
Transforming e-HRM Practices Through Artificial Intelligence: Exploring Electronic-Based Recruitment, Training, and People Management.

Ms. Suba D¹, Dr Arockiam Kulandai², S. Chandrasekar³

¹Ph.D. Research Scholar, Department of Human Resource Management, St. Joseph's College (Autonomous), Tiruchirappalli – 620 002, Affiliated to Bharathidasan University, Tiruchirappalli, Tamil Nadu, India, & Faculty, XIME Chennai. Email : dsuba.phd@gmail.com, 0000-0001-8532-3527

²Associate Professor & Research Supervisor, Dept of Human Resource Management, St. Joseph's College (Autonomous), Affiliated to Bharathidasan University, Tiruchirappalli, Tamil Nadu, India.
Email: rockiamk_hr1@mail.sjctni.edu, 0000-0002-0275-2770

³Sr Assistant Professor, Xime, Chennai, chandrasekar@xime.org

Abstract

Introduction: *The Fourth Industrial Revolution has greatly impacted working styles in organizations because of developments in areas like automation, robotics, sensors, data analysis, and artificial intelligence. HR processes are being digitized slowly in multinational companies and even in India's topmost manufacturing industries, consulting firms, IT services, and IT-enabled services. The digitization process of e-HRM has made life easier by eliminating repetitive jobs, thus making HR activities more efficient. The purpose of this study is to examine how effective the e-HRM process has been for businesses and how AI has impacted HR activities like recruitment and training.*

Methods: *This study is based on Descriptive and exploratory research methodology. The data were collected from 48 HR professionals from various Information Technology sectors through a purposive sampling method with a semi-structured questionnaire.*

Results: *This study found that the role of artificial intelligence in screening and scrutinising resumes is appreciable, playing a significant role in analysing employee efficiency through emails and text messages for better people management. So artificial intelligence leads to effective e-HRM practices.*

Discussion: *HR 4.0 has a lot of advantages for both HR departments and the organisation as a whole. These beneficial outcomes are particularly on attracting and retaining the best talent in the job market, continuous improvement in employee performance through training and expansion of strategic power in people management through technology.*

Keywords: *AI in HRM, e-HRM Practices, virtual Recruitment, HR Digitisation, People Analytics, Artificial Intelligence.*

I INTRODUCTION

Artificial Intelligence, data science, machine learning, language applications, and robotics technology have significantly transformed HRM practices. Data texting, artificial neural networks, and data mining methods function and respond similarly to humans (Gupta, 2024). Artificial neural networks are effectively utilized in business operations. Big data analytics assists in extracting necessary information from large datasets, while human resource information systems store and retrieve data according to business requirements

(Huy, P. Q, 2023). Big data analytics provides essential insights from both unstructured and structured data to initiate organizational changes. This has led to the rise of HR 4.0 in HRM practices within the framework of Industry 4.0. HR analytics is employed to identify business outcomes (Srivastava et al., 2022). The role of HRM has evolved from operational to strategic, enabling data-driven decisions at the right time. It also aids in assessing employee performance and the effects of employee engagement initiatives on financial outcomes (Martini et al, 2021). In essence, it allows for the evaluation of employee performance in

relation to business results. This helps in retaining talented employees by implementing the most suitable strategies and methodologies that assess average workers, top performers, and those who lack skills. It brings about improvements in policy effectiveness, reduces employee turnover and absenteeism by collecting feedback from employees about company policies, job nature, training, and evaluation practices. During the pandemic, as employees transitioned to remote work, HR analytics **McCartney, S., & Fu, N., 2022**) has been utilized to analyze various aspects of employee productivity. As companies across numerous industries grapple with the challenge of managing increased employee data and are gaining new insights about their workforce during the pandemic, HR managers must discover the best methods to handle data in order to obtain actionable insights regarding employee performance, as noted by Cude. AI-powered chatbots have significantly advanced candidate engagement within the realm of human resources, characterizing HR 4.0. In this context, HR focuses more on strategic issues rather than labour-intensive, time-consuming manual tasks (**Shenbhagavadivu, T., Poduval, K., & V.2024**). To ensure that employee policies and management objectives align, organizational goals and HR strategies must be synchronized. In practical terms, this means that HR 4.0 (**Dhanpat, N et al 2020**) emphasizes attracting qualified talent, enhancing training effectiveness, and engaging employees in activities that contribute directly to the company's strategic outcomes, contrasting with traditional HR's primary focus on payroll, monitoring work hours, and mainly administrative tasks. By utilizing AI techniques, HR professionals can efficiently analyze the most suitable resumes based on job descriptions from a diverse pool and assist in hiring the right candidates for the right positions. **Verma, A et al. (2020)** . Tasks such as reference checks, induction programs, onboarding activities, and training initiatives are organized and executed with the aid of AI. A prevalent challenge in recruitment is the communication gap between applicants and recruiters (**Koivunen et al., 2019**). Commercial AI-chatbot solutions, such as Mya, can facilitate communication with candidates via a mobile application throughout the recruitment process,

thereby maintaining the connection between recruiters and applicants. While a conversational user interface and such messaging channels appear to be promising for applicant communication, job seekers will still need to find and access the application. Web-based chatbot interfaces offer a significant advantage in this regard. Artificial Intelligence is also active in skill development, refresher training, knowledge sharing, and skill inventory. One essential aspect of HRM is coaching and mentoring, which is unlikely to be substituted by AI. The application, known as a "mobile coach" helps employees recognize their training needs and develop tailored training and growth plans. One essential aspect of HRM is coaching and mentoring, which is unlikely to be substituted by AI. The application, known as a "mobile coach," helps employees recognize their training needs and develop tailored training and growth plans. Another important role of HRM is coaching and mentoring, which is the least susceptible to replacement by AI. The tool referred to as a "mobile coach," allows employees to pinpoint their training needs and formulate personalized training and development approaches for themselves. Consequently, the software evaluates the job requirements for staff members and provides guidance on their future career paths or team enhancement (**Yuldoshev et al., 2018**). In the realm of people management, artificial intelligence techniques identify top-performing employees and those who may be underperforming by analysing historical performance data and recommending the necessary skills for upcoming projects. Performance assessments, social media interactions, and insights into employee experiences within the organization all contribute to employee data. Artificial intelligence leveraged to analyse this information and evaluate the level of employee engagement within the company (**Gaur, B. 2020**).

II REVIEW OF LITERATURE

Artificial Intelligence contributes to automating the business operation such as marketing, human resource management, operation etc. The applications that have been introduced in the market for various HR functions have changed the role of the HR manager to strategic and dynamic decision-making. In recruitment, AI-powered tools simplify

the recruitment process, which efficiently does job matches in a short duration of time. AI powered chatbots conduct interviews that analyse the efficiency level of the candidates effortlessly by asking relevant questions that are required for job performance. The study which was conducted by **Su, Y.-S., Suen, H.-Y., & Hung, K.-E. (2021)** explored the significance of AI in real-time remote video interviews that can decode the candidate's behaviour in their facial expressions, greatly expediting the hiring process. AI chatbots assist in interpreting responses in real-time, providing validation, and mitigating interviewer bias, as noted by **Sivathanu, B & Pillai R. (2018)**. AI Chatbots are essential in evaluating and facilitating better communication between candidates and employers. A study conducted by **Swapna, H. R., & Arpana, D. (2021)** sought to assess the speed at which chatbots enhance the hiring process and their significance in the early stages of recruitment. This study indicated that most recruiters concurred that AI chatbots are capable of efficiently handling manual HR tasks and effectively scheduling interviews by actively involving candidates in the interview panel as well as in subsequent rounds without any issues. Since AI chatbots can answer candidates' common inquiries, they are adept at minimizing repetitive duties and enhancing candidate engagement. **Anitha, K., & Shanthi, V. (2021)** discovered that AI chatbots performed effectively in various scenarios similar to the human brain. Compared to traditional recruitment methods, it successfully captures the attention of potential talent and contributes to the automation of the hiring process. Recruitment is an essential activity for any organization to thrive. By incorporating innovative hiring techniques, such as leveraging artificial intelligence, using chatbots in the recruitment process enables the organization to witness undeniable progress. According to **Ibrahim, W. M. R. W., & Hassan, R. (2019)** Natural Language Processing is employed by chatbots like Google and Siri to understand messages and give replies. Furthermore, some companies use technology to conduct recruitment interviews. **Rigotti, C., & Fosch-Villaronga, E. (2024)**. AI Chatbot applications facilitate communication between candidates and organizations without any time or

location limitations through email, SMS, social media, and messaging platforms. According to KPMG's 2019 Future of HR survey, 37% of respondents expressed being "extremely confident" in HR's capability to effectively transform and enhance their operations through vital skills such as analytics and artificial intelligence (AI). 60% of those surveyed indicated their willingness to invest in predictive analytics. Among those who have already invested in AI, 88% stated that they found their expenditure to be worthwhile, with 33% noting analytics as a key area of focus. Only 12% of managers identified analytics as their primary management concern, despite the remarkable potential of AI applications to deliver new insights and facilitate better decision-making. Google stands out as a leading technology company worldwide. Its innovative work culture and influential HR practices have established it as a preferred employer and one of the top organizations to work for globally. Furthermore, it is a pioneer in the area of people analytics, achieving excellent business outcomes through its comprehensive application of analytics in HR and enhanced people-focused decision-making (**Talent Management and HR, 2014**). Creating highly engaging, tailor-made training programs holds significant promise for advancing workplace learning. AI offers a comprehensive and practical solution to challenges and issues present in the workplace (**Schweyer, A. 2018**). The implementation of virtual training, re-skilling, and up-skilling has enabled the organization to adopt an agile work culture and maintain competitiveness. AI-driven intelligent tutoring systems (ITS) were initially implemented in the military and higher education settings during the 1980s (**Anderson, Conrad, and Corbett 1989; Lesgold 1988**). Over two decades ago, researchers found that integrating cognitive science tools and intelligent agents into educational settings greatly improved learning outcomes for high school algebra students (**Koedinger et al. 1997**). Subsequent thorough research has confirmed that these findings are applicable across various participant demographics and IQ levels. The performance of individuals in online training is positively linked to factors such as computer self-efficacy, email communication, supervisor support, and supportive educational

environments. Computer self-efficacy, which enhances skill development, is positively associated with participant performance. **Effendi, A. (2014, May)**. The implementation of AI in training and development streamlines labour-intensive tasks such as analysing needs assessments, scheduling training sessions, matching trainers with learners, organizing training programs in collaboration with training designers, and overseeing the corporate learning environment. AI involvement informs decisions regarding training needs, delivery, and trainer selection. Therefore, the role of training designers in the future will likely shift towards a more strategic and decision-oriented function (**Maity, S. 2019**). Insufficient training can lead to employee stress and increase the likelihood that team members may feel overwhelmed by their responsibilities, resulting in errors that could adversely impact customers. An organization's success relies heavily on the effectiveness of its product, process, and technology training, whether for junior employees or highly skilled professionals, according to **Smith, C. (2019)**. Training need assessment provides customised learning to every employee as per the requirement of the organisation rather than treating training as a singular event, organizations should see it as an ongoing process aimed at improving performance outcomes and reducing employee turnover. Luckily, AI has the potential to significantly impact this area. Companies can leverage advanced technology to evaluate employee performance, including their strengths and weaknesses. Today, every email, instant message, phone call, line of code, and mouse click leaves behind a digital footprint, as reported in a 2013 article by the New York Times. These patterns provide valuable insights into human behavior and communication at a minimal cost (**Lohr 2013**). Predictive modeling creates a list of terms and phrases associated with engaged employees, along with the likelihood of each word or phrase being relevant (**Golestani A et al. 2018**). Similarly, machine learning and AI algorithms identify words and phrases commonly found in the profiles of disengaged employees. With access to people analytics systems, organizations can analyze both the drivers and obstacles related to employee engagement. Decreased employee participation can

lead to increased error rates. Predictions can also be compromised due to self-censorship. The most effective results arise from platforms with the highest levels of social interaction and the most transparent environments. Designers of robotic systems should understand the implications of people analytics to enhance the learning of AI algorithms **Golestani A et al (2018)**, bridging the gap between technology and human behavior by emphasizing the importance of anthropomorphism. Organizations seek to boost the effectiveness of interactions between human workers and AI robots, believing that fostering employee engagement through people analytics is the optimal approach (**Neto, D., & Loureiro, S. M. C. 2021**). Machine learning holds the promise of enhancing fundamental HR functions, such as identifying top talent, providing tailored training by pinpointing skill gaps, evaluating daily performance, and fostering employee satisfaction to ensure long-term retention. Employee engagement is intricately linked to retention, productivity, and profitability, all of which are vital for an organization's success. Artificial intelligence leverages various capabilities, including data mining, predictive analytics, natural language processing, chatbots, managing rewards and benefits, delivering personalized learning and development, and facilitating decision-making to improve employee engagement.

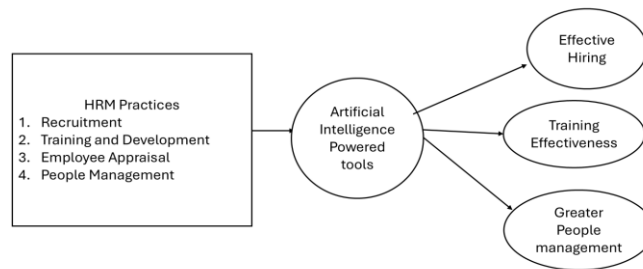
III THEORETICAL OUTLOOK

e-HRM PRACTICES & MODEL

Recent developments in information and communication technologies have resulted in the emergence of new responsive electronic mediums such as applications, dashboards, portals, chatbots, artificial intelligence, machine learning, big data analytics and robotics. That's how the world has witnessed the evolution of e-HRM **Strohmeier, S. (2007)**. HRM function is under considerable pressure to enhance its efficiency, productivity, innovation, and ability to align with strategic goals, leading to the creation of a new e-HRM model. **De Alwis, A. C et al (2022)** Electronic Human Resource Management (E-HRM) is a relatively recent concept in developing nations like India. The adoption of E-HRM practices in the companies is considered as a cost effective and time saving

process. **The Ulrich (1997)** model describes the different functions that HR departments undertake, including being a change agent, strategic partner, employee advocate, and administrative specialist. An administrative specialist pertains to the conventional HR role of creating and executing HR processes such as recruiting, rewarding, training,

hiring, and compensation. The researcher explained the model that artificial intelligence enhanced the HRM practices, especially the study concentrated on recruitment which helps organisation to bring potential employees to the organisation, so that it leads to training effectiveness and greater people management is possible is guaranteed.



IV METHODOLOGY

This exploratory research design is aimed at assessing the effectiveness of e-HRM practices in organizations. The researchers reviewed some of the articles from Elsevier, ResearchGate, and Springer as secondary data. For Primary data collection, the researchers have collected data from 48 HR professionals working in various firms in South India through a semi-structured questionnaire using purposive sampling. Chosen. The companies that have been chosen are based on the implementation

of artificial intelligence for HR practices. Because of the reluctance of the HR professional, the researchers were not able to contact a larger number of HR professionals. 120 HR professionals who were sent questionnaires, only via mail, via social media, only 48 were interested in taking up the questionnaire. Since the small sample size is 48, the researchers analysed the data with the non-parametric Spearman's rho test in SPSS. The research objectives aim to investigate the influence of artificial intelligence in only recruitment, training, and people management.

TABLE – I RELIABILITY ANALYSIS

S.No	Particulars	Items	Cronbach’s Alpha
	AI in Recruitment	4	0.720
	AI In Training	4	0.841
	AI in People Management	3	0.796

The cronbach’s alpha value shows a good validity score > ie. threshold .7 is acceptable, so, normality check is possible.

V DATA ANALYSIS

TABLE II: DEMOGRAPHIC PROFILE OF THE RESPONDENT

Demographic variable	Groups	Frequency	Percentage
Gender	Male	30	62.5%
	Female	18	37.5%
	Total	48	100

Age Group	25-35	12	25.5%
	36-45	20	41.5%
	46-55	10	20.5%
	Above 56	6	12.5%
	Total	48	100
Designation	Manager HR	6	12.5%
	Assistant Manager	10	20.5%
	Sr. Executive HR	20	41.5%
	Jr Executive HR	12	25.5%
	Total	48	100

The data indicates that 62.5% of the participants identify as male while 37.5% identify as female, 25.5% of the participants belong to the 25-35 age category, 41.5% are in the 36-45 age range, 20.5% fall within the 46-55 age group, and 14% are aged >56 and 12.5% hold positions as managers, 20.5% are assistant managers, 41.5% serve as senior executives, and 25.5% are junior executives within the HR department.

CORRELATION ANALYSIS

Spearman’s rank was used to test the hypothesis. It is a nonparametric statistic that quantifies the strength and direction of the relationship between two variables, which is between artificial intelligence and recruitment, training, development, and people management

TABLE-III: NON-PARAMETRIC CORRELATIONS

Correlations			AIR1	AIR2	AIR 3	AIR 4	AIT 1	AI T2	AI T3	AIT 4	AI P1	AIP 2		
Spe arm an's rho	AIR 1	CC	1.000	.333*	0.134	.343*	.446**	.441**	.601**	.436**	0.138	0.266	.422**	.513**
		sig		0.021	0.364	0.017	0.000	0.000	0.000	0.002	0.305	0.068	0.003	0.000
	AIR 2	CC	.333*	1.000	.460**	.694**	.717**	.445**	.778**	.778**	.459**	.750**	.490**	0.057
		sig	0.021		0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.702
	AIR 3	Cc	0.134	.460**	1.000	.625**	.633**	.538**	.386**	.448**	.597**	.592**	.622**	0.054
		sig	0.364	0.001		0.000	0.000	0.000	0.007	0.001	0.000	0.000	0.000	0.716
	AIR 4	CC	.343*	.694**	.625**	1.000	.556**	.680**	.525**	.650**	.521**	.746**	.684**	0.164
		sig	0.017	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.265
	AIT 1	CC	.446**	.717**	.633**	.556**	1.000	.541**	.674**	.621**	.492**	.590**	.598**	0.019
		sig	0.001	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.897
	AIT 2	CC	.441**	.445**	.538**	.680**	.541**	1.000	.424**	.675**	.444**	.641**	.805**	0.221
		sig		0.002	0.000	0.000	0.000		0.003	0.000	0.000	0.000	0.000	0.130

AIT 3	CC	.601**	.778**	.386*	.525	.674	.42	1.0	.695	.30	.616	.52	0.230
	sig	0.000	0.000	0.007	0.000	0.000	0.003		0.000	0.038	0.000	0.000	0.116
AIT 4	CC	.436**	.778**	.448*	.650	.621	.675**	.695**	1.00	.457**	.807**	.628**	0.172
	sig	0.002	0.000	0.001	0.000	0.000	0.000	0.000		0.001	0.000	0.000	0.242
AIP1	Cc	0.138	.459**	.597*	.521	.492	.44	.30	.457**	1.0	.507**	.531**	.321*
	sig	0.351	0.001	0.000	0.000	0.000	0.002	0.038	0.001		0.000	0.000	0.026
AIP2	CC	0.266	.750**	.592*	.746	.590	.641**	.616**	.807**	.507**	1.00	.599**	0.208
	Sig	0.068	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.155
AIP3	CC	.422**	.490**	.622*	.684	.598	.805**	.523**	.628**	.531**	.599**	1.0	.328*
	Sig	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.023
AI E	Cc	.513**	0.057	0.054	0.164	0.019	0.221	0.230	0.172	.321*	0.208	.328*	1.000
	Sig	0.000	0.702	0.716	0.265	0.897	0.130	0.116	0.242	0.026	0.155	0.023	
*. Correlation is significant at the 0.05 level (2-tailed).													
**. Correlation is significant at the 0.01 level (2-tailed).													

The Spearman's rho correlation results revealed that among the AI-driven HRM practices analyzed, three factors exhibited statistically significant positive correlations with effective e-HRM practices. Specifically, the capacity of AI to collect pertinent information for recruitment ($\rho = .513, p < 0.01$) demonstrated the strongest correlation, followed by AI's ability to evaluate employee preferences ($\rho = .328, p < 0.05$), and its skill in identifying HR drivers and obstacles ($\rho = .321, p < 0.05$). This indicates that recruitment based on data and people analytics has a meaningful impact on the perceived effectiveness of e-HRM. Conversely, other factors, especially those associated with AI-led training and resume screening, did not show a significant relationship, suggesting their influence might be indirect or dependent on the specific context within this sample.

VI RESULTS & DISCUSSION

The research study found that artificial intelligence proficiently managed the recruitment process, distinctly gathered all the pertinent information

required for the job, initiated the screening process when candidates applied for the job, scrutinised the resume effectively from the large database, and engaging candidate thorough out the recruitment process, scrutinising resumes effectively from the large amount of resumes, and reduced repetitive and boring tasks. Few HR professionals agreed that AI provides hyper-personalised training in order to make advancement in the workplace. An AI tutoring system effectively manages training modules in employee skill development, designs the training modules as per the industry requirement and plays a vital role in monitoring the corporate learning environment. Artificial intelligence identifies the drivers and barriers in people management, analyses the performance and behaviour at the workplace and it has a significant role in understanding employees through emails and instant text messages. The findings showed that there is a significant relationship between artificial intelligence and the recruitment process, especially in scrutinising resumes. It means that the Artificial intelligence role is effective in the e-recruitment process. But there is

no significant relationship between effective Artificial Intelligence and training modules in employee skill development. It means that AI-powered training modules are not effective and do not help employees develop their skills for future requirements in the organisation. There is a significant relationship between AI and people management. It means that AI has influence on people management, but it helps organisations to have a track on employees who are actively engaged, who are actively disengaged in turn, which helps organisations to introduce necessary. It is found that Artificial intelligence leads to effective e-HRM practices, and as per this research, it has no involvement in people management.

CONCLUSION

As a result of the fourth industrial revolution, everything became digitalized and automated, which resulted in the use of artificial intelligence, big data analysis, and machine learning algorithms. As identified in this research paper, the significance of artificial intelligence is in huge demand across the board. As HR department has been seen to have higher vulnerability to technological upgrades, the use of AI resulted in making changes in the recruitment process. As far as AI-powered chatbots ask for the information required, it allows for estimating the skills of candidates who want to take part in the process. However, artificial intelligence training modules do not play any significant role in suggesting training modules for employees. Therefore, it fails to stimulate organizations to know how many projects will come up in the coming days and the skills possessed by the employees. Analytical tools based on AI have a track record of the most successful people in terms of email communication and other written forms. This helps organizations to determine who among them is engaged and disengaged, thus making it easier for managers to manage them effectively. In the context of the pandemic, human resource management serves as a crucial assets for organizational leaders to overcome challenges that might arise due to operational changes and workforce management.

References

1. De Alwis, A. C., Andrić, B., & Šostar, M. (2022). The influence of e-hrm on modernizing the role of hrm context. *Economies*, 10(8), 181. <https://doi.org/10.3390/economies10080181>
2. Dhanpat, N., Buthelezi, Z. P., Joe, M. R., Maphela, T. V., & Shongwe, N. (2020). Industry 4.0: The role of human resource professionals. *SA Journal of Human Resource Management*, 18. <https://doi.org/10.4102/sajhrm.v18i0.1302>
3. Dhir, S., & Shukla, A. (2019). Role of organizational image in employee engagement and performance. *Benchmarking: An International Journal*, 26(3), 971–989. <https://doi.org/10.1108/BIJ-04-2018-0094>
4. DiClaudio, M. (2019). People analytics and the rise of HR: How data, analytics and emerging technology can transform human resources (Hr) into a profit center. *Strategic HR Review*, 18(2), 42–46. <https://doi.org/10.1108/SHR-11-2018-0096>
5. Gaur, B. (2020). Hr4. 0: An analytics framework to redefine employee engagement in the fourth industrial revolution. *2020 11th International Conference on Computing, Communication and Networking Technologies (ICCCNT)*, 1–6. <https://doi.org/10.1109/ICCCNT49239.2020.9225456>
6. Huy, P. Q., Shavkatovich, S. N., Abdul-Samad, Z., Agrawal, D. K., Ashifa, K. M., & Arumugam, M. (2023). Resource management projects in entrepreneurship and retain customer based on big data analysis and artificial intelligence. *The Journal of High Technology Management Research*, 34(2), 100471. <https://doi.org/10.1016/j.hitech.2023.100471>
7. Iscte-Instituto Universitário de Lisboa, Neto, D., & Loureiro, S. M. C. (2021). Exploring social interaction of ai robot on employee engagement. *Global Fashion Management Conference*, 182–184. <https://doi.org/10.15444/GFMC2021.03.04.02>
8. Lopus, A., & Hartman, C. (2022). *Road to flourishing: Eight keys to boost employee engagement and well-being*. InterVarsity Press.
9. Maity, S. (2019). Identifying opportunities for artificial intelligence in the evolution of training and development practices. *Journal of Management Development*, 38(8), 651–663. <https://doi.org/10.1108/JMD-03-2019-0069>
10. Martini, M., Cavenago, D., & Marafioti, E. (2021). Exploring types, drivers and outcomes of social e-HRM. *Employee Relations: The International Journal*, 43(3), 788–806. <https://doi.org/10.1108/ER-10-2019-0404>

11. McCartney, S., & Fu, N. (2022). Bridging the gap: Why, how and when HR analytics can impact organizational performance. *Management Decision*, 60(13), 25–47. <https://doi.org/10.1108/MD-12-2020-1581>
12. Ong, E. (2021). *Early identification and intervention of suicide risk in Chinese young adults*. Springer Singapore Pte. Limited.
13. Ramhurry, R. (2021, July 29). Electronic mentoring in the digital age: The role of social media as a “game changer” in mentoring practices within higher education. *Proceedings of The 3rd International Academic Conference on Teaching, Learning and Education*. 3rd International Academic Conference on Teaching, Learning and Education. <https://doi.org/10.33422/3rd.tleconf.2021.07.165>
14. Rigotti, C., & Fosch-Villaronga, E. (2024). Fairness, AI & recruitment. *Computer Law & Security Review*, 53, 105966. <https://doi.org/10.1016/j.clsr.2024.105966>
15. Shenbhagavadivu, T., Poduval, K., & V, V. (2024). Artificial intelligence in human resource: The key to successful recruiting and performance management. *ShodhKosh: Journal of Visual and Performing Arts*, 5(6), 486–493. <https://doi.org/10.29121/shodhkosh.v5.i6.2024.1351>
16. 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>
17. Srivastava, Y., Ganguli, S., Suman Rajest, S., & Regin, R. (2022). Smart hr competencies and their applications in industry 4. 0. In P. Kumar, A. J. Obaid, K. Cengiz, A. Khanna, & V. E. Balas (Eds.), *A Fusion of Artificial Intelligence and Internet of Things for Emerging Cyber Systems* (pp. 293–315). Springer International Publishing. https://doi.org/10.1007/978-3-030-76653-5_16
18. Stach, E. A., Maruyama, B., & Chen, C. (2018). Using operando characterization, data analytics, and artificial intelligence to understand mechanistic links between processing and structure. *Microscopy and Microanalysis*, 24(S1), 258–259. <https://doi.org/10.1017/S1431927618001782>
19. Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human Resource Management Review*, 17(1), 19–37. <https://doi.org/10.1016/j.hrmr.2006.11.002>
20. Su, Y.-S., Suen, H.-Y., & Hung, K.-E. (2021). Predicting behavioral competencies automatically from facial expressions in real-time video-recorded interviews. *Journal of Real-Time Image Processing*, 18(4), 1011–1021. <https://doi.org/10.1007/s11554-021-01071-5>
21. Tewari, I., & Pant, M. (2020). Artificial intelligence reshaping human resource management: A review. *2020 IEEE International Conference on Advent Trends in Multidisciplinary Research and Innovation (ICATMRI)*, 1–4. <https://doi.org/10.1109/ICATMRI51801.2020.9398420>
22. Titan, Effendi, A., & Trivena. (2014). Online training effect on employee skills development. *2014 2nd International Conference on Information and Communication Technology (ICoICT)*, 288–291. <https://doi.org/10.1109/ICoICT.2014.6914081>
23. Tyagi, D. M., & Pandita, D. (2022). Artificial intelligence and people analytics—A key to employee engagement. *2022 International Conference on Sustainable Islamic Business and Finance (SIBF)*, 224–228. <https://doi.org/10.1109/SIBF56821.2022.9940118>
24. Verma, A., Bansal, M., & Verma, J. (2020a). Industry 4.0: Reshaping the future of HR. *Strategic Direction*, 36(5), 9–11. <https://doi.org/10.1108/SD-12-2019-0235>
25. Verma, A., Bansal, M., & Verma, J. (2020b). Industry 4.0: Reshaping the future of HR. *Strategic Direction*, 36(5), 9–11. <https://doi.org/10.1108/SD-12-2019-0235>
26. Wagh, S. K., Agarwal, D. O., Hire, L. S., & Choudhary, J. N. (2019). Mockai smart recruitment counseling using artificial intelligence. *International Journal of Computer Sciences and Engineering*, 7(2), 261–265. <https://doi.org/10.26438/ijcse/v7i2.261265>