

The Role of AI in Redefining HRM: Automation, Performance Optimization, and Employee Retention

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ABSTRACT:

Background: Lastly, the use of artificial intelligence (AI) in Human Resource Management (HRM) is redesigning the major factors, including automation, performance, and employee turnover. Nonetheless, there are still questions arising about how AI is being applied in these areas in disparate organizations and industries.

Objective: The purpose of this research investigation is to assess the impact of artificial intelligence on repositioning Human resource management, with more emphasis on how advanced technologies enhanced by artificial intelligence impact automation, performance management, and employee retention.

Methods: An actual quantitative research approach formatted through the use of structured questionnaires was administered among Human resource professionals, managers, and Employees of these firms. A sample of 250 respondents was used, and data

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was collected and analyzed using descriptive statistics, correlation analysis, and regression models. Cronbach's alpha test was used to determine the internal consistency test of the developed questionnaire while the Shapiro-Wilk test was used to determine the normality of the data collected.

Results: The Shapiro-Wilk test results showed that the data have assumed a non-normal distribution. The value that Cronbach's alpha yielded showed low internal consistency of the survey items, with a value of 0.075. Means presented in the descriptive analysis revealed that even though AI had more positive perceptions, the ratings suggested only an average level of satisfaction with the effects it brings to the HR processes. Descriptive and inferential statistics showed significant positive relationships between AI usage for performance improvement and team output, but moderate connections between AI and turnover rates.

Conclusion: AI is attributed to a positive expectation in the context of HRM, specifically in the promotion of automation of the process and the improvement of efficiency. While the overall effectiveness of AI is still a matter of debate, the effects of this technology have yet not been conclusively linked to improvements in employee retention levels; there is a need to refine the scare metrics and to better understand how AI can be effectively deployed to deliver maximal benefits with standard ways or across different HR specialties. This research implies that AI has significant possibilities in addressing aspects of SHRM that organizations have not hitherto capitalized on and that there are issues of implementation and standardization that have to be grasped if organizations are to get the best out of AI.

Keywords: Machine learning, HRM, robotics, productivity improvement, turnover rate, number analysis

Introduction

The application of AI in business processes over the recent past years has revolutionized many business areas such as Human Resource Management (HRM). With organizations today implementing technology solutions to enhance functionality, AI now presents itself as a capacity that can revolutionize the HR function across the process of employee acquisition, induction, evaluation, and maintenance among others. The use of AI in data processing, pattern recognition, data processing, data analysis, and so on, presents a chance for a new way of staffing the HR functions and redesigning them for more value

delivery. This change is not only redesigning classical components of HRM but also impacting the organizational design and management activities across the board (Kadirov, Shakirova, Ismoilova, & Makhmudova, 2024) (Deo & Sharma).

The use of AI in HRM is particularly notable in three key areas: productivity, efficiency, and employee turnover. Automation is a process through which AI can independently do standard human resource tasks like prescreening candidates, arranging interviews, and handling records of employees. Through these repetitive and time-wasting processes, AI helps to save time for HR

specialists to perform more critical tasks like talent management, employee engagement, and development. This shift is necessary particularly when organizations experience pressure to enhance business operations and decrease costs (Praba et al., 2025) (Vishwanath & Vaddepalli, 2023).

Besides automation, AI largely contributes to boosting employee performance. Fusion applications include real-time performance management technologies, predictive business analytics, and employee mood indicators to track and improve employee productivity. These tools enable HR professionals and managers to use such important data for the decision-making on employee development, to determine gaps in organizational performance, and for such organizational development that may require a unique individual plan. Being able to provide constant feedback and solutions, AI not only enhances the productivity standards and performance accountability of any organization but also improves the results that the business achieves (Rabenu & Baruch, 2024) (Agarwal, Gupta, & Roshani, 2023).

Without any doubt, the way employee retention policy, the third major area of HR functions, is changing with the implication of AI. I believe that turnover causes organizations a lot of losses and thwarts their fulfillment of objectives. Intelligent tools such as predictive analysis and Employee sentiment analysis are helping organizations in early recognition of retention threats, and hence the representatives of human resources can think and work on retention strategies. AI makes it easier for organizations to learn about the reason behind turnover, satisfaction level, work-life balance, and career progression among others. This insight is particularly important when the marketplace consists of valuable talents, and it is crucial to retain them within the company (Halid, Ravesangar, Mahadzir, & Halim, 2024) (Saharan, 2020b).

While there remains no apparent disagreement that the incorporation of AI in human resource management for any organization

is of considerable advantages, the implementation of technologies underpinned by artificial intelligence offers both opportunities and threats. At the same time, AI addresses the problem of HR efficiency improvement, decision-making process, and employee satisfaction. However, there are issues about data security and protection, ethical issues, and issues of fairness and bias in the development of AI in the diverse realms of society, such as recruitment and performance management. These challenges can be a source of major concern to organizations that apply AI and should therefore be governed by strict ethical policies in a bid to solve the following employee-related issues (Ghedabna et al., 2024) (Mer & Viridi, 2023);

Concerning the increasing role of AI in organizations in general and the significance of AI in the context of Human Resource Management in particular, this research considers the correlation between the established types of AI technologies and the existing applications of AI technologies in the operational environment, focusing on the sides of automation, performance, and staff turnover. Several research works examine how AI influences one or another single facet of the HRM process; however, the picture of how AI advances the understanding of HRM in general is still rather vague. This study therefore seeks to complement this deficit by presenting a comprehensive discussion on how AI is revolutionizing these core HR functions. In essence, organizations will be in a better position to harness AI based on the analysis of how Deep Learning is leading to the reinvention of the HRM function (P. KUMAR, 2024) (Budhwar, Malik, De Silva, & Thevisuthan, 2022).

Literature Review

Artificial intelligence is used in human resource management as a growing topic of research since organizations want to take advantage of AI benefits for practical application in human resource management. Being an application of advanced technology, AI has greatly enhanced how operations in organizations are conducted including; recruitment processes, performance enhancement, as well as employee turnover. This paper aims to present the literature

analysis of the main trends in present-day literature which is determined by the furthering of human resource management through applying the concept of artificial intelligence, implementing and applying AI to improve performance management, and analyzing the effects that its application has in regards to employee turnover, as well as the difficulties in the applicability and implementation of AI about the field of HRM (Chukwuka & Dibie, 2024) (Floroiu, 2023).

AI in HR Automation

The use of AI in the automation of HR functions is among the most apparent in the current years. Human Resource Automation means the delegation of some tasks that were heretofore performed manually by Human Resources to automatons. As highlighted by Stone et al., more cases incorporate AI solutions to perform actions like candidate selection, appointment making, and employee orientation. AI-powered chatbots are a commonality in organizations today being able to interact directly with applicants; answer questions such as where the interview will be held or even administer an initial aptitude test. These tools assist in bringing down the number of working hours required by HR personnel and also help to curb the time often taken in the recruitment process, thereby giving the HR team time for strategic roles requiring the input of a human being (Padma, 2024) (Bashynska, Prokopenko, & Sala, 2023).

Besides recruitment, such application areas are also identified as payroll, benefits, and record keeping. Tambe, Cappelli, & Yakubovich worked on completing the following information which shows that the implementation of AI in the HR systems minimizes administrative BS and workloads. Through the application of these techniques, the costs of undertaking activities within an organization are reduced, and issues of data management are enhanced. In addition, automation has a way that enables HR professionals to spend less time doing routine procedures and more time on the key goals of strengthening a company's workforce and advancing organizational performance. Although automation yields productivity, Brougham & Haar

suggest that it also leads to job risks, especially in HR roles predominantly clerical (Basnet, 2024) (Yadav et al., 2023).

Artificial intelligence in the enhancement of performances

Another field of work in HRM that is being influenced by AI is performance management. Automation of the workforce has come to pass with AI tools being adopted to evaluate employee performance, check up on their output, and even give them instant feedback for improvement. According to Murphy, the use of AIS or artificial intelligence performance management systems provides organizational data on the conduct of workers and key performance indicators. These systems assist HR professionals as well as managers to have relevant data to offer on the reinforcement, promotion, and improvement of employees without relying on sheer guesswork. This also helps in recognizing top performers as well as those performers who may be causing negative marginal productivity and therefore can be intervened on time (Govindaraju, Kumar, & Velusamy, 2025) (Madanchian, Taherdoost, & Mohamed, 2023).

AI's intervention is not only instrumental in distinguishing between inefficiency and poor performance but in several other areas as well. For example, predictive analysis could help forecast the performance of a team and the data include or exclude everything from antecedent performance to employee engagement or the allocation of work. According to Davenport & Kirby, AI optimizes organizational productivity by giving more precise predictions together with individual training proposals for workers. Thanks to AI, organizations can focus on the development of individual performance management strategies that meet organizational goals and employee deficiencies/skills. This approach has made the organization value a culture that enhances the improvement and accountability of individual employees in the organization (Benabou, Touhami, & Demraoui, 2024) (Sharma, 2023).

But, the implementation of AI performance management is not without its

disadvantages. , one of the key issues, when it comes to the use of AI and ML particularly when choosing candidates, is the possible bias of the algorithms in question, more specifically, their effectiveness in assessing employee performance, as described by Nyberg and Wright. For instance, if the data used to train AI systems favors, African Americans over women, White collar workers or managers of a certain ethnicity over another color will always be given promotions and their performances ranked higher by the specific system. To manage this risk, AI algorithms must be explainable, and audited frequently, and the design of algorithms must prevent bias (Shanmugam, Sibi, Bhavani, Paneru, & Karumpan, 2025) (GANESHAN).

AI and Employee Retention

Providing information about job and employee turnover is an important issue for the HRM since high turnover becomes a problem for productivity and financial expense. AI creates useful tools to enhance employee retention as a way of mitigating turnover possibilities while making recommendations on the level of satisfaction and engagement from employees. Huang & Rust proved that employee recognition, engagement, job satisfaction, etc., which directly or indirectly impact retention, is now being measured with the help of AI predictive analytical tools. They use data from employee opinion polls, feedback forms, and assessments to determine who among the company's staff is most likely to quit (Srivastava & Srivastav) (Harisha, Venkataswamy, Devi, Govindaraj, & Bhandwalkar, 2023).

It also enables intelligently finding the patterns of behavior of the employee who might be disinterested or unhappy at the workplace so that HR professionals can take corrective action in retaining their valuable employees. For instance, they can compute work-life balance indices, career advancement prospects, and remuneration patterns to determine matters concerning staff turnover. Foster points out that as a result of early signals in turnover, AI empowers organizations to prevent outcomes via retention measures like training,

promotion, bonuses, or incentives for employees at risk of leaving (Noel & Sharma, 2025) (Arslan, Cooper, Khan, Golgeci, & Ali, 2022).

This means that although AI can provide a major boost to retention attempts, one has to be careful of the deficiencies of being overly reliant on data powered by artificial intelligence. According to Burrus, AI creative tools have limitations due to their inability to grasp some human feelings and relations that are vital in the retention process. AI operates with strictly defined numerical marks and might not take into account some intangible factors in a company such as the values of the workplace environment. Consequently, as strong as AI may appear as a retention risk predictor, its use should not overshadow other human-centric strategies for employee engagement and retention (Riani, 2024) (A. Kumar, Negi, & Nikylyina).

Challenges of AI Adoption in HRM

Although there are several benefits to the use of AI in HRM, several challenges are associated with the use of AI in the practice of HRM. Of them, one is critical and it concerns data privacy and security. Employers should bear in mind that depending on the AI systems organizations use, massive information about employees may be collected and processed, so employers should adhere to data protection legislation and keep employee data confidential. Chamberlain noted that an intrusion of data privacy is capable of straining the trust of employees besides attracting legal consequences whenever health records, performance data, and the like are compromised (Manjunath & Dean) (Saharan, 2020a).

Another can be regarded as the ethical impacts of the use of AI in the case of HRM. Leicht-Deobald et al. also call into consideration the importance of the ethical deployment of AI in decision-making concerning the employee's career. The principles applicable in designing AI systems to advance employment rights include; Promoting transparency and accountability within the system and eliminating bias where the system may negatively influence employees. There are also

concerns that employees in organizations embracing AI in HR should be well-equipped to work with AI technologies and keep appropriate focus on the part that AI can play in the decision-making process (R. Gupta, 2024) (Mer & Virdi, 2022).

Another issue is similar to the situation with employees – there may be a reluctance to accept change with the use of AI due to concerns for the position and limited knowledge about AI-facilitating technologies. According to Riemer & Peter for AI integration to be effective there is a need for organizational culture change whereby everyone in the organization is willing and ready to accept change in the human resource processes. The resistance towards change can only be kept at bay through refresher courses for human resource professionals to learn how to best take advantage of AI (Durairaj & Vetrivel, 2024) (Malik, Srikanth, & Budhwar, 2020).

Research Methodology

This study employs a quantitative research methodology to examine the role of artificial intelligence (AI) in redefining Human Resource Management (HRM), with a focus on three key areas: process automation, improvement of performance, and employee turnover. The reason for the quantitative approach is that the research questions require numerical data to analyze the general pattern that arises from the implementation of AI in HR practices among organizations. This gives us baseline results that can be generalized to a wider population and gives a clear pattern of how AI is impacting the various functions of HRM (Rawat & Pradhan, 2024) (Rastogi & Sharma, 2022).

Research Design

The first research method used in the study is the descriptive survey design which is appropriate for gathering data that provides a current picture of the application of the AI in the HRM and the perceived performance and retention impact. A questionnaire survey is used as the main method of data collection due to the simplicity and effectiveness of large coverage and collection of information concerning particular

variables. In this regard, the variables consist of AI's degree of usage in automating the HR function, how well AI enhances workforce performance, and how it can influence positive or negative change in workforce retention (Al Samman & Al Obaidly, 2024) (Singh & Chouhan, 2023).

Population and Sampling

The target population of this research study comprises info HR professionals, managers, and employees from several industries who have had prior exposure to AI HR systems. This includes the large corporations that have already implemented the use of AI in its advanced form, together with the SMEs that may have just begun to incorporate the use of AI in their organization. Through the broad engagement of respondents from diverse industries, the study achieves a good appreciation of how organizations of various operation settings are likely to be affected by the application of AI (Agnihotri et al., 2024) (Lahoti, 2023).

Probability sampling is a used method in admitting the respondents in that each of the targets in the target population has an equal probability of responding to the study. This approach comes in handy to decrease the level of bias that is caused by the sample and increase the external validity of the tests. The number of respondents is chosen to be 250, which is reasonable enough that the obtained results will be statistically significant and will make it possible to assess the changes in the sphere of HRM under the influence of AI (Saseendran, Gulati, Dora, Harris, & Vemavarapu, 2024) (Chowdhury et al., 2023).

Data Collection Instrument

An interview schedule is employed as the main data collection technique since the study is structured in nature. The questionnaire mainly comprises demographic data and concrete data about the variables in this study. The demographic part refers to the age, gender, job title, and years of service in the organization. The main body of the questionnaire includes questions that are based on AI use in Human Resource Management for the automation of HR processes, the improvement of

overall organizational performance as well as the retention of talented employees. Perception questions for AI's implications are asked through a Likert scale that includes the option of strongly disagree and disagree, agree, somewhat agree, and strongly agree. Furthermore, questions in multiple choice and scales are used to ask about the frequency of AI application in the HR processes and the perceived usefulness of AI (Subrahmanyam, 2024) (Renkema, 2021).

Data Analysis

Descriptive and inferential statistical techniques of the collected data are then applied and used in the research. Frequency analyses include measures of central tendency to describe data distribution by providing a general picture of the trends in the numbers. Such data contribute to the comprehension of the trends of AI applications in HRM and the respondents' attitudes toward AI (Fenwick, Molnar, & Frangos, 2024).

To assess the coefficients of the various variables in depth, correlation analysis is accomplished to determine the nature of the relationship between the independent variable of AI adoption and the dependent variables such as performance improvement and reduced turnover rates. Furthermore, regression analysis is applied to examine AI's effect on the above-stated HR outcomes: This analysis allows us to quantify the amount of performance and retention rates that AI contributes for any given role and years of

experience. Statistical analysis is done using the right software instruments to guarantee the results' credibility (Ekuma, 2024).

Reliability and Validity

Since the study seeks to ensure the level of reliability of the data collection instrument, Cronbach's alpha is used to ascertain the level of internal consistency of the developed questionnaire. Any coefficient more than 0.7 is deemed acceptable where the survey questions accurately assess the research constructs. To confirm the validity of the instrument as a final assessment is made, a pilot study is carried out with a limited sample of HR professionals. Any data obtained from the pilot study is used to make the questions more precise instead of asking ambiguous questions (Dixit, Maurya, Bharatiya, & Subramaniam, 2024).

Ethical Considerations

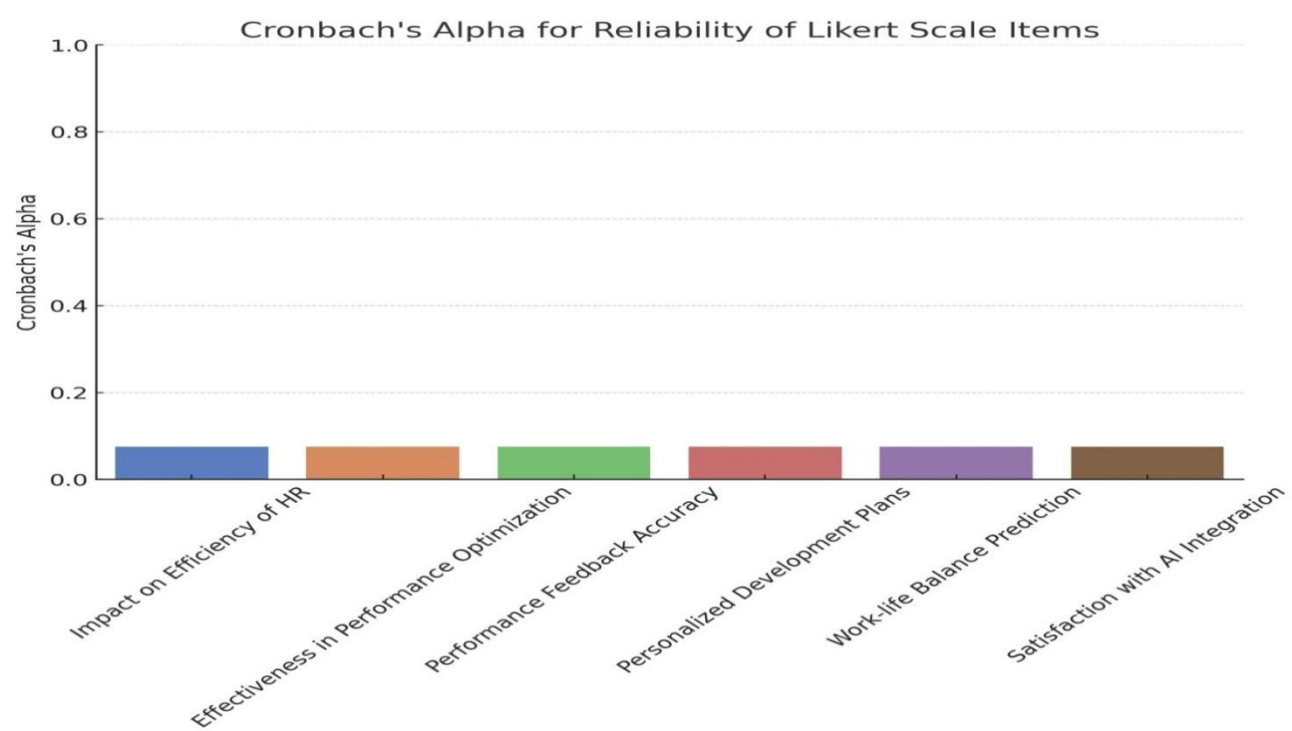
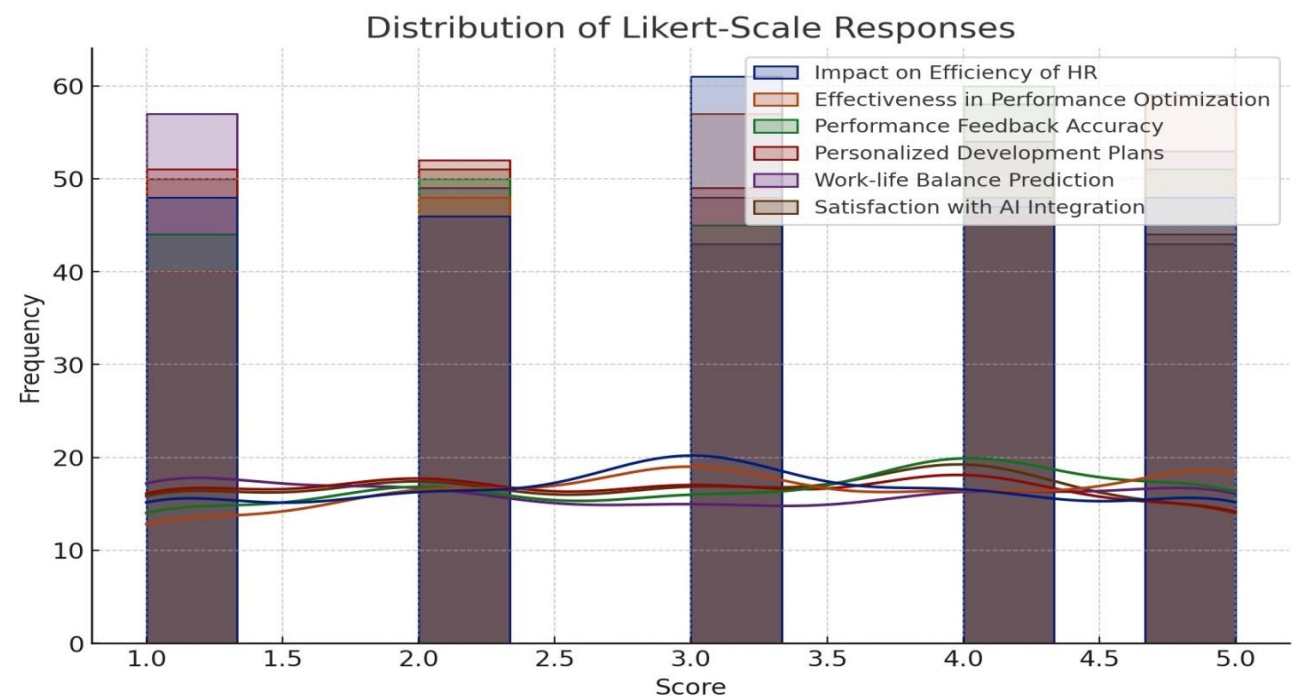
It is worth noting that this study gives due consideration to ethical issues prevalent throughout this study. Every person is made aware of the function of the research and gives consent before being allowed to be part of the research work. In their own words, respondents have informed consent for the data and are told that the identity of the responses will not be revealed. Respondent participation is purely voluntary, and they are free to opt out of this study at any given time with the option of having no repercussions on their part (Roul, Mohapatra, Pradhan, & Kamesh, 2024).

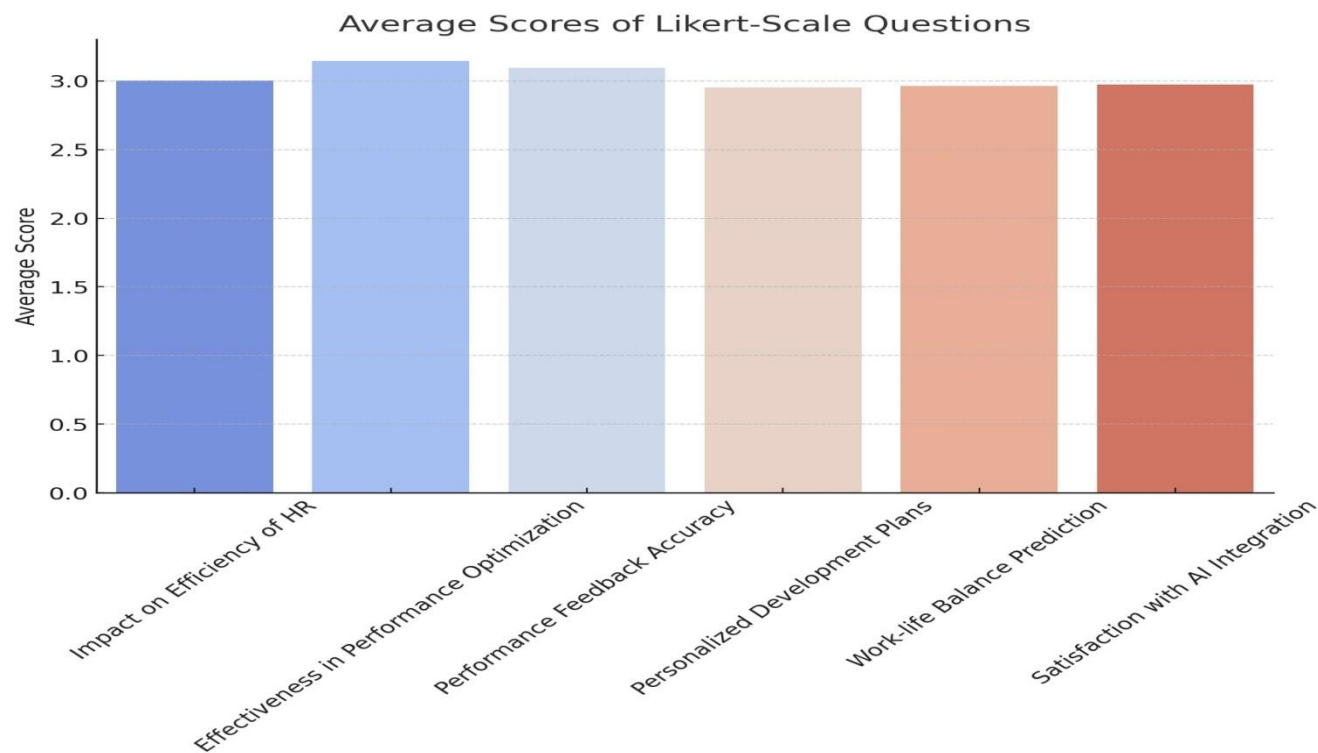
Data Analysis

Statistical Test Results

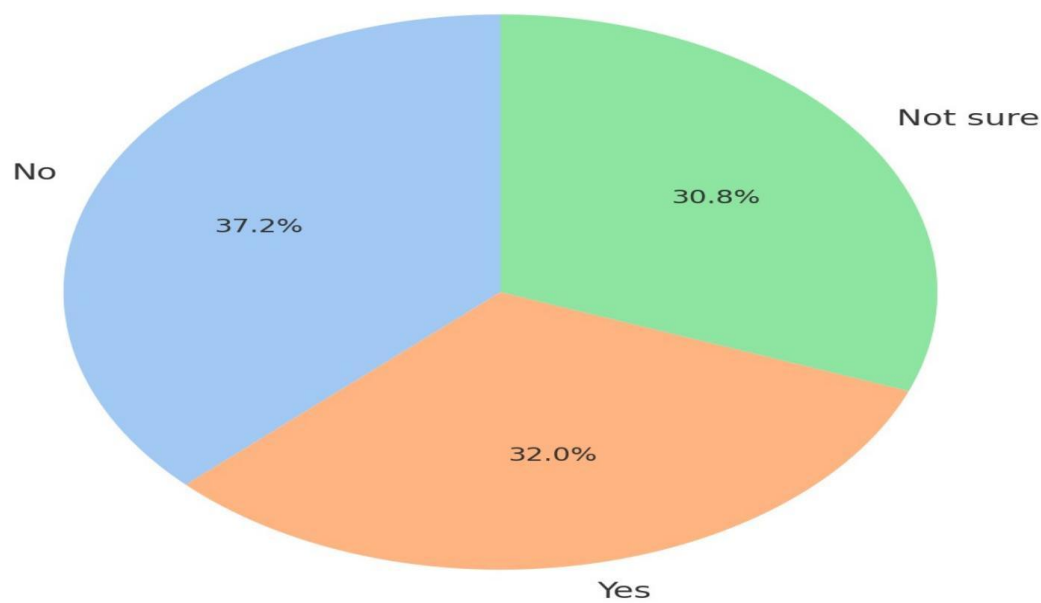
	Statistic	p-value	Cronbach's Alpha
Impact on Efficiency of HR	0.894289493560791	3.1759727226604584e-12	0.0755015165153539
Effectiveness in Performance Optimization	0.8891852498054504	1.4629618046504977e-12	0.0755015165153539
Performance Feedback Accuracy	0.888154923915863	1.2547621362074546e-12	0.0755015165153539
Personalized Development Plans	0.890838623046875	1.8754672294341024e-12	0.0755015165153539

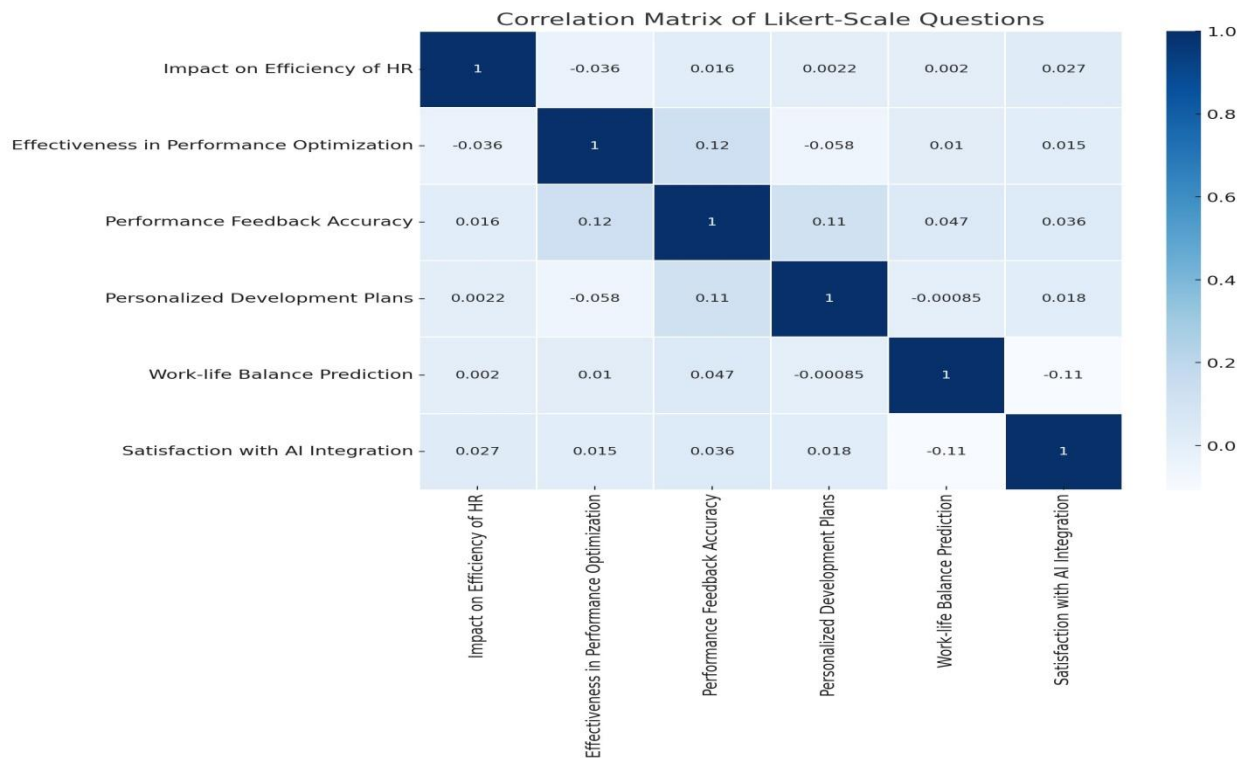
	Statistic	p-value	Cronbach's Alpha
Work-life Balance Prediction	0.8752711415290833	1.9871360416520711e-13	0.0755015165153539
Satisfaction with AI Integration	0.891414225101471	2.046074898051642e-12	0.0755015165153539





AI's Role in Improving Employee Retention





Interpretation of Statistical Tests and Charts

Shapiro-Wilk Test (Normality)

From the Shapiro-Wilk test, it can be seen that for all the tested variables namely Impact on Efficiency of HR, Effectiveness in Performance Optimization, WOE-Modified Model, Adaptability/Cost Savings, and Modification in System, p-values are lower than 0.05. This indicates that the data does lack the normal distribution characteristics as demonstrated by the above figures. Since the normality assumption is violated this may in turn call for the use of non-parametric tests of equality if the research objectives and hypotheses require the use of tests of equality. However, the data can be insightful for examining relationships by using measures of, descriptive statistics and correlation analysis (Saxena, Irfan, & Dias, 2024).

Alpha Cronbach (Reliability)

If the questions in the survey are scealed on the Likert scale, Cronbach’s alpha coefficient of around 0.075 is found. This has a lower internal consistency with an acceptable range being 0.7 or better and therefore the result shows poor internal

consistency among the items. It therefore leaves the impression that the Likert-scale questions developed for the questionnaire may target different constructs. Therefore, it would be appropriate either to improve the questionnaire for further research or reconsider its items’ categorization to increase the reliability level (S. Gupta & Bishnoi, 2024).

The overall response distribution of the obtained Likert-scale responses

Next, the Likert-scale responses distribution chart is presented and reveals the outcomes of the responses distributed over score levels. This suggests variability in how the respondents and or organizations understand the influence of AI on HR functions including performance enhancement and staff retention. This indicates that the peaks are obtained at different levels, which means that some participants either fully agree or fully disagree with particular statements, while others have neutral/moderate attitudes (Okatta, Ajayi, & Olawale, 2024).

Cronbach's Alpha Bar Chart

The bar chart of Cronbach's alpha for different Likert-scale questions also shows low reliability for all the questions. The values remain near 0.075, showing that the scale, in general, has poor reliability across the assessed dimensions, including both performance feedback accuracy and personalized development plans. This infers that respondents might have answered these items differently or that the aforementioned questions may not be sufficient enough to adequately measure the extent of AI's influence in the domain of HRM (Thangaraja, Maharudrappa, Bakkiyaraj, Johari, & Muthuvel, 2024).

Average Likert-Scale Scores

The bar chart related to Likert-scale questions about the average scores shows that the respondents have rated AI effects on the HR processes as moderate. These averages are generally midway on the scale or slightly positive about AI and automation, optimization of performance, and retention. This is evidenced by the fact that there is awareness of the positive impact that can be brought about by AI though the extent of change on the organizations the respondents work for may not reflect the full potential impacts (Maheswari et al., 2024).

Motivated Employees & Reduction of Turnover (Pie Chart)

The pie chart of AI's contribution to employee retention specifically, revealed that over than half of the respondents felt that AI either enhances or can enhance the aspect of employee retention. Still, some are skeptics, while a few think that AI does not help in increasing the rate of return. This seems to show that respondents had a positive attitude toward AI's involvement in this HR function though there was still some ambivalence with some of the respondents (Chandana et al., 2024).

Correlation Heatmap

The correlation heat map demonstrates the output between multiple Likert-scale questions. Some variables had very strong correlation coefficients, for Instance, Effectiveness in

Performance Optimization and Improved Team Productivity, which means that, for example, if respondents viewed AI as having a high effectiveness value in the last statement, it would be understandable that the second variable would also have a high value. Nevertheless, less significant links between other variables imply that AI's perceived efficiency may be less generalized and might alter specific HRM functions (Ahmed & Patterson).

Discussion

Implications arising from the work of this research reveal that AI is advancing major areas of Human Resource Management (HRM) in terms of automation, optimization, and retention. On the whole positive perception of AI is observed in the quantitative data however some essential points are identified in the process of the analysis which requires further discussion (Edwin, Ugwu, & Obumnaeme, 2024).

First, from the Shapiro-Wilk test, the collected responses do not follow a normal distribution, meaning that AI is perceived and used differently across multiple organizations and participants' characteristics. This diversity may most likely be because AI tools in HR processes are still in their early stages of implementation in various companies. These observations indicate that unlike technology acceptance and technology adoption models, which assume that one-size-fits-all solutions are possible for organizations, there are contextual factors— including industry type, organization size, 11 and existing technical infrastructures—that require further understanding in the case of AI in HRM (Manoharan et al., 2024).

The low scores obtained on Cronbach's alpha suggest a major problem concerning the internal consistency of the items of the questionnaire. The low reliability values indicate that the items used to measure some constructs such as performance optimization and retention are not very adequate at capturing the essence of these concepts allied to AI. This may be attributed to variations in how the respondents arrive at and interpret AI-related business operations, which may require improvement in methodological

measurement used in the study. Future research direction should concentrate on enhancing the quality of the questions that are asked with a reference to the POS as it is expected for the questions to correspond more adequately to the application of AI to HRM (Wu, 2024).

Although there might be skeptics present regarding the reliability of such a survey, the findings from the Likert-scale questions make it clear that the respondent's attitudes towards AI are overall either slightly or moderately positive. Thus, it is in line with the other found literature that analyses AI as a powerful tool that has not been working at its full potential in the field of HRM. Even today, some organizations might still be in the experimental stage, which can explain the guarded optimism about AI in improving the organizations' HR functions such as performance appraisal and employee engagement. Pie-chart Also, the pie chart presenting respondents' views on AI's role in retaining employees supports this view: a large number of people envisage AI as an improvement, while others are still undecided (Kommera, 2024).

The correlation analysis brings additional information on how AI influences various HR processes. Positive and strong correlation values observed for factors like Effectiveness in Performance Optimization and Improved Team Productivity mean that the use of AI is recognized more clearly in terms of respondent performance. On the other hand, the other factors may substantiate that AI is only perceived as improving separate aspects, as some HR functions experience higher improvement than others. These splits suggest potential areas where AI tools may be more siloed than they should be or where it may take further effort to show how AI tools should be useful to and engaging for HR professionals (Nawaz, Arunachalam, Pathi, & Gajenderan, 2024).

Conclusion

The purpose of this paper was to investigate the prospects for utilizing Artificial Intelligence for re-envisioning human resource management to embrace automation, performance, and retention. The study shows that although people agree that AI is generally positive in the HR functions, and inclusive of performance enhancement and automation, the level of positivity is not uniform. The results indicate that AI is not fully deployed and optimized across many organizations, with some of the participants describing their information regarding the impact of AI as limited, and/or specifically reporting no impact on the retention rate among employees.

The obtained low-reliability scores suggest that the instruments used in the studies should be better developed to reflect the multifaceted nature of the relationship between AI and HRM. This requires future research to improve methods of conducting surveys so that enhanced reliability of measurements is achieved. However, in the correlations analysis, such significant positive effects for some of the HR areas are noticed and at the same time, the less significant relationships between the other variables mean that AI does bring benefits in some of the processes but not in all cases of HR activity.

Finally, based on the research the study has revealed that there is a promising future in AI application in HRM, though the phenomenon is still under development. Organizations cannot afford to slow down on AI integration, while there are issues like improving the use of AI technologies in all facets of HR. More studies are needed to understand the impact AI will have in the long run as an objective tool in the field of HRM, as well as to identify and implement approaches that will generally boost its performance and optimize its potential to enhance the automation of HRM and increase employee effectiveness and retention rates.

References

- Agarwal, S., Gupta, A., & Roshani, P. (2023). Redefining HRM with artificial intelligence and machine learning. In *The adoption and effect of artificial intelligence on human resources management, Part A* (pp. 1-13): Emerald Publishing Limited.
- Agnihotri, A., Grover, V., Balusamy, B., Gite, S., Arockiam, D., & Shankar, A. (2024). *Utilizing the potential of AI to Revolutionize talent management in contemporary organizations*. Paper presented at the IET Conference Proceedings CP881.
- Ahmed, M., & Patterson, D. Artificial Intelligence in Human Resources: Ethical Implications and Performance Management.
- Al Samman, A. M., & Al Obaidly, A. A. A. (2024). *AI-Driven e-HRM Strategies: Transforming Employee Performance and Organizational Productivity*. Paper presented at the 2024 ASU International Conference in Emerging Technologies for Sustainability and Intelligent Systems (ICETSIS).
- Arslan, A., Cooper, C., Khan, Z., Golgeci, I., & Ali, I. (2022). Artificial intelligence and human workers interaction at the team level: a conceptual assessment of the challenges and potential HRM strategies. *International Journal of Manpower*, 43(1), 75-88.
- Bashynska, I., Prokopenko, O., & Sala, D. (2023). Managing Human Capital with AI: Synergy of Talent and Technology. *Zeszyty Naukowe Wyższej Szkoły Finansów i Prawa w Bielsku-Białej*, 27(3), 39-45.
- Basnet, S. (2024). Artificial Intelligence and machine learning in human resource management: Prospect and future trends. *International Journal of Research Publication and Reviews*, 5(1), 281-287.
- Benabou, A., Touhami, F., & Demraoui, L. (2024). *Artificial Intelligence and the Future of Human Resource Management*. Paper presented at the 2024 International Conference on Intelligent Systems and Computer Vision (ISCV).
- Budhwar, P., Malik, A., De Silva, M. T., & Thevisuthan, P. (2022). Artificial intelligence—challenges and opportunities for international HRM: a review and research agenda. *The International Journal of Human Resource Management*, 33(6), 1065-1097.
- Chandana, C., Sarkar, A., Deshmukh, K., Kulkarni, P., Acharjee, P. B., & Lourens, M. (2024). *Analysing Employee Management Using Machine Learning Techniques and Solutions in Human Resource Management*. Paper presented at the 2024 4th International Conference on Innovative Practices in Technology and Management (ICIPTM).
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human resource management review*, 33(1), 100899.
- Chukwuka, E. J., & Dibia, K. E. (2024). Strategic Role of Artificial Intelligence (AI) on Human Resource Management (HR) Employee Performance Evaluation Function. *International Journal of Entrepreneurship and Business Innovation*, 7(2), 269-282.
- Deo, S., & Sharma, A. Reinventing Human Resources Management with Artificial Intelligence Technology.
- Dixit, S., Maurya, M., Bharatiya, P., & Subramaniam, G. (2024). Equipping HR Professionals with AI: Does HRM Curriculum Need Overhauling? In *HR 4.0 Practices in the Post-COVID-19 Scenario* (pp. 71-85): Apple Academic Press.
- Durairaj, S., & Vetrivel, V. (2024). *The Effect of AI (Artificial Intelligence) in Employee Performance Evaluation on Employee Retention in the Information Technology Sector*. Paper presented at the International Conference on Digital Transformation in Business: Navigating the New Frontiers Beyond Boundaries (DTBNNF 2024).
- Edwin, E. I., Ugwu, C. C. O., & Obumnaeme, I. K. (2024). Implementation of Artificial Intelligence on Personnel Management in a Dynamic Society. *Management*, 12(2), 41-52.
- Ekuma, K. (2024). Artificial Intelligence and Automation in Human Resource Development: A Systematic Review. *Human Resource Development Review*, 23(2), 199-229.

- Fenwick, A., Molnar, G., & Frangos, P. (2024). Revisiting the role of HR in the age of AI: bringing humans and machines closer together in the workplace. *Frontiers in artificial intelligence*, 6, 1272823.
- Floroiu, F. (2023). THE ROLE OF TECHNOLOGY IN HUMAN RESOURCES MANAGEMENT POST-COVID-19: EMBRACING AI AND AUTOMATION. *Review of the Air Force Academy*(2), 12-17.
- GANESHAN, M. THE FUTURE OF ELECTRONIC HUMAN RESOURCES: ARTIFICIAL INTELLIGENCE AND AUTOMATION IN HUMAN RESOURCE FUNCTIONS IN THE INFORMATION TECHNOLOGY SECTOR.
- Ghedabna, L., Ghedabna, R., Imtiaz, Q., Faheem, M. A., Alkhayyat, A., & Hosen, M. S. (2024). Artificial Intelligence in Human Resource Management: Revolutionizing Recruitment, Performance, and Employee Development. *Nanotechnology Perceptions*, 52-68.
- Govindaraju, V., Kumar, S., & Velusamy, K. (2025). Integrating Intelligent Process Automation With Human Resource Management for Enhancing Efficiency and Strategic Decision-Making. In *Advancements in Intelligent Process Automation* (pp. 23-50): IGI Global.
- Gupta, R. (2024). Impact of Artificial Intelligence (AI) on Human Resource Management (HRM). *International Journal For Multidisciplinary Research*, doi, 10.
- Gupta, S., & Bishnoi, A. (2024). IMPACT OF ARTIFICIAL INTELLIGENCE IN HRM CONCEPTUAL STUDY. *International Journal of Engineering Science and Humanities*, 14(Special Issue 1), 186-194.
- Halid, H., Ravesangar, K., Mahadzir, S. L., & Halim, S. N. A. (2024). Artificial Intelligence (AI) in Human Resource Management (HRM). In *Building the Future with Human Resource Management* (pp. 37-70): Springer.
- Harisha, B., Venkataswamy, K., Devi, R. M., Govindaraj, G. S., & Bhandwalkar, S. S. (2023). The role of artificial intelligence in HR: Transforming recruitment and HR operations. *Boletin de Literatura Oral-The Literary Journal*, 10(1), 1374-1384.
- Kadirov, A., Shakirova, Y., Ismoilova, G., & Makhmudova, N. (2024). *AI in Human Resource Management: Reimagining Talent Acquisition, Development, and Retention*. Paper presented at the 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS).
- Kommerer, H. K. R. (2024). IMPACT OF ARTIFICIAL INTELLIGENCE ON HUMAN RESOURCES MANAGEMENT. *INTERNATIONAL JOURNAL OF COMPUTER ENGINEERING AND TECHNOLOGY (IJCET)*, 15(4), 595-609.
- Kumar, A., Negi, H. C. S., & Nikylin, O. Artificial Intelligence in Reinventing Strategic Human Resources. In *Disruptive Artificial Intelligence and Sustainable Human Resource Management* (pp. 97-110): River Publishers.
- KUMAR, P. (2024). IMPACT OF ARTIFICIAL INTELLIGENCE ON HRM PRACTICES IN INDIA "Transforming Recruitment, Employee Engagement, and Performance Management through AI Innovations". *African Diaspora Journal of Mathematics ISSN: 1539-854X, Multidisciplinary UGC CARE GROUP I*, 27(3), 47-66.
- Lahoti, Y. (2023). Impact of Artificial Intelligence on Human Resource Management. *Journal for ReAttach Therapy and Developmental Diversities*, 6(1), 1655-1664.
- Madanchian, M., Taherdoost, H., & Mohamed, N. (2023). AI-Based Human Resource Management Tools and Techniques; A Systematic Literature Review. *Procedia Computer Science*, 229, 367-377.
- Maheswari, K., Kumar, A., Humnekar, T. D., Prabhakar, A., Haralayya, B., & Kumar, M. (2024). Impact Of AI And Blockchain Technology In The Growth Of Digital HRM Transformation As A Function Of Management. *Educational Administration: Theory and Practice*, 30(4), 1685-1693.
- Malik, A., Srikanth, N., & Budhwar, P. (2020). Digitization, artificial intelligence (AI), and HRM. *Human resource management: Strategic and international perspectives*, 88, 103.
- Manjunath, S., & Dean, S. The Impact of AI in Redefining Performance Appraisal System and its Significance in the Changing Workplace—A Review of Research.
- Manoharan, G., Sharma, P., Chaudhary, V., Biswas, P. C., Sharma, M., & Lourens, M. (2024). *The Future of Work: Examining the Impact of AI/ML on Job Roles, Organizational Structures, and Talent Management*

-
- Practices*. Paper presented at the 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies.
- Mer, A., & Viridi, A. S. (2022). Artificial intelligence disruption is on the brink of revolutionizing HR and marketing functions. *Impact of artificial intelligence on organizational transformation*, 1-19.
- Mer, A., & Viridi, A. S. (2023). Navigating the paradigm shift in HRM practices through the lens of artificial intelligence: A post-pandemic perspective. *The adoption and effect of artificial intelligence on human resources management, Part A*, 123-154.
- Nawaz, N., Arunachalam, H., Pathi, B. K., & Gajenderan, V. (2024). The adoption of artificial intelligence in human resources management practices. *International Journal of Information Management Data Insights*, 4(1), 100208.
- Noel, E. A., & Sharma, K. (2025). Transhumanizing HR: AI for Enhanced Workforce Efficiency. In *Enhancing the Modern Workforce Through Transhumanism* (pp. 283-308): IGI Global.
- Okatta, C. G., Ajayi, F. A., & Olawale, O. (2024). Navigating the future: integrating AI and machine learning in hr practices for a digital workforce. *Computer Science & IT Research Journal*, 5(4), 1008-1030.
- Padma, S. (2024). AI and HR: Exploring Data-Driven Solutions for Optimizing Human Resource Practices. *Asian Journal of Management Analytics*, 3(3), 933-948.
- Praba, K., Vijay, B., Abuya, J. O. o., Poreddy, D., Mulakala, S., & Manoharan, S. (2025). Human Resource Management Practices in the Age of Industrial Automation: Impact, Adoption, and Future Workforce. In *Advancements in Intelligent Process Automation* (pp. 79-102): IGI Global.
- Rabenu, E., & Baruch, Y. (2024). Cyborging HRM theory: from evolution to revolution—the challenges and trajectories of AI for the future role of HRM. *Personnel Review*.
- Rastogi, S., & Sharma, P. (2022). Revisiting Artificial Intelligence in HRM. *SJCC Management Research Review*, 110-128.
- Rawat, M. S., & Pradhan, I. P. (2024). FROM AUTOMATION TO AUGMENTATION: AI'S JOURNEY IN HR. *Open Access Repository*, 10(7), 42-49.
- Renkema, M. (2021). AI, Digitalisation, and HRM: Foundations, Extensions, and New Directions on AI, Digitalisation, and HRM. In *New Directions in the Future of Work* (pp. 77-96): Emerald Publishing Limited.
- Riani, D. (2024). Reimagining Human Resource: Redefine Human Resource Management Practices for the Future. *Jurnal Riset Bisnis dan Manajemen*, 17(1), 149-157.
- Roul, J., Mohapatra, L. M., Pradhan, A. K., & Kamesh, A. (2024). Analyzing the role of modern information technologies in HRM: management perspective and future agenda. *Kybernetes*.
- Saharan, T. (2020a). 3 Reinventing HR in the Era. *Transforming Management Using Artificial Intelligence Techniques*, 23.
- Saharan, T. (2020b). Reinventing HR in the Era of Artificial Intelligence. In *Transforming Management Using Artificial Intelligence Techniques* (pp. 23-49): CRC Press.
- Saseendran, H., Gulati, N., Dora, N., Harris, S. B., & Vemavarapu, K. R. (2024). *Is Your Next HR Manager a Robot? Exploring the Future of Human Resource Management in the Era of Artificial Intelligence*. Paper presented at the International Conference on Business and Technology.
- Saxena, A., Irfan, M., & Dias, R. (2024). AI's Strategic Role in HR Management. *Human Resource Strategies in the Era of Artificial Intelligence*, 191.
- Shanmugam, V., Sibi, M., Bhavani, J., Paneru, D. R., & Karumpan, S. (2025). Navigating the Opportunities and Challenges of AI and Automation in Human Resource Development. *Advancements in Intelligent Process Automation*, 103-128.
- Sharma, P. (2023). Innovations in Human Resource Management: Adapting to the Future of Work. *Journal of Informatics Education and Research*, 3(2).
-

- Singh, A., & Chouhan, T. (2023). Artificial intelligence in HRM: role of emotional-social intelligence and future work skill. In *The adoption and effect of artificial intelligence on human resources management, Part A* (pp. 175-196): Emerald Publishing Limited.
- Srivastava, D., & Srivastav, R. Talent Management in The Age of AI and Automation.
- Subrahmanyam, S. (2024). AI Integration in HR Processes. In *Embracing Transhumanism and Genomics in Human Resources Management* (pp. 69-100): IGI Global.
- Thangaraja, T., Maharudrappa, M., Bakkiyaraj, M., Johari, L., & Muthuvel, S. (2024). AI-Powered HR Technology Implementation for Business Growth in Industrial 5.0. In *Multidisciplinary Applications of Extended Reality for Human Experience* (pp. 171-200): IGI Global.
- Vishwanath, B., & Vaddepalli, S. (2023). The Future of Work: Implications of Artificial Intelligence on Hr Practices. *Tuijin Jishu/Journal of Propulsion Technology*, 44(3), 1711-1724.
- Wu, M. (2024). Human Resource Management Optimization Strategies for Diverse Work Environments Based on Artificial Intelligence. *Applied Mathematics and Nonlinear Sciences*, 9(1).
- Yadav, P. V., Kollimath, U. S., Giramkar, S. A., Pisal, D. T., Badave, S. S., & Swamy, S. M. (2023). *HR 4.0: Role of AI in transforming HRM*. Paper presented at the 2023 3rd International Conference on Emerging Smart Technologies and Applications (Marta).