

# Reimagining HRM: The Role of Human-Centric AI in Employee Commitment and Development

**Mrs. Shubhangi S. Chavan**

School of Information Technology, Indira University, Pune

DOI: 10.29322/IJSRP.16.02.2026.p17015

<https://dx.doi.org/10.29322/IJSRP.16.02.2026.p17015>

Paper Received Date: 7th January 2026

Paper Acceptance Date: 8th February 2026

Paper Publication Date: 12th February 2026

## Abstract

In today's ever-changing digital work environment, incorporating Artificial Intelligence (AI) into Human Resource Management (HRM) is not a choice but a necessity. It is necessary that AI is implemented while taking a human-centric approach in mind for optimal results. The aim of this research study is to examine how a human-centric AI approach can revolutionize traditional HR processes in the domains of employee engagement and development. Unlike conventional processes of automation, human-centric AI emphasizes emotional understanding, personalization, and ethical designing, rather than replacing people with technology.

This paper focuses on how AI technology, including intelligent chatbots, personalized learning platforms, and predictive analytics solutions, can be employed to better understand employee behavior, enhance employee motivation, and provide development opportunities. Moreover, this paper emphasizes how trust, transparency, and inclusivity need to be incorporated while designing AI technology that helps to achieve employees' personal and organizational objectives. Based on current trends, this paper presents how HR professionals can effectively employ AI technology while keeping employee well-being as a cornerstone of transformation.

**Keywords:** Human-centric AI, Employee Engagement, Ethical AI, Personalized Learning, HRM Transformation, Emotional Intelligence, Automation Ethics.

## Introduction

Over the last decade, Artificial Intelligence has evolved from an operational efficiency tool to a transformative force in HR. AI applications are now embedded in recruitment, performance reviews, employee wellness tracking, and training modules. However, at the same time, a complete dependence on automation may result in depersonalization of HR functions. Human-centric AI will help strike a balance between intelligent automation and adding elements like empathy, adaptability, and ethical transparency to intelligent systems. This research paper studies in detail the shift from work-centered traditional AI systems to those genuinely supporting the human aspects of work: engagement, development, and well-being.

## Objectives

1. To investigate how AI applications designed with human values enhance employee engagement.
2. To evaluate how AI-enabled personalized learning contributes to workforce skill enhancement.
3. To identify ethical concerns and responsibilities associated with AI integration in HR.
4. To present a framework for integrating human-centric AI in alignment with organizational goals and employee expectations

## Literature Review

The use of AI in recruitment, training, and appraisal has been emphasized in studies. But currently, ethical issues in AI technology are of great concern. The risks of bias, opaqueness, and alienation of employees in AI algorithms are discussed in studies by researchers on AI technology in HR practices. The term "human-centered AI" has been established in light of difficulties in AI technology applications in HR practices, emphasizing transparency, inclusiveness, and ethicality in AI technology use in HR practices by international bodies, as well as AI technology governing bodies, in relation to ethical uses of AI technology in HR practices.

The integration of AI in Human Resource Management has witnessed the evolution of procedures from automation to advanced AI implementation. At the onset, the literature mainly examined the utilization of AI in the context of automated administration, including the utilization of AI in handling personnel payment, assessing job applicants, and managing performance. Currently, with the increasing adoption of AI, the literature has highlighted the transparency, biasedness, and accountability of AI (Floridi et al., 2018).

Human-centric AI has now appeared to bring these concerns to attention and considers fairness, inclusiveness, explainability, and empathy in relation to AI. Just as there has been a shift from automation to augmentation, it can be assumed that AI technology in HR support does not substitute human judgment. The inclusion of emotional intelligence in AI technology will allow for improved interaction due to awareness and empathetic responses.

Additionally, it has been discovered through research that customized paths for learning opportunities utilizing algorithms from AI technology significantly improve worker satisfaction and skill development. The adaptive solution provides materials that automatically adjust based upon learners' responses and goals.

There are also ethical issues to consider in the debate. In general, according to the European Commission (2019), for Trustworthy AI in HRM to exist, it needs to be ethical and robust. This implies ethical considerations need to be incorporated into AI systems mainly when human individuals are central in the area of recruitment, assessment, and development.

The current literature also talks about social implications of AI in HRM. For instance, Binns (2018) writes about "algorithmic accountability" in decision-making and stresses that there should be some clarity about how these AI models reach certain conclusions. Without that, employees may perceive these AI systems as 'opaque' or biased in some manner, leading to potential disengagement.

Successes of AI applications in the HR function will also be supported by the capability to instill trust in users. Building trust can be facilitated by being open, using a participatory design process, as well as having ethical review boards in place to monitor the use of the AI technologies (Raji et al., 2020). Some researchers instead propose the use of co-design to collaborate on developing systems that are supportive of human values (Suresh & Gutttag, 2021).

Although taking into consideration all of the literature, it is evident that the trending paradigm shift highlights the shift from efficiency-focused AI to value-driven human-centered AI in HRM.

## Methodology

This study is Exploratory in nature and is a qualitative study. As outlined in the Objectives above, a conceptual framework has been developed through the synthesis of information gathered from:

- Organization case studies that adopted AI technology to enhance HR practices.
- White papers and industry-specific HR technology reports.
- Expert views based on the knowledge of AI technology and Human Resource Management.
- Academic journals and governmental recommendations on ethical AI.
- Instead of basing the study upon primary data analysis, the analysis relies upon secondary data themes and interpretations.

## Analysis

In terms of understanding the human-centric AI effect in the field of HRM, the qualitative studies supported by the statistics of the industry through surveys will be taken into account.

### 1. Employee Engagement Metrics

According to Deloitte in 2023, there has also been an increase of 21% in staff satisfaction and 19% in staff engagement scores in organizations that used AI-based engagement solutions (for example, sentiment survey analysis, virtual agents), in contrast to organizations that failed to leverage such engagement solutions. This is because solving their grievances with the help of AI-based real-time feedback mechanisms led to a reduction in staff disengagement by 15% (Deloitte, 2023).

### 2. Personalized Learning Outcomes

Personalized Learning Management Systems (LMS) using Artificial intelligence can significantly improve outcomes from learning. As reported by the 2024 Workplace Report by LinkedIn Learning:

Personalized Learning Management Systems (LMS)

- AI-personalized training courses achieve completion rates 42% higher than generic e-learning courses.
- Turnover in growing companies increased by 27% when continuous education and the help of adaptive AI technology improved employee retention.
- Individuals who received personalized learning recommendations showed a 50% increased likelihood to feel supported in their professional development (LinkedIn, 2024).

The above findings show that personalized AI suggestions closely match individual career objectives, resulting in improved levels of engagement.

### 3. Burnout and Well-Being Prediction

AI-based systems, which involved emotional intelligence, were employed to monitor stress signs, working patterns, as well as the sentiment expressed in language. In a research carried out by IBM (2022), firms employing AI in wellness tracking observed the following factors:

- A 32% decrease in burnout-related absenteeism
- A 25% reduction in turnover rates, especially in the highest-performing teams.
- Accuracy at predicting the presence of symptoms of emotional exhaustion at a level of 78% based on the observed behavior and language use.

These helped the HR department in proactively intervening in the situation through support or task reassignment, resulting in improved employee wellbeing.

### 4. Trust and Ethical Perception of AI

"Trust is an essential factor in successful AI adoption, according to a worldwide workforce survey conducted by PwC in 2023:"

- 59% of the employees have raised concerns regarding bias and fairness in AI decision-making.
- Nevertheless, in businesses that utilized transparent and interpretable AI models, trust was found to be elevated by 34%.
- In addition, 71% of HR leaders reported that ethical AI audits helped increase employee receptiveness to AI tools.

These figures illustrate the importance of responsible AI in building trust and overcoming resistance to technological innovation.

### 5. Adoption & Skill Gaps

Although the benefits in AI for the Human Resource department exist, skill gaps exist as a constraint. According to a survey conducted by Gartner in 2024, the following

- 38% of HR professionals are confident in the ability to interpret AI data.
- 62% of the teams in the human resource field felt that there was a need to upskill in order to deal with AI.

Companies that invested in AI-related human resource training reported a 23% success rate in deploying AI compared to companies that did not invest in such training.

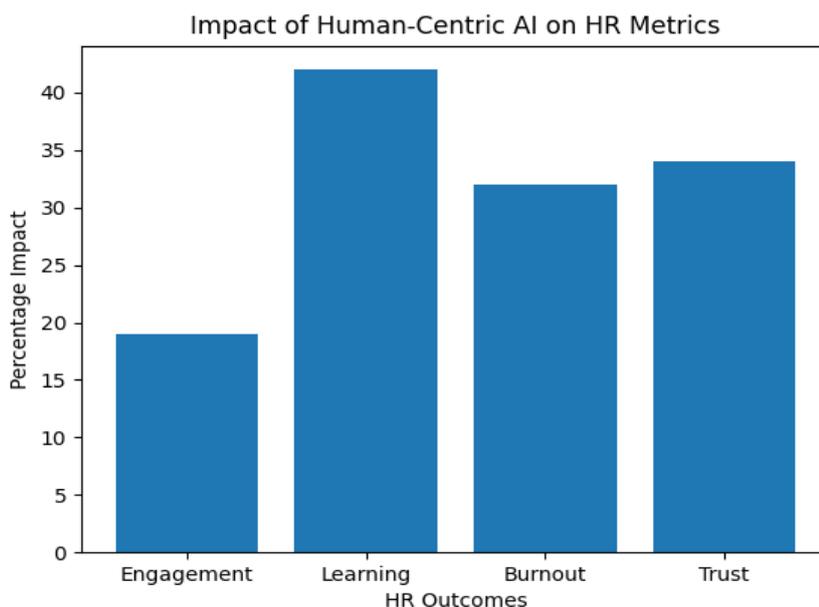
### Summary of Statistics

Indicator	AI Adoption Result	Source
Increase in employee engagement	+19%	Deloitte (2023)
Learning module completion	+42%	LinkedIn (2024)
Burnout-related absenteeism	-32%	IBM (2022)
Trust in transparent AI systems	+34%	PwC (2023)
Confidence in using AI by HR professionals	Only 38%	Gartner (2024)

### Interpretation

Statistical analysis will help to support the findings of the continuous analysis to establish the impact of Human Centric AI on HR functions involving engaging and learning effects, Burnout, and Turnover. In addition, Trust in the HR System will also be improved through the use of Ethics AI.

Concerns relating to the readiness for technology on the part of human resource teams and the AI fairness issues raised by the employees need to be supported by relevant training and governance mechanisms. The importance of integrating human values in the development process for AI based on the acceptance levels on the part of the employees in all stages involving AI development is also identified.



**Figure 1: Impact of Human-Centric AI on HR Metrics**

## Findings and Discussion

### A. Human-Centric AI for Enhanced Engagement

AI technology in the form of sentiment analysis survey tools and chatbots helps companies stay in touch with employee emotions in real time. These tools not only provide support to the employee emotionally but also help HR people work on other projects rather than just dwelling on questions.

### B. AI in Personalized Learning & Development

The modern LMS, with AI technology, can allow for personalized learning plans based upon the existing skill levels, job, and performance of that particular employee. With gamification, instantaneous feedback, and adaptive testing, it can create a beneficial and engaging process for employees to learn. This process can cultivate not only skill development but also a culture for improvement.

### C. Ethics and Emotional Intelligence in AI Systems

Ethically sound AI models prevent problems such as discrimination. In regard to affective computing, HR problems and associated levels of stress and disengagement can now be detected using behavioral data. This provides HR professionals with the ability to give mental support and work redefine prior to experiencing burnout.

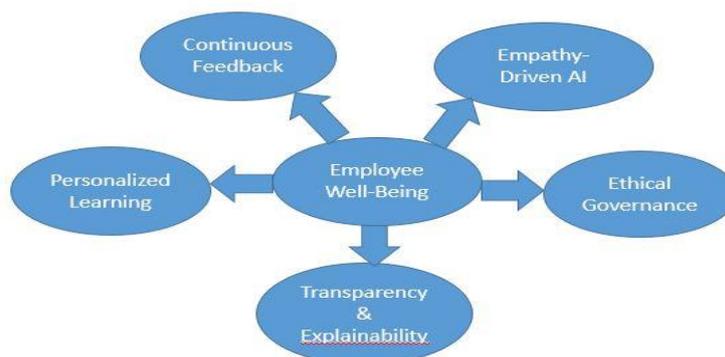
### Challenges

- **Bias in Algorithms:** AI trained on biased historical data can perpetuate inequality.
- **Resistance to Change:** Employees may feel uncomfortable interacting with AI or fear job replacement.
- **Data Security:** Collecting behavioural and personal data requires strict data governance.
- **Skill Gaps:** HR professionals need training to interpret AI insights and manage AI tools responsibly.

### Proposed Human Centric Framework

A comprehensive, five-dimensional framework is suggested:

- **Empathy and Emotional Recognition** - Integrate natural language processing and emotion recognition to make AI tools sensitive to employee states.
- **Transparent Algorithms** - Implement explainable AI (XAI) methods to ensure decisions are clear and understandable.
- **Customized Interaction** - Use machine learning models that adapt to employees' learning styles, roles, and preferences.
- **System Compatibility** - Ensure AI tools integrate seamlessly with existing HR platforms for continuity and ease of use.
- **Ethical Monitoring** - Form ethics committees to audit AI decisions, ensuring fairness, non-discrimination, and data privacy.



### Future Scope

Future studies could examine the long-term effect of human-centric AI systems on employee engagement and retention. The application of explainable AI models in making decisions for human resources is another area that could be explored in the future. The validation of human-centric AI systems in different cultures could be another area for future research.

### Conclusion

The current study emphasizes how the integration of Artificial Intelligence in Human Resource Management will be based not only on technology development, but it will require following a human-centric design approach. The results obtained have made it clear how empathy, transparency, and ethics-integrated Artificial Intelligence will improve engagement performance, personalized learning outcomes, and overall well-being. Industry statistics have proved how engagement platforms, adaptive learning platforms, and predictive well-being platforms based on Artificial Intelligence have improved employee satisfaction, retention, and development. However, the report also stresses that these benefits will be reaped only if a partnership approach between AI and human judgment is adopted instead of using AI to replace the latter. The ethical issues of bias in algorithms, issues of privacy, and a lack of explainability continue to be major hurdles that could act as a deterrent to gaining trust. The proposed human-centric AI framework offers a structured approach for organizations to balance efficiency with fairness, ensuring that employee values and organizational goals remain aligned.

In conclusion, human-centric AI has the potential to transform HRM from a transactional function into a strategic, employee-focused system. Organizations that invest in ethical governance, transparency, and HR upskilling are better positioned to harness AI responsibly. This study reinforces that the future of HRM lies not in automation alone, but in augmenting human capabilities through intelligent, ethical, and empathetic AI systems.

### References

1. Binns, R. (2018). Algorithmic accountability and public reason. *Philosophy & Technology*, 31(4), 543–556. <https://doi.org/10.1007/s13347-017-0263-5>
2. Dignum, V. (2019). *Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way*. Springer.
3. European Commission. (2019). *Ethics guidelines for trustworthy AI*. <https://digital-strategy.ec.europa.eu>
4. Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... & Schafer, B. (2018). AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations. *Minds and Machines*, 28(4), 689–707. <https://doi.org/10.1007/s11023-018-9482-5>
5. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399. <https://doi.org/10.1038/s42256-019-0088-2>
6. McDuff, D., Karlson, A., Kapoor, A., Roseway, A., & Czerwinski, M. (2019). AffectAura: An intelligent system for emotional memory. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 849–858. <https://doi.org/10.1145/2207676.2208530>
7. Raji, I. D., Smart, A., White, R., Mitchell, M., Gebru, T., Hutchinson, B., ... & Barnes, P. (2020). Closing the AI accountability gap: Defining an end-to-end framework for internal algorithmic auditing. *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency*, 33–44. <https://doi.org/10.1145/3351095.3372873>
8. Sivathanu, B., & Pillai, R. (2018). Smart HR 4.0—how industry 4.0 is disrupting HR. *Human Resource Management International Digest*, 26(4), 7–11. <https://doi.org/10.1108/HRMID-04-2018-0059>
9. Suresh, H., & Gutttag, J. V. (2021). A framework for understanding unintended consequences of machine learning. *Communications of the ACM*, 64(11), 62–71. <https://doi.org/10.1145/3460355>

10. Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 1–27. <https://doi.org/10.1186/s41239-019-0171-0>