Artificial Intelligence for Enhancing Human Resource Development Efficiency

Dr. Nomita Sharma
Keshav Mahavidyalaya, University of Delhi

Mr. Tushar Sharma
DMS IIT Delhi

Dr. Neha Sharma
Keshav Mahavidyalaya, University of Delhi

Abstract

The purpose of the paper is to comprehend the role of artificial intelligence in improving development of human resources efficiency & equity. The paper also discusses the role of artificial intelligence on developing human resources in relation to efficiency and equity. Artificial intelligence (AI) refers to the ability of machines to simulate particular aspects of human intellect, such as pattern recognition and decision-making. Nowadays, organizations from different sectors use AI for a variety of reasons, such as hiring, risk evaluation, financial consulting, and criminal sentencing recommendations. AI is not exempt from the established fact that social interaction and context are reflected and recycled in technology; it can exacerbate existing biases, prejudice, and injustices. The document utilizes the PRISMA approach. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is a widely established standard for reporting systematic reviews and meta-analyses. To make certain that their reports are transparent and detailed, it offers a list of minimum requirements that writers need to deliver in their reports. The findings from this study lay the foundation for further research aimed at better understanding the relationship between human development, work, and technology. This is particularly important as labor markets are increasingly impacted by artificial intelligence. While AI has the potential to help the poor, governments and businesses must work together to ensure equal opportunities in the field of AI to reduce the potential for negative impacts.

Keywords:
Human Resource Development, Artificial Intelligence, Equity, PRISMA, Efficiency.

1. Introduction

The human resources (HR) department of a company is responsible for managing day-to-day operations and improving company culture. Improving the HR department can not only improve employee morale, but also make them more productive. However, this can vary from company to company and require different approaches. This article explores human resource development, explains its meaning, and offers suggestions for improving the development process. At the organizational level, "human resource development" refers to a comprehensive set of strategies, tools, methods, processes, and frameworks that organizations use to better help employees achieve

their goals. Itsede (2003). The process by which an organization supports employees in developing their knowledge, skills, and talents is called human resource development, or HRD. In turn, using this method comes with the effect of increasing the organization's efficiency. The process that the organization uses to help its employees develop their knowledge, skills, and abilities is called human resource development or HRD for short. On the other side, the use of this method leads to improvement in the organization's efficiency. All manner of strategies such as recruiting and selection, training and development, performance appraisal, and compensation have been employed by human resource management professionals in a bid to manage employees efficiently.

Moreover, the nature of these approaches has changed as business environments and the workforce become more diverse. Therefore, in order to manage a diverse workforce more effectively, human resource professionals considered the diversity element while implementing any method or strategy. Inequities in hiring, training, performance reviews, and incentives are issues that the human resources department handles (Goodman et al., 2003; Kabongo et al., 2011). By using human resource management toolkits, managers have gradually raised the status of fair employment opportunities and encouraged creativity in multicultural workforces.

Workplaces are undergoing significant change, digitization is influencing knowledge and behavior, and communities are becoming more global and varied. Talent management has emerged as one of the primary objectives for all business entities in the age of growing global capitalism and profitable advancements in the economic ecosystem. How effectively a business succeeds is determined by the quality of its human capital, and strategies for improving those resources can raise employee capabilities. The paper seeks to present analysis of relation between HRD efficiency and equity through artificial intelligence by looking at a number of theoretical and empirical investigations. Thus, the following research topics will be addressed by the study:
1. How is artificial intelligence used in today's essential HRD functions?
2. How do artificial intelligence impacts HRD efficiency and equity?
3. What are some of the key results of HRD's incorporation of artificial intelligence, and how do these affect HRD theory and practice?

2. Technology and HRD
Given the impact of technology on different sectors and performance enhancement, instructional technologies may help with HRD's training and development component (Barlett, 2008). Three levels of technology were conceptualized by Swanson and Holton (2009): information technology (IT) and HRD, which focuses on the decentralization of HRD activities in the workforce; application-oriented technology that delivers HRD activities (i.e., Technology Within HRD); and process-oriented technology that articulates job-specific tasks and skills to improve the performance output (i.e., Workforce Technology).

The impact of Internet technologies (IT) on our society is extensive, multifaceted, and widespread. Digital gadgets have penetrated the workplace and revolutionized the way work is done, Facebook has changed how we communicate with others, Amazon has changed how we buy items, and learning technology has completely changed how we learn. Organizational changes, including those related to human resource development (HRD), have long been fueled by technology. Innovative work practices like telecommuting, virtual teams, and cloud-based work systems are

the consequence of IT advancements that have kept pace with the times. Companies have been able to hire talented and skilled workers from all around the world because to these tactics. HRD faces additional problems in managing, assessing, and developing a workforce that is becoming more diverse and distributed.

Without a doubt, technological innovation has been attributed with generating prospects for performance enhancement by achieving increased effectiveness and efficiencies for both individuals and businesses. A Pew Research study found that most American workers (n = 1,066) who participated in the poll said that while IT has increased their freedom, it also made them spend more time at work. Among them, a sizable majority thought that technology had improved their productivity (Purcell and Rainie ,2014).

Both individuals and organizations are become more astute in their acceptance and adaptation of new technology for the workplace. HRD specialists are in charge of embracing and spearheading this organizational shift that is focused on IT. A new age of possibilities and challenges caused by artificial intelligence (AI) and automation is transforming a number of industries, encompassing the development of human resources. (Bennett, 2022; Wilson & Daugherty, 2018). The advent of AI and automation technologies has resulted in a paradigm shift in HRD. It has compelled a review of established protocols and practices. The utilization of these cutting-edge technologies in HRD is widely commended due to its revolutionary potential (Bhatt & Muduli, 2022; Stone et al., 2015).

3. Methodology

This systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to review the literature on artificial intelligence and automation in HRD (Liberati et al., 2009; Moher et al., 2010). The PRISMA system provides a systematic review process that ensures comprehensive coverage and scientific rigor. The PRISMA framework provides a systematic and repeatable approach to analyzing existing research by guiding the systematic collection, analysis, and synthesis of literature (Moher et al., 2010). It is particularly helpful for combining and analyzing research findings on complex technological issues in human resource development (HRD). It provides a structured approach to reviewing the use of technology in HRD in different organizational settings.

This approach illustrates how technology can intuitively impact HRD processes and outcomes. In addition, it helps identify the constraints and facilitators that may exist in different organizational settings (Denyer et al., 2008). The review process focused on variables such as eligibility criteria, selection of information sources, selection of relevant research findings, data extraction, assessment of study quality, data integration, and identification of outcome impacts.

Eligibility Standard

This review considers research material that specifically addresses the impact of automation and AI on the strategic HRD function. We also consider the advantages and disadvantages of using AI and automation in the HRD process. In the contemporary era, these studies explain how the functions of human resource development professionals are changing. studies incorporated in the study comprised both empirical and non-empirical research, including book chapters and reviews. The empirical research comprised both qualitative and quantitative investigations. The objective

of these studies was to examine the impacts that artificial intelligence and automation have on the development of human resources (HRD), particularly how these two impact HRD activities like skills development, employee satisfaction, and organizational efficiency. Those studies that did not deal with these issues or publications that were not English language sources were excluded from this analysis.

Methods of research

To discover relevant research on artificial intelligence and automation in human resource development, an effective search strategy was developed. Utilization of significant keywords related to Human resource development, artificial intelligence, and automation using Boolean operators "AND" and "OR," databases such as Web of Science, Scopus, Google Scholar, and Semantic Scholar were searched. The words "artificial intelligence," "machine learning," "automation," and "human resource development, " "Equity", "Efficiency", "talent management," "workforce upskilling," "employee development," "workforce development," "knowledge management," "workforce planning," and "learning and development" were included. Keywords, theoretical frameworks and articles published within the period 1997 to 2023 were the prime concern during the search.

References from existing studies were also searched to determine other studies that met the inclus ion criteria. This repetitive search strategy included many related articles and increased the integr ity of the review.

Selecting Studies, Extracting Data, and Evaluating Quality

Ratings were selected according to a careful fulltext rating, according to the specified eligibility c riteria, including title reviews and summary. Data invoked from the study was obtained using a ca refully constructed data extraction form. This form included authors, year of publication, research design and major topics. Data extraction was performed one after the other to ensure accuracy an d consistency of the data that was called. This allows for a comprehensive investigation into the u se of automation and artificial intelligence in HR development, including adoption determinants, powerful drivers and outcome results.

Summary of the Included Research

The initial search resulted in 1,074 elements. However, when search keywords were restricted, th e search elements were limited to 1,000. The total number of candidates continued to decline to 7 4, of which 34 were rejected after the abstract and title screening process. Of these, 40 were able t o achieve inclusion criteria, while the other 34 were not eligible. The quality of articles included i n the review was assessed using the CAP Checklist (Critical Appraisal Skills Program) and beca me the final sample of 40 articles for checking.

Forty research work consisting of two conference discussions from internet sources, nine books a nd three works were collected from 20 magazines. Publications of magazine articles such as Hum an Resource Development Review, Safety Science, and Journal of Enterprise Information Manag ement are part of the collection.

Analysis and Synthesis of Data

The results of the included studies have been examined and explained using an approach known a s narrative integration (Popay et al., 2017). The ability of a narrative integration approach to logic

ally link an extended overview of analyticallyguided phenomena and provide an extended overview of analyticalguided phenomena was an important determinant that led to his acceptance. Using this approach, data from numerous quantitative and qualitative research studies can be synthesized from numerous research studies (Lisy & Porritt, 2016; Popay et al., 2017). This approach also makes it easy to spot gaps, topics and patterns in research studies.

Findings

Some important new revelations regarding the part played by automation and AI in human resource development are highlighted in the synthesis of findings. These findings indicate that application of artificial intelligence (AI) and automation holds great potential for enhancing human resource development (HRD) processes and results. This is bound to revolutionize entirely the process by which organizations deal with their human assets.
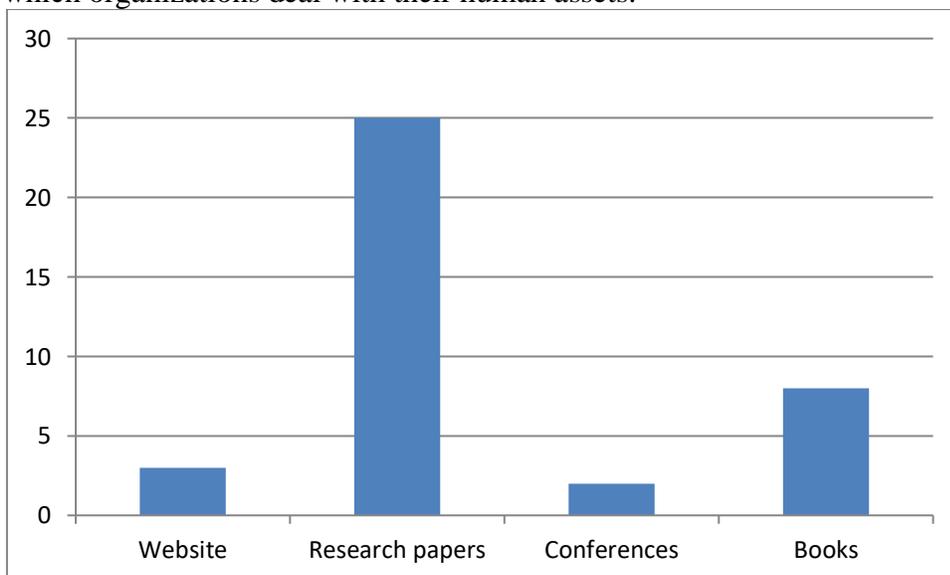
Graph 1. shows different sources of research covered in the paper. The main source remains research journals followed by books, websites, conferences on the related topic.
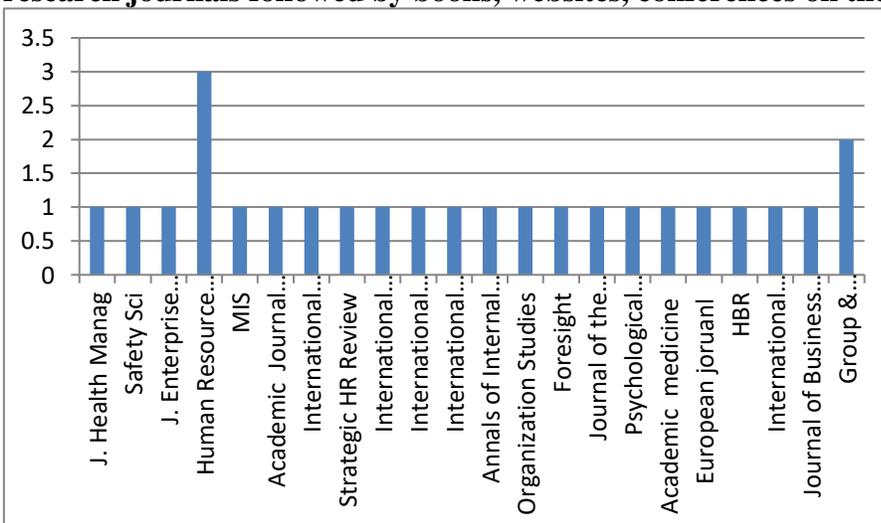
Graph 2. Shows the different journals referred to in the study. Maximum research papers are considered from journals—'Human Resource Development Review.
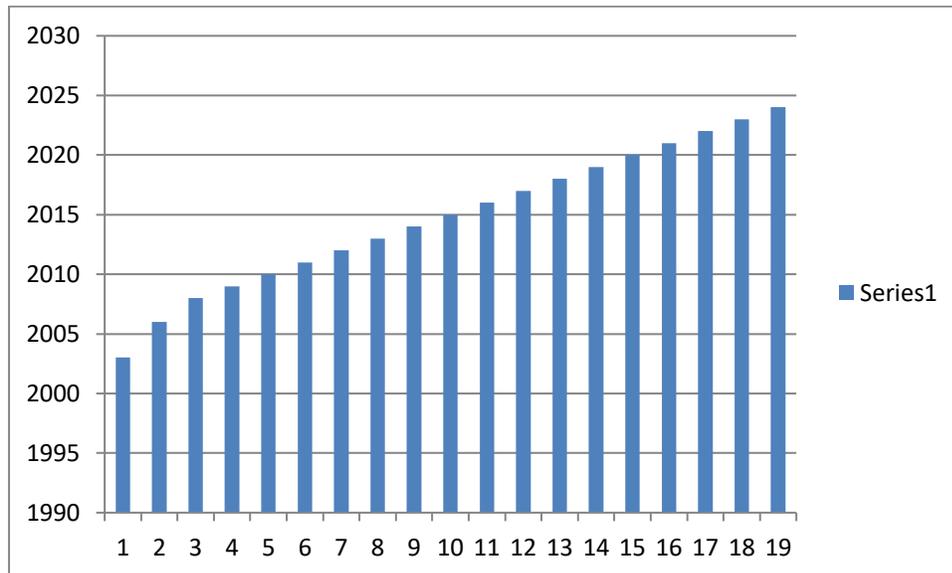
Graph 3. shows the selection of year of publication considered in the study. The maximum research papers are from 2021.

4.1Artificial Intelligence and HRD efficiency and equity

This section examines the ways in which automation and artificial intelligence have been incorporated into fields like learning, performance management, talent development, and workforce planning, and knowledge management, best practices, trends, and patterns that direct further development. AI and automation in HRD can be found by investigating the applications of these technologies in these crucial HRD functions.With roots in prior technical advancements, the integration of technology HRD is a developing domain. Traditional, instructor-led teaching methods were first replaced in the 1960s and 1970s by computer-based training systems (Noe, 2010). Employees now have a more adaptable and practical method of involvement for learning and development, which was made possible by the internet's advent in the 1990s (Ruiz et al., 2006).

Another change was spurred by the early 2000s development of Web 2.0 technology, opened the door for online communities of practice, collaborative learning settings, and social learning platforms (Salas et al., 2012).

The limitations of HRD were expanded by the democratization of education that produced richer and more urgent experiences (Marler & Fisher, 2013). Excessive technologies, such as augmente d virtual reality, and mobile learning are examples of existing advancements that contribute to the creation of highly personalized, tired contexts (Wilson & Daughty, 2018).

Including automation and artificial intelligence (AI) in HRD is an important step forward for the development of discipline. These technologies are used for a variety of HRD functions, including learning and development, talent development and management, and workforce planning, Agarw

al et al. (2023). For example, detection and fulfillment of learning needs revolutionize through data analysis identification of patterns.

In order to uncover relevant insights about skill gaps among employee and specific learning needs, AI algorithms also use machine learning and natural language processing to assess employee feedback (Agarwal et al., 2023). Therefore, use of AI in human resource domain enables customized experience of learning and helps identify gaps in skill utilizing analytics, ensuring that each employee gets instruction that are understood.AI has a dual function in personnel management and development: in addition to collecting and evaluating performance indicators, it also predicts trends, allowing for preventative measures (Davenport & Kirby, 2016; Davenport et al., 2020). In addition to helping human resource professionals with management of talent, Predictive analytics powered by AI also aids in planning of workforce.(Agarwal, 2022). HR still handles performance management, hiring, development, and other HR tasks in an agile company, but with agile approaches. The ability to swiftly and effectively identify issues that require attention, the ability to shorten the time required to develop and execute a response, and the integration of analysis and design thinking to predict, plan, and target programs with the highest chance of success are the three components of HR agility (Tarken, 2019;Qamar et al., 2021).

4.1.1AI in Training and Learning
Two AI-driven technologies that assist in identifying the top talent and offer more insightful data are predictive analytics and personalized learning systems (KaraboꙨga, 2023). According to Hemalatha et al. (2021), features of artificial intelligence (AI), such as machine vision, natural language processing, automation, and augmentation, have a significant impact on personnel management practices and can lead to increased productivity and time and cost savings.AI and automation can also be used to automate tasks like training and evaluation (Albert, 2019; Jose, 2019).

The research, collectively, shows the ways in which artificial intelligence and automation are revolutionizing learning with opportunities for data-based, personalized learning. These technologies utilize adaptive learning interfaces and intelligent tutoring systems in an effort to deliver employees the type of individualized and engaging experiences they need (Huang et al., 2021). By making those individual learning preferences and styles known, keeping a close watch over their progress, and delivering individually tailored information and advice, the union of automation and artificial intelligence can make the learning process much more effective. In the research of Sivathanu and Pillai in 2020, not only does this improve learning outcomes but also employee engagement and even the efficiency of its retention of information.

4.1.2 AI for Customization and Flexibility
HRD professionals can customize solutions to meet the individual needs of each employee because of the personalization and flexibility provided by AI-based tools (Huang & Rust, 2021). This is seen in the learning and development sector, where workers are able to maximize their potential through adaptive learning systems that offer individualized learning experiences (Brynjolfsson et al., 2021).
The central argument is that automation and AI can contribute proactively to HRD due to the most important mechanisms of flexibility and personalization. Increased employee skill and satisfacti

on acquisition is possible through personalization through more efficient and participatory learning experiences (Kim, 2022)

4.1.3 AI in better decision making

AI and automation can help organizations make sound, datacontrolled decisions about HRD processes (Meister & Willyerd, 2021). Managers will receive deep insights into research and AIbased analyses in the workforce, skill development, employee performance, predictive modeling. Actual data can be used to make strategic decisions with confidence and validity (Mamela et al., 2020).

4.1.4 Health improvements and Workplace safety

Applying artificial intelligence to human resources can be an advantage in determining and avoiding workplace risks. Systems with artificial intelligencedriven systems analyze information from many sources, such as devices, sensors, cameras, and more, to determine workplace hazards. Employees can access this information and work in a safer environment (Wang, 2020). Artificial intelligence can also be used to identify possible health risks. For example, AIpowered solutions can pursue employee health information and recognize all trends that indicate specific health issues. As stated by NGAI (2020), employees can use this data from their employers to receive personalized health recommendations and prevent future medical issues.

4.2 Impact of artificial intelligence on the effectiveness and fairness of human resource development

Regarding the reviews of Brynjolfsson et al. (2021) There is a positive relationship between improving organizational performance and the use of artificial intelligence in human resource development. Bhattcharya (2021) states that through the simplification of many types of HRD responsibilities, businesses can benefit through the implementation of AIcontrolled HR processes. This increases productivity and improves employee recruitment and training. The benefits of an AIbased HR development process go beyond employee decisionmaking, productivity, and choice and training. The adoption of AI technology can improve workers' commitment and storage (Alqahtani et al., 2022). This is achieved by working for personalized learning and growth. According to a study by Coombs et al. In 2020, artificial intelligence organizations will help improve diversity, justice, and inclusion by eliminating distortions from employment and performance management practices. A study by Huang and Rust (2021) presents an exciting view related to AI control solutions. According to a study from Shao and Shis 2020, the development has opportunities to improve employee commitments, motivations and job satisfaction in general. As from ChamorroPremuzic et al. (2019) It is very important to consider the possible negative impacts of AIbased performance management systems. This can occur in the form of high stress levels and serious problems. This important discussion addresses the feasibility of using AIbased talent development tools to improve employee satisfaction and take into account the potential threats associated with these technologies.

Artificial intelligence and automation transform the skills required by personnel development personnel and increase the overall workforce. The current study shows that HRD experts are excellent change managers fully equipped for data analysis, and because these technologies are recorded, they need to understand the use of artificial intelligence. These skills are needed to manage digital transformation in a company (Kim, 2022).

5. Consequences of the research

There are some critical implications that can be drawn from this systematic study for legislators and HRD practitioners who are interested in leveraging automation and artificial intelligence (AI) for improving HRD practice.

There is a reasonable explanation of how automation and artificial intelligence are adopted and how they change the terrain of HR development. In particular, the research highlights how import ant it is for organizations to use a comprehensive review of their ability to provide these technolo gies using automation and artificial intelligence.These assessments need to examine a broad range of issues, ranging from the business culture to employee skills and the technological environments currently in existence. A diverse strategy is needed in an attempt to reduce the chance of obstacles and increase the advantage that can be achieved. It is not just a technical advancement, but also a full organizational change (Harrison et al., 2020; Meister & Willyerd, 2021). This will be achieved by developing an environment that is favorable for artificial intelligence and automation.

6. Constraints of the research

Since they have not been well addressed in either this review or the literature, analysis showed a series of gaps in artificial intelligence and human resource development (HRD) study that need further research. For instance, there is a complete dearth of longitudinal studies in the body of research that examines the long-term effects of automation and artificial intelligence on human resource development (HRD) practices and outcomes. Although the existing research presents some understanding of the short-term consequences of these technologies on HRD, there is a compelling need for further studies that are both exhaustive and time-related so that an in-depth comprehension of the long-run impacts AI and automation will have on HRD practice and the broader labor market can be achieved. In this manner, a better insight into the development and long-term sustainability of AI-based human resource development projects would be offered.

7. Conclusion

The study in this paper illustrates that artificial intelligence can boost the capabilities of human resources and increase production levels as well. While it also showcases the worth of organizational culture, ethical values, and competencies, it also emphasizes how artificial intelligence can increase the efficiency of human resource development (HRD), flexibility, and data-driven decision making.

The research examines many uses of artificial intelligence in human resource development (HRD) through the Prisma methodology. It has potential benefits such as increased productivity and inc reased satisfaction, such as threats such as job losses and ethical challenges. This result provides a platform for further research aimed at expanding knowledge about the relationship between tec hnology, work and human progress. Considering the increased impact of artificial intelligence on human resources. Through the expertise required to effectively deal with dynamic work and tech nical environments, companies can use the benefits of technology in their HRD activities in a sust ainable way.

References:

1. Ravanera, C. & Kaplan,S. (2021,July 10). An Equity Lens on Artificial Intelligence, https://www.gendereconomy.org/artificial-intelligence/.

2. Schosser,A.(2024,July 10). What is the Role of AI in Human Resource Management? https://www.retorio.com/blog/what-ai-in-human-resource-management.
3. Itsede 0., (2003,December,2). Globalisation and the Survival of the Nigerian Economy
4. Lagos, Business Luncheon Meeting of the Nigeria-America Chamber of Commerce,, Multi-disciplinary Journal of Research and Development, 5(2),4 . http://eprints.covenantuniversity.edu.ng/2580/1/Dr. %20Ibid unni%20O .% 20S%20 11. Pdf.
5. Goodman, J. S., Fields, D. L., & Blum, T. C. (2003).
6. Cracks in the glass ceiling: In what kinds of organizations do women make it to the top?. Group & Organization Management, 28(4), 475-501.
7. Kabongo, J. D., Chang, K., & Li, Y. (2013). The impact of operational diversity on
8. corporate philanthropy: An empirical study of US companies. Journal of Business Ethics, 116, 49-65.
9. Barlett, J. (2008). Instructional technologies in human resource development:
10. Impact, models, and changes. International Journal of Instructional Technology & Distance Learning, 5, 51-65.
11. Holton III, E. F., & Swanson, R. A. (2011, December 1). Foundations of human resource
12. development. https://lsms.ac/wp-content/uploads/2023/02/18.pdf.
13. Purcell, K., & Rainie, L. (2014,December 1). Technology's impact on workers.
14. https://www.pewresearch.org/internet/2014/12/30/technologys-impact-on-workers/.
15. Bennett, E. E. (2022). *Leveraging technology to design and deliver human resource*
16. *development*. In The Emerald handbook of work, workplaces and disruptive issues in HRM 261-276. Emerald Publishing Limited.
17. Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are
18. joining forces. Harvard Business Review, 96(4), 114-123.
19. Bhatt, P., & Muduli, A. (2023). Artificial intelligence in learning and development: a
20. systematic literature review. European Journal of Training and Development, 47(7/8), 677-694.
21. Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015).
22. The influence of technology on the future of human resource management. Human resource management review, 25(2), 216-231.
23. Noe, R. A. (2020). *Employee training and development*. McGraw-Hill.
24. Ruiz, J. G., Mintzer, M. J., & Leipzig, R. M. (2006). The impact of e-learning in medical
25. education. Academic medicine, 81(3), 207-212.
26. Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of
27. training and development in organizations: What matters in practice. Psychological science in the public interest, 13(2), 74-101.
28. Marler, J. H., & Fisher, S. L. (2013). An evidence-based review of e-HRM and strategic
29. human resource management. Human resource management review, 23(1), 18-36.
30. Davenport, T. H., & Kirby, J. (2016). *Only humans need apply: Winners and losers in the age of*
31. *smart machines* , 1-281. New York: Harper Business.
32. Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence
33. will change the future of marketing. Journal of the Academy of Marketing Science, 48, 24-42.
34. Agarwal, A. (2022). AI adoption by human resource management: a study of its antecedents and

35. impact on HR system effectiveness. Foresight, 25(1), 67-81.

36. Agarwal, S., Gupta, A., & Roshani, P. (2023). Redefining HRM with artificial

37. intelligence and machine learning. In The Adoption and Effect of Artificial Intelligence on Human Resources Management, Part A, 1-13. Emerald Publishing Limited.

38. Denyer, D., Tranfield, D., & van Aken, J. E. (2008). Developing design propositions

39. through research synthesis. Organization Studies, 29(3), 393–413. https://doi.org/10.11 77/ 0170840607088020.

40. Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P.,

41. Clarke,   M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. Annals of Internal Medicine, 151(4), 65. https://doi.org/10. 7326/0003-4819-151-4-200908180-00136

42. Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., PRISMA Group. (2010).Preferred

43. reporting items for systematic reviews and meta-analyses: The PRISMA statement. International Journal of Surgery, 8(5), 336–341. https://doi.org/10.10 16/j.ijsu.2010.02.007.

44. Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., Britten, N., Roen, K.,

45. & Duffy, S. (2017). *Guidance on the conduct of narrative synthesis in systematic reviews: A product from the ESRC methods programme*. Institute for Health Research.

46. Lisy, K., & Porritt, K. (2016). Narrative synthesis: Considerations and challenges. International

47. Journal of Evidence-Based Healthcare, 14(4), 201. https://doi.org/10. 1097/01.XEB. 0000511348.97198.8c

48. Sivathanu, B., & Pillai, R. (2020). Technology and talent analytics for talent

49. Management –a game changer for organizational performance. International Journal of Organizational Analysis, 28(2), 457–473. https://doi.org/10.1108/IJOA-01-2019-1634

50. Albert, E. T. (2019). AI in talent acquisition: A review of AI-applications used in

51. recruitment and selection. Strategic HR Review, 18(5), 215–221. https://doi.org/1 0.1108/SHR-04-2019-0024

52. Jose, S. (2019).

53. Innovation in recruitment and talent acquisition: A study on technologies and strategies adopted for talent management in IT sector. International Journal of Marketing &Human Resource Management, 10(3), 1–8. https://doi.org/10.3421 8/IJMHRM.10.3.2019.001

54. Hemalatha, A., Kumari, P. B., Nawaz, N., & Gajenderan, V. (2021, July 10).

55. Impact of artificial intelligence on recruitment and selection of information technology companies. In 2021 international conference on artificial intelligence and smart systems (ICAIS) (pp. 60–66). IEEE. https://doi.org/10.1109/ICAIS50930.2021.9396036

56. Karaboˇga, T. (2023). The impact of industry 4.0 on talent management practices: A systematic

57. review. In Leadership perspectives on effective intergenerational communication and management, 53–71. IGI Global. https://doi.org/10.4018/978-1-6684-6140-2.ch004

58. Huang, J., Saleh, S., & Liu, Y. (2021). A review on artificial intelligence in education.

59. Academic Journal of Interdisciplinary Studies, 10(3), 206–206. https://doi.org /10 .36941/ ajis-2021-0077

60. Brynjolfsson, E., Wang, C., & Zhang, X. (2021). The economics of IT and digitization: Eight

61. questions for research. MIS Quarterly, 45(1), 473–477.
62. Kim, S. (2022). Working with robots: Human resource development considerations in
63. human robot interaction. Human Resource Development Review, 21(1), 48–74. https://doi.org/10. 1177/15344843211068810
64. Meister, J. C., & Willyerd, K. (2021). *The 2020 workplace: How innovative companies attract,*
65. *develop, and keep tomorrow's employees today*. HarperCollins Publishers Inc.
66. Mamela, T. L., Sukdeo, N., & Mukwakungu, S. C. (2020,August 6-7). The integration of AI on
67. workforce performance for a South African Banking Institution. In 2020 International Conference on Artificial Intelligence, Big Data, Computing and Data Communication Systems.
68. Bhattacharya, S. (2021). *AI in talent management for business excellence*. In Industry 4.0
69. technologies for business excellence,255–266. CRC Press. https://doi.org/10.1201/ 9781003140474-15
70. Qamar Y., Agrawal R.K., Samad T.A., Jabbour C.J.C. (2021). When technology meets people:
71. the interplay of artificial intelligence and human resource management, Journal of Enterprise Information Management, 34 (5), 1339-1370.
72. Tarken W. (2019, February 4) How to measure your agile HR operating performance?
73. https://www.linkedin.com/pulse/how-measure-your-agile-hr-operating-performance-tarken-sphr-csm/.
74. Wang L., Li Y., Du J., Huang X. (2020). An Artificial Intelligence-enabled health and safety
75. management system for industry 4.0, Safety Science, 124, Article 104618.
76. Ngai E.W.T., Chan T.K.H., Moon K.K.L. (2020). Artificial intelligence applications in
77. healthcare: A thematic analysis, Journal of Health Management, 22 (2), 220-234.