, a significant 82.2 percent of participants emphasized the scarcity of budgetary resources as a fundamental impediment to the comprehensive deployment of AI in HR. This scarcity poses a considerable obstacle, limiting the extent to which AI can be harnessed to streamline HR functions.

Another noteworthy challenge that emerged from the discussions was the limited availability of HR professionals well-versed in the applications of AI. A striking 72.3 percent of participants identified this scarcity as a primary concern. This shortage of AI-savvy HR personnel restricts the full realization of AI's potential in HRM practices.

## **Suggestions for Overcoming AI Implementation Challenges**

In light of these challenges, we propose a multifaceted approach for organizations to surmount these obstacles and unlock the transformative power of AI in HR:

1. Prioritizing AI in HRM Practices: Organizations must place a more pronounced emphasis on the integration of AI into HRM practices. A strategic shift toward AI can yield numerous benefits when applied judiciously throughout the organization. It enhances efficiency, optimizes decision-making, and bolsters overall operational effectiveness.

2. AI Continuous Learning Programs: To bridge the gap in AI proficiency, organizations should offer their employees comprehensive AI continuous learning programs. These programs are instrumental in equipping the workforce with the requisite knowledge and awareness of AI applications. Such initiatives empower employees to effectively navigate and leverage AI tools designed to enhance HRM practices and free up HR time for more strategic pursuits.



3. Talent Acquisition: Organizations should actively seek out HR experts with proven experience in AI applications. Hiring professionals well-versed in AI is instrumental in maximizing the value of AI integration within HR practices. The expertise of these individuals can be a driving force behind AI's successful implementation.

4. Comprehensive AI Budgeting: A tailored budget specifically allocated for AI initiatives is essential. Organizations should recognize the significance of AI in HRM practices and allocate financial resources accordingly. This earmarked budget allows for systematic investment in AI technologies and applications, ensuring that the organization remains at the forefront of technological advancement.

#### **Conclusion:**

In summation, the synthesis of secondary and primary data from this study underscores the profound impact of artificial intelligence on organizational growth, efficiency, and decision-making. The integration of AI not only elevates employee engagement and satisfaction but also offers HR professionals the invaluable gift of time. By harnessing AI, HR can redirect this newfound time toward more strategic endeavors, nurturing a culture of employee-centric growth.

Organizations utilizing AI in their daily HR practices should recognize the imperative of enhancing their employees' proficiency in AI applications. This pursuit must be underpinned by the recruitment of HR experts well-versed in AI and the development of AI competencies among existing HR personnel.

Today, organizations must embrace AI technologies without hesitation, recognizing the myriad benefits they bring to HRM practices. AI, when employed strategically, paves the path to organizational success, enhancing decision-making, increasing efficiency, and fostering employee engagement and satisfaction. It is a dynamic tool for transformation, and organizations should invest wholeheartedly in its realization.

# References

Wijayati, D. T., Rahman, Z., Fahrullah, A., Rahman, M. F. W., Arifah, I. D. C., & Kautsar, A. (2022, January 4). A study of artificial intelligence on employee performance and work engagement: the moderating role of change leadership. International Journal of Manpower, 43(2), 486–512. https://doi.org/10.1108/ijm-07-2021-0423

(Wijayati et al., 2022)

Wang, L., & Zheng, G. (2022, August). Linking Digital HRM Practices with HRM Effectiveness: The Moderate Role of HRM Capability Maturity. *Academy of Management Proceedings*, 2022(1). https://doi.org/10.5465/ambpp.2022.18262abstract

Heslina, H., & Syahruni, A. (2021, January 7). The Influence of Information Technology, Human Resources Competency and Employee Engagement on Performance of Employees. *Golden Ratio of Human Resource Management*, 1(1), 01–12. <u>https://doi.org/10.52970/grhrm.v1i1.100</u>

Kee, D. M. H., & Rubel, M. R. B. (2021). Technology adaptation is on its way: the role of high involvement work practice. *International Journal of Business Innovation and Research*, 25(1), 35. https://doi.org/10.1504/ijbir.2021.115011

Rubel, M. R. B., Kee, D. M. H., Rimi, N. N., & Yusliza, M. Y. (2016). Adapting technology: effect of high-involvement HRM and organisational trust. Behaviour & Information Technology, 36(3), 281–293. https://doi.org/10.1080/0144929x.2016.1222552

Artificial Intelligence in HRM: An Experimental Study of an Expert System John J. Lawler University of Illinois Robin Elliot San Francisco. (n.d.).

Perception towards Artificial Intelligence in Human Resources Management Practices -with Reference to IT Companies in Chennai P. Barani Kumari, A. Hemalatha. (n.d.).

Artificial Intelligence Techniques in Human Resource Management—A Conceptual Exploration Stefan Strohmeier and Franca Piazza. (n.d.).



Artificial Intelligence in Human Resources Management: Challenges and a Path Forward Prasanna Tambe1, Peter Cappelli1,2, and Valery Yakubovich1,3. (n.d.)

Artificial intelligence – challenges and opportunities for international HRM: a review and research agenda Pawan Budhwar, Ashish Malik, M. T. Thedushika De Silva & Praveena Thevisuthan. (n.d.).

Trends And Opportunities Of Artificial Intelligence In Human Resource Management: Aspirations For Public Sector In Bahrain Article in International Journal of Scientific & Technology Research · January 2020. (n.d.).

A Conceptual Artificial Intelligence Application Framework in Human Resource Management Qiong Jia Hohai University, China, Yue Guo Hohai University, China, Rong Li Hohai University, China, Yurong Li Hohai University, China, Yuwei Chen Washington University in St. Louis, China, 756575524@. (n.d.).

Application of Artificial Intelligence for Sustaining Green Human Resource Management Dr. Vikas Garg. (n.d.).

A Study of Artificial Intelligence and its role in Human Resource Management Article · February 2019. (n.d.).

A review paper on artificial intelligence at the service of human resources management Siham Berhil1, Habib Benlahmar2, Nasser Labani3. (n.d.).

Artificial Intelligence in Human Resource Management: A Qualitative Study in the Indian Context Eric Premnath and Arun Antony Chully Christ (Deemed to be University), Lavasa, Pune, India. (n.d.).