



Journal Homepage: -[www.journalijar.com](http://www.journalijar.com)

## INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/16668  
DOI URL: <http://dx.doi.org/10.21474/IJAR01/16668>



### RESEARCH ARTICLE

#### HUMANS REPLACED BY AI IN HR PRACTICES?-APERSPECTIVE SCANNER

Pallavi Pandey and Avichal Sharma

#### Manuscript Info

##### Manuscript History

Received: 10 February 2023

Final Accepted: 14 March 2023

Published: April 2023

##### Key words:-

Artificial Intelligence, Human  
Intelligence, HR Practices, Creative  
Cognitive Skills, Literature Analysis

#### Abstract

This paper presents a panorama of the research that is based on 20 subsisting types of research presupposing that a paradoxical situation is breathing, ergo the humans are being supplanted from performing human resource practices in essence. Researchers are skeptical about the superseding of various jobs from the liveware to the software, indicatively, Artificial Intelligence software. The research is performed leaning on the secondary data collected. Study shows that the inclusion of AI in HR practices may fish out many of the jobs, contrarily, it might also lead to the hatching of a fresh set of jobs summoning highly digitalized intelligence. Human intelligence and artificial intelligence need to be in consociation and apportion responsibilities, in such wise, that expert systems will guard peculiar processes in HR practices, whereas, intelligent retrievals will concentrate on creative cognitive skills, like leadership and problem-solving. Many researchers advocate that a harmonious association between AI and HR is an absolute necessity for the refinement of existing HR practices. Therefore, this paper aims to provide the literature analysis on the active studies with regard to AI and HR practices, where, neither the former overpowers the latter nor the latter surpasses the former, rather there exists an equipoise of intellectuality, be it human or artificial.

Copy Right, IJAR, 2023.. All rights reserved.

#### Introduction:-

The potential to conjoin skills, knowledge, process, technique, and tools together, in an effort to make the life of humans secure and easier by solving their problems lies with Technology. "Artificial intelligence is defined as "an ideal intelligent" machine that is the flexible agent that perceives its environment and takes actions that maximize its chance of success at some goal." (Yawalkar, 2019). It can help to reduce the workload and work pressure on the employees at the workplace can be reduced by folds in various business functions. This minute artificial intelligence has set foot in the gross system of an organization. Distinctly, In the human resource department humans are replacing the humans from performing human resource practices and the varied functions of human resource practices by its nature as, candidate screening, recruitment, alignment of human resource activities, etc. Time and again it has been sighted that the role of progress in technology in the gross hike of the business is climacteric. The detangled answers with the essence of clarity that technology provides to the tangled and complicated questions of the organizations are alluring to managers from all domains including HR. However, the flipside says that HR is the only function that has a human touch to a larger extent. It is an art of dealing with human-related issues, so the presence of AI might hamper the humanistic approach towards HR-related tasks. The art of dealing with the human side of the business leads to more permanent solutions to complex problems. (Rana, 2018). In order to accomplish

the current study, 20 research papers were studied thoroughly, their focus was on the impact of AI on HR, either positive or negative, or both, and peeping into the future of HR through the lenses of AI.

Gartner concurs, with a recent report showing that our increasingly digital workplaces are designed to promote employee agility and engagement through a more “computerized” work environment. Employees’ digital dexterity is predicted to become a critical source of competitive advantage for organizations. Gartner forecasts that by 2020, algorithms will positively alter the behavior of over 1 billion global workers, which will start with job seekers seeking “automated advice” on how to improve their ranking in job-matching algorithms. (Hogg, 2019)

The scope of AI is disputed: as machines become increasingly capable, tasks considered as requiring "intelligence" are often removed from the definition, a phenomenon known as the AI effect, leading to the quip in Tesler's Theorem, "AI is whatever hasn't been done yet." Basic artificial intelligence programs that can help recruiters with the sourcing and screening processes include screening chatbots and automated social media scraping tools. These tools are designed to provide weak or average indicators about an applicant’s likelihood of success with the company. Unilever is one company that has utilized an effective artificial intelligence screening process designed with the help of its partner Pymetrics. The hiring strategy requires applicants to spend around twenty minutes playing some neuroscience-based Pymetrics games. These scientific games sneakily measure a candidate’s qualities like memory, relationship to risk, ability to read contextual cues, and ability to focus. These intermediate AI applications usually give hiring managers a fairly good indication of whether a candidate is a good fit for the position or not, but these predictors usually don’t focus on specific job metrics. Advanced artificial intelligence solutions, however, utilize custom algorithms that are created specifically to link unique job performance measures to potential candidates that best exhibit these qualities. These types of AI software programs are so incredibly advanced that they can literally detect the flash of contempt that passes over an applicant’s face when he discusses his ex-boss. (WirePiazza, 2018)

**Literature Review:-**

1. Managing continuous improvement is one challenge in front of industries. To enhance speed and routine work, most industries adopt modern technologies. Most researchers and experts also recommend industries make use of artificial intelligence tools and digital technologies. Artificial Intelligence and machine language has been used by many companies in the field of human resource department where AI plays an integral role in recruitment, selection, hiring, analyzing performance, collecting data regarding employees, providing real-time information, and providing accurate information (Yawalkar,2019).
2. Despite providing ease of work and efficiency in various fields of HR, AI is still unable to overpower the importance of human involvement in the implementation of HR functions. The personal connection and crucial behavioral understanding of the human mind is the job of the HR department only. If all the tasks are allocated to the robots the organization may never be able to sustain employees or their commitment to the organization. So, human resources must not stop doing what they earlier used to do but must take assistance from AI to do it in a better manner. (Rana,2018).
3. There is a substantial gap between the promise and reality of artificial intelligence in human resource (HR) management. This article identifies four challenges in using data science techniques for HR tasks: the complexity of HR phenomena, constraints imposed by small data sets, accountability questions associated with fairness and other ethical and legal constraints, and possible adverse employee reactions to management decisions via data-based algorithms. It then proposes practical responses to these challenges based on three overlapping principles— causal reasoning, randomization and experiments, and employee contribution— that would be both economically efficient and socially appropriate for using data science in the management of employees. (Tambe, Cappelli&Yakubovich, 2019)
4. As much as the HR technology landscape continues to be disrupted by AI. HR teams need to balance these cognitive tech advancements with transparency. HR leaders and practitioners need to have a clear understanding of how decisions are being made to mitigate unknowingly injecting bias into their programs, this transparency will be essential in making sure that employees trust the new technology. (Ahmed,2020)
5. In HR, it is our responsibility to help navigate business leaders towards making the best business decision, often with the use of technology. AI, like analytics before it, has huge potential. The main advantage is increased productivity – repetitive tasks are completed by the technology in a faster and more accurate manner, giving HR professionals more time to work on human-centric tasks. (Hogg,2019).
6. The success strategy to be adopted for effective implementation of AI to gain the competitive edge is by leveraging AI in sourcing and early screening, learning about the existing and emerging AI tool and preparing

the organization accordingly, upskilling or resell employees slowly to adapt to the automation easily, give importance to AI tool that improves employees' engagement and experience. An organization that hesitates to adopt first should follow AI closely and learn what's coming ahead and not oppose and restrict it immediately. The future of HR will most probably involve a human-machine collaboration and that can end up being a good thing. (Merlin & Jayam, 2018).

7. In the present-day complex and dynamic business environment, the application of information and communication technology has become inevitable in all the operations of business enterprises across the world. Human resource management key operation of an organization as the efficiency of the whole organization is highly influenced by the successful operation of human resource planning and management. This paper has dealt with the application of ICT in the HRM of an organization highlighting the challenges faced by and the opportunities available for organizations in the present-day business environment. (Ali and Shanfari, 2019).
8. The discussion of mature application scenarios could uncover that, across different techniques and task categories, fitting combinations could be found. This basically underscores the assumption of the broad application potential of AI techniques in all categories of HR tasks. However, it also became very clear that these application potentials are far from being explored and, all the more, far from being practically exploited; also, not each AI technique is suitable for HR management, and not each HR task can be solved by an AI technique. (Strohmeier and Piazza, 2015).
9. Daily advances in technology are present and the insertion of new ways to make daily life easier. This is in line with the market scenario that urges and exalts day-to-day practices of process management and people management that seek to make the organization economically viable and stand out from the competition. Faced with this reality, as a theoretical contribution, this article advances in research on the evolution of Artificial Intelligence in the Human Resources area. The papers and proceedings analyzed in the present study show variations in the behavior of interest in researching the theme, being developed by different authors and in different universities and research centers. The motivations, objectives, methods, AI techniques, and HR applications are also varied (Jatobá, Mariana; Santos, Juliana; Gutierrez, Ives; Moscon, Daniela; Fernandes, Paula O.; Teixeira, João Paulo (2019)).
10. It is still a debate that whether the upcoming AI systems will just automate the existing HR functions and will assist the HR professionals or it will augment people who are doing these jobs. As feared by many scientists like Stephen Hawking, that AI could take over and can surpass human ability and intelligence, the progresses made in AI should be kept under check. It is true that with the rise of AI function in HR, the employees will be affected in multiple ways, and the biggest fear and risk is mass unemployment, hence focus should be on devising ways that make AI and Human resources like each other's complement and not substitutes. (Mathur, 2019).
11. The authors conclude that AI removes bias from assessment, recruitment and training processes and can save businesses significant time and resources as well as improve the cultural fit and diversity of their recruits. There is a balance to be struck, though, as the systems used are only as good as the science supporting the selection – and humans must ultimately retain the role of decision-makers. (Altemeyer, 2019).
12. One of the biggest impacts of artificial intelligence (AI) on HR is and will continue to be around performance management. Adobe showed us years ago that performance management is not just a one-time discussion at the end of the year, but rather an ongoing, data-driven conversation. Variations of that approach are being recognized by an increasing number of companies that understand the need for continuous touch points, and more real-time feedback so employees receive the positive recognition they deserve as well as constructive feedback when appropriate. (Buck, B. and Morrow, J. (2018)).
13. The future of HR is both digital and human as HR leaders focus on optimizing the combination of human and automated work. This is driving a new priority for HR: one which requires leaders and teams to develop fluency in artificial intelligence while they re-imagine HR to be more personal, human, and intuitive. (Meister, 2019).
14. Artificial Intelligence based software will enable HR to perform and deliver the best. Thus freeing up HR staff to get on with more meaningful responsibilities and assignments which truly matter for the organization's perform. AI helps to lessen the administrative burden on HR professionals and helps them to take decisions based on data patterns rather than gut feeling alone. AI is also being used for recruiting, reducing favoritism, and retaining top talent. Moreover, AI use is expected to grow as the technology becomes more trustworthy and reasonable. There are strong economic incentives for the development of new technologies to take place as fast as possible without killing time on costly risk analyses. These unfavorable conditions increase the risk that we slowly lose our hold on AI technology and its use. This should be disallowed on all possible levels, including politics and the research itself. An elementary precondition to directing AI development will be to broaden the field of AI safety. (Rathi, 2018).

15. AI and automation are already being integrated into HR in many organizations around the world. However, we can in the near future expect to see technology not only automating back-office functions but increasingly taking on the more “human” elements of HR roles. There is a fine balance between man and machine, and while these technologies will increase efficiency, decrease bias, and improve the value of HR in businesses, the human touch will always be the key to success. (Gikopoulos, J. (2019).
16. An organization would require a successful Smart HR 4.0 strategy to cope with the challenges of Industry 4.0 transformation. Emerging technologies such as Internet-of-Things, Big Data, and artificial intelligence will automate most of the HR processes, resulting in efficient and leaner HR teams. Both organizational structure and leadership style changes would be required for efficient Smart HR 4.0 implementation that would allow HR departments to play a more strategic role in the overall organization’s growth. (Sivathanu, B. and Pillai, R. (2018).
17. Technology can already e-enable a number of HR processes, say from manager/employee self-service to records/payroll administration. In the more-advanced organizations, there is no HR intervention because managers and employees are trusted to make decisions or update records (within limits). In other organizations, HR teams still try to control the data updates, perhaps for good verification reasons or perhaps for residual control. In time, more and more of these transactions will be automated. CEOs will expect this to happen and there will be no acceptable technological excuses. Culturally, there will be a ‘service now’ climate. Thus, the challenge for some HR teams will be a mindset shift, more than any technological adoption challenge. (Reilly, P. (2018).
18. The time is now for AI. We are already welcoming it into our personal lives (the same Oracle and Future of Work study found 70 percent of people are using some form of AI in their personal life) and the potential impact of AI in the workplace is huge. HR professionals have the opportunity to incorporate AI and other emerging technologies in the workplace to enhance the employee experience, thereby leading their organization’s digital transformation and making work more human, captivating and inspiring. (He, E. (2018).
19. The findings indicate that work from home (WFH) arrangements required by the enforced conditions governing work and workplaces during the COVID-19 crisis have expedited the acceptance by organizations and employees for technological change and job re-design. It is anticipated that beyond the current COVID constraints, the future will involve hybrid workforces where tasks will be divided between those that can be undertaken remotely from the workplace and those that must occur at the organizational premises. For HR functions, it is anticipated that new technology will change work so that it will be less transactional and more meaningful. Challenges regarding these transitions include the need for trust in the relationships between managers/supervisors and employees; the requirement that employee surveillance and privacy when working remotely is reasonable and legal; and organizational responsibility towards ensuring that all staff has adequate access to technological resources when working from home. (Larkin, R., Connell, J., & Burgess, J. (2021).
20. The study says the impact of developments in the field of AI on the hiring process and the recruitment industry. The application of AI for managing the recruitment process is leading to efficiency as well as qualitative gains for both clients and candidates. (Upadhyay, A.K. and Khandelwal, K. (2018).

### **Intrusion or Inclusion of AI in HR?**

Human Resources Practices and their peripheral functions ordeal the ascendant of Artificial Intelligence and it is apparent with the introduction of HRIS, chatbots, etc. There is an urgent need to appraise and appreciate the glory of human intelligence that made artificial intelligence capable enough of bringing in revolutionary advancements in all fields including HR. Advancements occurred due to Humans must not be valued in such a way that it replaces the humans themselves, as happened in the case of the AI system adopted by Facebook, where the intrusion of AI over Humans grabbed the eyeballs when the news broke- **“it seems that artificial intelligence (AI) could be out to get us.**

It sounds like something from a science fiction film - the Sun even included a few pictures of scary-looking androids. So, is it time to panic and start preparing for the apocalypse at the hands of machines? Probably not. While some great minds - including Stephen Hawking - are concerned that one day AI could threaten humanity, the Facebook story is nothing to be worried about.

Days after Tesla CEO Elon Musk said that artificial intelligence (AI) **was the biggest risk**, Facebook shut down one of its AI systems after chatbots started speaking in their own language, which used English words but could not be understood by humans. According to a report in **Tech Times** on Sunday, the social media giant had to pull the plug on the AI system that its researchers were working on "because things got out of hand". The trouble was, while the

bots were rewarded for negotiating with each other, they were not rewarded for negotiating in English, which led the bots to develop a language of their own. Musk has been speaking frequently on AI and has called its progress the biggest risk we face as a civilization. AI is a rare case where we need to be proactive in regulation instead of reactive because if we're reactive in AI regulation it's too late.

**Insight into the scenario**

So as to better utilize the software so that it doesn't supersede the livewards, an understanding of the levels of AI is necessary. AI is generally divided into three stages. These are:

**First Stage:**

Artificial Narrow Intelligence (ANI)-This is the most basic technology in artificial intelligence, limited in scope with intelligence restricted to only one functional area.

**Second Stage:**

Artificial General Intelligence (AGI)-In this, artificial intelligence works at an advanced level, this includes the power of reasoning, solving problems, and abstract thinking which is mostly on par with humans.

**Third Stage:**

Artificial Super Intelligence (ASI)-This is the highest form of intelligence explosion in which AI will surpass human intelligence in almost all fields. (UBS, 2018).

**Threats intrusion of AI may pose upon HR**

It has been proved and reinforced in various studies that customers hate speaking to a machine while looking for solutions to their problems. At workplaces too, no matter how intelligent these machines become capable of reading faces, analysing moods, giving solutions they still cannot respond and deal with human emotions in a dependable way. (Mathur, 2019).

Nowadays, necessary skillset for employees are required due to involvement of artificial intelligence into human resource department. Most of the times it is difficult for employees to adopt and learn the AI tools and have a proficiency in the field of digital technologies (Jain, 2017).

The bosom of a company is its liveware that has the ability and capability of developing, advancing and implementing the softwares implementing which may affect the management and functioning of any organization. It is pivotal to get the suitable personnel to handle AI tools in order to cope up with the industrial challenges, specifically concerning HR department. Another limitation and challenge is restricted HR department barring it from taking decisions in day-to-day life as technology overcomes the authority and role of HR into decisions making in an organization.

**Prospects and benefits of inclusion of AI in HR**

According to the survey "The State of Artificial Intelligence", by HR.com, AI has the greatest potential to enhance HR function in five functional areas- analytics and metrics, time and attendance, talent acquisition, training and development, and compensation and payroll. (HR.com, 2017)

1. Minimize the load on administrative staff of preliminary screenings held in the company.
2. It ensures quick and apt talent acquisition by finding the right candidates for the desired role.
3. AI helps to keep a check on and forecast the rate of employee retention and turnover at workplace.
4. It can get over the constraints of the human brain and cognitive skills.
5. It guarantees accuracy to a major extent or better say completely.
6. Biased decision-making will be minimized to a level where it gets negligible.

**Conclusion:-**

After thoroughly analyzing the outcomes of the study, it is significant to seek reflective image on the study. As discussed earlier, the consequences of the literature analysis showed that single handedly, neither HR nor AI have the capability to excel. Further the benefits and challenges being discussed in the study leaves us in dilemma, as for instance, the discussion states that AI may increase job opportunities by developing technologies that with the help of human resources will benefit by folds, whereas, automation of majority of manual work may end up snatching

away jobs of many, causing human resource practices without humans. Therefore, now the most crucial question that can jump into our mind; Are Humans ousted from performing Human Resources Practices, in wake of soaring AI dominance? Yes, if, what can be the reason? To answer this question in the light of literature analysis, it is necessary to figure out the most probable reasons specifically through the examples of Facebook and Microsoft wherein entire AI unit was shut down due to AI having developed its own language and surpassing the commands of the human developer. Therefore, to counter phase the scenario, a success mantra needs to be adopted wherein AI can be modeled and infused into the system in such a way that helps the organization gain a competitive edge.

What lies in the universe of HR tomorrow necessarily requires liveware-software collaboration and that can end up being a good thing, as balance is the key to success of another is, excess of anything causes havoc and destruction. Thus, its high time humans understand manner of practices human resources to spare them from not being replaced by AI. HR departments needs to overcome their tunnel vision as well as also not be exploitative towards technology in order to be welcoming towards changes. Else, the fear of many scientists like Stephen Hawking, that AI could take over and can surpass human ability and intelligence, the progresses made in AI should be kept under check. None can deny the fact that because of involvement of AI function in HR, the human resources will be affected in varied ways, however the biggest fear and risk shall be mass unemployment, or else overutilization of technology making humans themselves give over their remote into the hands of AI. Hence emphasis must be exerted on formulating ways, which make AI and Human resources each other's complements and not substitutes.

### References:-

1. Yawalkar, M. V. V. (2019). a Study of Artificial Intelligence and its role in Human Resource Management. International Journal of Research and Analytical Reviews (IJRAR), 6, 20-24.
2. Buck, B. and Morrow, J. (2018), "AI, performance management and engagement: keeping your best their best", Strategic HR Review, Vol. 17 No. 5, pp. 261-262. <https://doi.org/10.1108/SHR-10-2018-145>
3. Gikopoulos, J. (2019), "Alongside, not against: balancing man with machine in the HR function", Strategic HR Review, Vol. 18 No. 2, pp. 56-61. <https://doi.org/10.1108/SHR-12-2018-0103>
4. Sivathanu, B. and Pillai, R. (2018), "Smart HR 4.0 – how industry 4.0 is disrupting HR", Human Resource Management International Digest, Vol. 26 No. 4, pp.7-11 <https://doi.org/10.1108/HRMID-04-2018-0059>
5. He, E. (2018), "Can artificial intelligence make work more human?", Strategic HR Review, Vol. 17 No. 5, pp. 263-264. <https://doi.org/10.1108/SHR-10-2018-146>.
6. Larkin, R., Connell, J., & Burgess, J. (2021), "AI and Meaningful work: exploring the challenges for HR Professionals".
7. Upadhyay, A.K. and Khandelwal, K. (2018), "Applying artificial intelligence: implications for recruitment", Strategic HR Review, Vol. 17 No. 5, pp. 255-258. <https://doi.org/10.1108/SHR-07-2018-0051>
8. Rana, D. (2018). The future of HR in the presence of AI: A conceptual study. The Future of HR in the Presence of AI: A Conceptual Study (November 24, 2018).
9. Hogg, P. (2019). Artificial intelligence: HR friend or foe?. Strategic HR Review.
10. WirePiazza, L. N. (2018). How Can Artificial Intelligence Work for HR. SHRM Y. Zhang, DK Robinson, AL Porter, D. Zhu, G. Zhang, and J. Lu (2016). Technology road mapping for competitive technical intelligence, Technological Forecasting and Social Change, 110, 175-186.
11. Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. California Management Review, 61(4), 15-42.
12. Ahmed, O. (2018). Artificial intelligence in HR. International Journal of Research and Analytical Reviews, 5(4), 971-978.
13. Maduravoyal, C. (2018). Artificial intelligence in human resource management. International Journal of Pure and Applied Mathematics, 119(17), 1891-1895.
14. Zahra, A., & Scholar, M. P. (2012, February). ICT and HRM: management perceptions about the changing scenario. In 3rd international conference on business management, Lahore(pp. 1-14).
15. Strohmeier, S., & Piazza, F. (2015). Artificial intelligence techniques in human resource management—a conceptual exploration. In Intelligent techniques in engineering management (pp. 149-172). Springer, Cham.
16. Jatobá, M., Santos, J., Gutierrez, I., Moscon, D., Fernandes, P. O., & Teixeira, J. P. (2019). Evolution of artificial intelligence research in human resources. Procedia Computer Science, 164, 137-142.
17. Mathur, S. (2019). Artificial Intelligence: Redesigning Human Resource Management, Functions and Practices. Human Resource: People, Process and Technology.
18. Boris Altemeyer (Cognisess, Bath, UK), Strategic HR Review, ISSN: 1475-4398, Article publication date: 13 February 2019, Issue publication date: 16 April 2019

19. Meister, J. (2019). Ten HR trends in the age of artificial intelligence. Forbes. Retrieved, 20.
20. Rathi, D. R. (2018). Artificial intelligence and the future of hr practices. International Journal of Applied Research, 4(6), 113-116.
21. Reilly, P. (2018). The impact of artificial intelligence on the HR function.
22. HR. com (Firm) SkillSoft (Firm). (2017). Supporting the modern learner: creating great learning cultures for today's diverse, multi-faceted workforce.