



RESEARCH PAPER

Artificial Intelligence is a Blessing or Curse for The Future Human Resource: A Conceptual Analysis

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ABSTRACT

Artificial intelligence is the fastest modern technology impacting human life globally. There are numerous applications based on artificial intelligence that contribute to human life. This study aims to examine the positive and negative aspects of artificial intelligence for the future human resources of any organization. Further, this study has also compared their weightage whose effects are more severe for the future human resource and how the future human resource can prepare themselves to tackle them. A qualitative approach was used to analyze them to address the issue. The results of this study show that artificial intelligence is both a blessing and a curse for future employees in any organization. However, the weightage of both is approximately equal. This study also suggests preventive measures for human resources to avoid the negative impact and gives several suggestions for job survival.

KEYWORDS Artificial Intelligence, Blessing, Curse, HRM

Introduction

Over the past few years, Artificial intelligence has made numerous remarkable impacts in our lives. One of the most intense impacts is highlighted in human resources (Makridakis, 2017). However, AI programs and devices are influenced by human resources for recruiting purposes, selection, and management of employees (Parry & Battista, 2019). The research's main motive is to emphasize AI devices' positive and negative impacts on the future of human resources in the global industry. However, artificial intelligence affects any organization's future human resources. These impacts may be harmful and optimistic for future human resources (Goralski & Tan, 2020). According to several studies, these impacts are primarily negative, although there is a bundle of positive effects. The negative impact can be minimized by the different strategic tools adopted by the employees and the organization to make their employees overcome their weaknesses to adopt these technologies and save their jobs (Ferreira et al., 2021). Although AI is a threat to all sectors and the nature of the job the organizational dynamics offer, their impact varies from position to position, according to the researchers (Klein & Todesco, 2021). The table below shows the technology's estimated threat count for the different nature of the jobs.

% OF EXISTING JOBS AT POTENTIAL RISK OF AUTOMATION

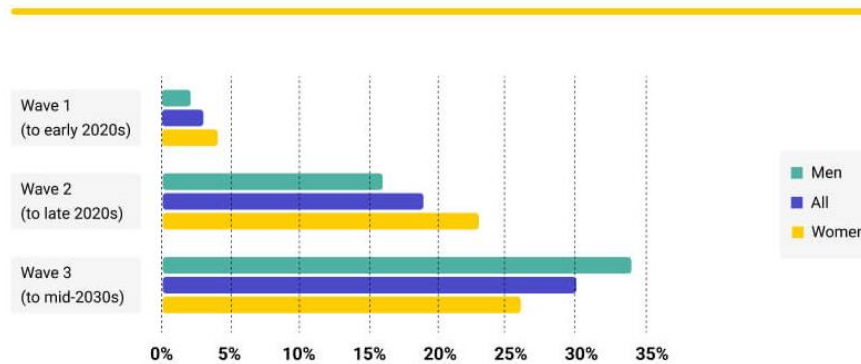


Figure 1: Percentage of Job Risk due to Automation based on AI (AI Bees, 2023).

According to the research analysis by different researchers based on the risk for future human resources management due to the automation of artificial intelligence, China will be the country at the top after India, the United States, Japan, Mexico and Germany by 2030, when this technology will be fully functional globally.

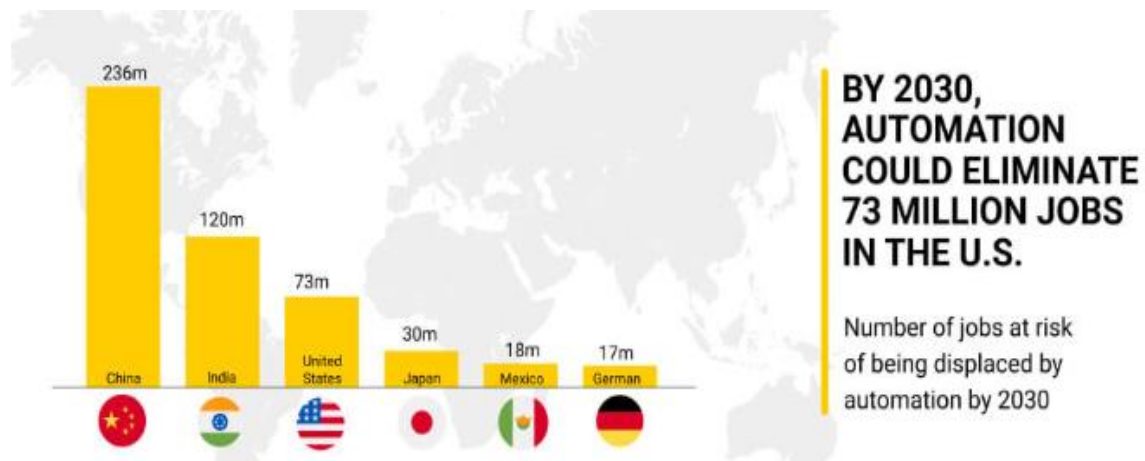


Figure 2: Job Risk due to Automation based on AI by 2030 country-wise (AI Bees, 2023).

Literature Review

Positive Impacts of AI in Human Resources

Artificial intelligence has several positive aspects for any industry's human resources. Some of the notables are recruitment and selection, improving employee onboarding, learning and development, task automation, decision-making advancement, etc. (Chowdhury et al., 2023a). Where artificial intelligence applications play a broad role, their usage in the organizational context is limited to this aspect and the most important ones. Now, we discuss each part briefly in the context of artificial intelligence (Liu et al., 2022). AI has greatly withdrawn from the time consumption and administrative burden of recruitment and selection (Jaweria et al., 2023). The AI algorithms have made it significant by identifying thousands of resumes and analyzing the most eligible candidates based on specified criteria (Einola & Khoreva, 2023). As a result, it not only saves time or shrinks administrative hardships but also enhances the quality of the hires. AI-related devices or tools assess the candidates' skills more efficiently due to better decision-making. Likewise, some companies use neuroscience-

based games to evaluate the candidates' cognitive and emotional traits (Saxena & Mishra, 2023).

AI programs, tools, and devices enhance the onboarding process of new hires (Charlwood & Guenole, 2022). AI bots and virtual assistants help the training process of new employees by providing them with training materials and in the assessment of the paperwork, reducing the time effort for HR administrators in contrast to without using AI tools. AI-based learning programs and tools can enhance employee development (Ibrahim et al., 2014). The AI-based learning programs focus on learning that identifies employee paths based on their skills, qualitative goals, and preferences (Budhwar et al., 2023). Employees can build new skills and enhance knowledge by providing such knowledge that results in significant development and performance (Köchling & Wehner, 2020). AI empowers HR fields to measure growth by analyzing multiple data sources, such as employee performance. AI systems can also help identify when individuals tend to leave the company when at risk. However, HR departments may implement higher compensation packages to entertain employees (Kameswari et al., 2023).

HR administrators prefer automation tasks. AI devices and programs may transform these administrative tasks, such as manual attendance processes, payroll systems, and managing employee records, into automation processes (Ahmad, Alam, et al., 2023). Function automation improves the quality to identify fewer errors and increases efficiency. AI-based tools and devices provide the HR department with qualitative and quantitative trends and patterns (Wang et al., 2023). With the help of data analytical, the proposed, analyzed data of employee performance, improved knowledge, and development, HR departments can make decisions easily about the training programs. The data-driven decision-making may help enhance and develop overall business performance (Verma et al., 2021).

Negative Impacts of AI on Human Resources

Although artificial intelligence (AI) technologies have significantly improved the human resources sector, there are several challenges and possible adverse effects to be aware of. There are several negative aspects of artificial intelligence for the human resources of any industry. Some of the notables are bias and fairness, loss of human interaction, job displacement, data privacy and security, resistance to change, lack of accountability, etc., where artificial intelligence applications play a broad negative role (Khan et al., 2022). Their usage in the organizational context is limited to this aspect and the most important ones. Now, we discuss each part briefly in the context of artificial intelligence (Makarius et al., 2020).

AI algorithms' objectivity depends on the quality of the training data. Biases in the past data used to train AI models may be carried over into the recruiting, performance review, and other HR procedures (Mirowska & Mesnet, 2022). This may have unjust and discriminatory effects, making some groups less advantaged in employment. To prevent and lessen bias in AI systems, HR professionals must exercise caution and invest in algorithmic fairness (Ahmad et al., 2022). There's a chance that human engagement in HR may decrease as AI devices automate certain HR activities (Jaweria, Saqib, et al., 2023). For instance, answering employee questions using chatbots may result in a lack of human touch and leave staff members feeling less supported and appreciated. HR managers must balance automation and preserve meaningful human relationships to promote a positive workplace culture (Malik et al., 2023).

A recurring worry, particularly in the human resources sector, is that technology and artificial intelligence will eventually replace human workers. While AI can automate

repetitive tasks, HR positions require human judgment, creativity, and empathy. However, some lower-level HR professions may become obsolete when AI systems replace human workers for routine activities like data input and record-keeping (Ahmad, Han, et al., 2023). AI in HR depends on a tone of private and sensitive employee data, such as employee surveys, pay information and performance reviews. It is difficult to safeguard sensitive data from breaches and ensure that privacy laws like the CCPA and GDPR are followed. Organizations may face legal and reputational repercussions if employee data is mishandled (Cheng et al., 2023).

HR professionals and employees may object to the automation and AI gadgets introduced into HR procedures. The adoption of AI in HR may be hampered by worries about data privacy, uncertainty about AI's accuracy, and fear of losing one's job (Budhwar et al., 2022). It will take new management approaches and open communication about the advantages of AI for HR to overcome these obstacles (Irshad et al., 2023). It cannot be easy to hold people accountable for judgments made by AI in HR procedures. If an AI system chooses a candidate for a position or suggests a training course, it might not be evident who bears the blame if the choice is less than ideal. One persistent problem in AI-driven HR operations is establishing accountability (Peng et al., 2023).

Material and Methods

A qualitative approach was adopted to address the issue in question. The researcher adopted a conceptual analysis technique among the different qualitative inquiry methods to conclude the matter in question. The data was gathered from the prior literature and the research articles focusing on the impact of artificial intelligence on the human being. Based on this literature, research has compared both the drawbacks and positive aspects. After that, based on the judgmental analysis, the researcher provided different solutions to overcome the future threats of artificial intelligence for human resources.

Discussion

Devices with artificial intelligence are changing the worldwide industry's approach to human resources. HR procedures could be completely changed by the benefits of AI, which include better hiring and selection, better onboarding of new hires, individualized learning and development, predictive analytics for employee retention, automation of repetitive processes, and data-driven decision-making (Ahmad et al., 2021). These advantages however come with drawbacks and difficulties. It is important to acknowledge issues related to bias and justice, human interaction loss, employment displacement, data privacy and security, reluctance to change and a lack of responsibility. To guarantee that AI devices in HR produce favorable results, HR professionals and businesses must be aware of these drawbacks and take proactive measures to resolve them. Ultimately, the future of human resources will probably require a careful balancing act between artificial intelligence and human knowledge. AI tools can improve HR procedures and decision-making (Bankins, 2021). Still rather than replacing human discretion and empathy, HR professionals should view AI tools or programs as tools to support and empower their work. Employers and employees can profit from more effective and efficient HR ecosystem that the global business can establish by utilizing AI's potential while minimizing risks. However, there are different ways to secure future human resources to be jobless from the impact of artificial intelligence (Chowdhury et al., 2023b). The purpose of these methods is to train human resources to meet their needs and adapt the changes caused by artificial intelligence.

Conclusion

This study aims to examine the positive and negative aspects of artificial intelligence for the future human resources of any organization. Further, this study has also compared their weightage whose effects are more severe for the future human resources and how the future human resources can prepare themselves to tackle them. The results of this study show that artificial intelligence is both a blessing and a curse for prospective employees in any organization. However, the weightage of both is approximately equal. This study recommends taking preventive measures for human resources to avoid the negative impact and give several suggestions for job survival.

References

- Ahmad, S. F., Alam, M. M., Rahmat, Mohd. K., Mubarik, M. S., & Hyder, S. I. (2022). Academic and Administrative Role of Artificial Intelligence in Education. *Sustainability*, 14(3), 1101. <https://doi.org/10.3390/su14031101>
- Ahmad, S. F., Alam, M. M., Rahmat, Mohd. K., Shahid, M. K., Aslam, M., Salim, N. A., & Al-Abyadh, M. H. A. (2023). Leading Edge or Bleeding Edge: Designing a Framework for the Adoption of AI Technology in an Educational Organization. *Sustainability*, 15(8), 6540. <https://doi.org/10.3390/su15086540>
- Ahmad, S. F., Han, H., Alam, M. M., Rehmat, Mohd. K., Irshad, M., Arraño-Muñoz, M., & Ariza-Montes, A. (2023). Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanities and Social Sciences Communications*, 10(1), 311. <https://doi.org/10.1057/s41599-023-01787-8>
- Ahmad, S. F., Rahmat, Mohd. K., Mubarik, M. S., Alam, M. M., & Hyder, S. I. (2021). Artificial Intelligence and Its Role in Education. *Sustainability*, 13(22), 12902. <https://doi.org/10.3390/su132212902>
- AI Bees. (2023). *How Artificial Intelligence Impacts the Future of Work*. <https://www.ai-bees.io/post/how-artificial-intelligence-impacts-the-future-of-work>
- Bankins, S. (2021). The ethical use of artificial intelligence in human resource management: a decision-making framework. *Ethics and Information Technology*, 23(4), 841-854. <https://doi.org/10.1007/s10676-021-09619-6>
- Budhwar, P., Chowdhury, S., Wood, G., Aguinis, H., Bamber, G. J., Beltran, J. R., Boselie, P., Lee Cooke, F., Decker, S., DeNisi, A., Dey, P. K., Guest, D., Knoblich, A. J., Malik, A., Paauwe, J., Papagiannidis, S., Patel, C., Pereira, V., Ren, S., ... Varma, A. (2023). Human resource management in the age of generative artificial intelligence: Perspectives and research directions on ChatGPT. *Human Resource Management Journal*, 33(3), 606-659. <https://doi.org/10.1111/1748-8583.12524>
- Budhwar, P., Malik, A., De Silva, M. T. 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. <https://doi.org/10.1080/09585192.2022.2035161>
- Charlwood, A., & Guenole, N. (2022). Can HR adapt to the paradoxes of artificial intelligence? *Human Resource Management Journal*, 32(4), 729-742. <https://doi.org/10.1111/1748-8583.12433>
- Cheng, C., Ahmad, S. F., Irshad, M., Alsanie, G., Khan, Y., Ahmad (Ayassrah), A. Y. A. B., & Aleemi, A. R. (2023). Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness. *Sustainability*, 15(17), 12945. <https://doi.org/10.3390/su151712945>
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023a). Unlocking the value of artificial intelligence in human resource management through AI capability framework. *Human Resource Management Review*, 33(1), 100899. <https://doi.org/10.1016/j.hrmr.2022.100899>
- Chowdhury, S., Dey, P., Joel-Edgar, S., Bhattacharya, S., Rodriguez-Espindola, O., Abadie, A., & Truong, L. (2023b). Unlocking the value of artificial intelligence in

- human resource management through AI capability framework. *Human Resource Management Review*, 33(1), 100899. <https://doi.org/10.1016/j.hrmr.2022.100899>
- Einola, K., & Khoreva, V. (2023). Best friend or broken tool? Exploring the co-existence of humans and artificial intelligence in the workplace ecosystem. *Human Resource Management*, 62(1), 117–135. <https://doi.org/10.1002/hrm.22147>
- Ferreira, R., Pereira, R., Bianchi, I. S., & da Silva, M. M. (2021). Decision Factors for Remote Work Adoption: Advantages, Disadvantages, Driving Forces and Challenges. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 70. <https://doi.org/10.3390/joitmc7010070>
- Goralski, M. A., & Tan, T. K. (2020). Artificial intelligence and sustainable development. *The International Journal of Management Education*, 18(1), 100330. <https://doi.org/10.1016/j.ijme.2019.100330>
- Ibrahim, M., Shahid, M. K., & Ahmed, S. F. (2014). The Impact of Telecom Services Characteristics on Consumer for Use in Pakistan. *Advances in Economics and Business*, 2(4), 172–179. <https://doi.org/10.13189/aeb.2014.020403>
- Irshad, M., Qureshi, M. A., Saraih, U. N., & Ahmad, S. F. (2023). Impact of institutional climate on the student's engagement and learning outcomes in private sector universities of Karachi. *International Journal of Management in Education*, 17(3), 297. <https://doi.org/10.1504/IJMIE.2023.130674>
- Jaweria, Jan, M., & Mudasser, A. K. (2023). SWOT Analysis of Artificial Intelligence: Empirical Evidence from the Pharmaceutical Industry of Pakistan. *Pakistan Languages and Humanities Review*, 7(3), 616–628.
- Jaweria, Saqib, G., & Jan, M. (2023). Role of Artificial Intelligence on Leadership Decision Making: A Perspective of Business Sector Organization. *Annals of Human and Social Sciences*, 4(3), 195–203.
- Kameswari, J., Palivela, H., Settur, S., & Solanki, P. (2023). Identification, Assessment and Optimisation of Key Impact Variables in People Analytics Using AI. In *The Adoption and Effect of Artificial Intelligence on Human Resources Management, Part A* (pp. 245–282). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-027-920231013>
- Khan, Y., Su'ud, M. B. M., Alam, M. M., Ahmad, S. F., Ahmad (Ayassrah), A. Y. A. B., & Khan, N. (2022). Application of Internet of Things (IoT) in Sustainable Supply Chain Management. *Sustainability*, 15(1), 694. <https://doi.org/10.3390/su15010694>
- Klein, V. B., & Todesco, J. L. (2021). <scp>COVID</scp> -19 crisis and <scp>SMEs</scp> responses: The role of digital transformation. *Knowledge and Process Management*, 28(2), 117–133. <https://doi.org/10.1002/kpm.1660>
- Köchling, A., & Wehner, M. C. (2020). Discriminated by an algorithm: a systematic review of discrimination and fairness by algorithmic decision-making in the context of HR recruitment and HR development. *Business Research*, 13(3), 795–848. <https://doi.org/10.1007/s40685-020-00134-w>
- Liu, X., Ahmad, S. F., Anser, M. K., Ke, J., Irshad, M., Ul-Haq, J., & Abbas, S. (2022). Cyber security threats: A never-ending challenge for e-commerce. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.927398>

- Makarius, E. E., Mukherjee, D., Fox, J. D., & Fox, A. K. (2020). Rising with the machines: A sociotechnical framework for bringing artificial intelligence into the organization. *Journal of Business Research*, 120, 262-273.
- Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60.
- Malik, A., Budhwar, P., Mohan, H., & N. R., S. (2023). Employee experience -the missing link for engaging employees: Insights from an MNE's AI-based HR ecosystem. *Human Resource Management*, 62(1), 97-115.
- Mirowska, A., & Mesnet, L. (2022). Preferring the devil you know: Potential applicant reactions to artificial intelligence evaluation of interviews. *Human Resource Management Journal*, 32(2), 364-383. <https://doi.org/10.1111/1748-8583.12393>
- Parry, E., & Battista, V. (2019). The impact of emerging technologies on work: a review of the evidence and implications for the human resource function. *Emerald Open Research*, 1, 5. <https://doi.org/10.12688/emeraldopenres.12907.1>
- Peng, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Ali, Y. A., & Awwad, E. M. (2023). Impact of Digitalization on Process Optimization and Decision-Making towards Sustainability: The Moderating Role of Environmental Regulation. *Sustainability*, 15(20), 15156. <https://doi.org/10.3390/su152015156>
- Saxena, M., & Mishra, D. K. (2023). Artificial intelligence: the way ahead for employee engagement in corporate India. *Global Knowledge, Memory and Communication*. <https://doi.org/10.1108/GKMC-09-2022-0215>
- Verma, S., Singh, V., & Bhattacharyya, S. S. (2021). Do big data-driven HR practices improve HR service quality and innovation competency of SMEs. *International Journal of Organizational Analysis*, 29(4), 950-973. <https://doi.org/10.1108/IJOA-04-2020-2128>
- Wang, C., Ahmad, S. F., Bani Ahmad Ayassrah, A. Y. A., Awwad, E. M., Irshad, M., Ali, Y. A., Al-Razgan, M., Khan, Y., & Han, H. (2023). An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce. *Heliyon*, 9(8), e18349. <https://doi.org/10.1016/j.heliyon.2023.e18349>