

Influence of Artificial Intelligence in Human Resource Management: A Comprehensive Review

Nikita Saklani¹ and Ashli Khurana²

¹Visiting Faculty, L.A.D & Smt. R.P. College for Women, Nagpur, INDIA

²HR Manager, Ajanta Agencies, Nagpur, INDIA

¹Corresponding Author: nikitasaklani13@rediffmail.com

Received: 02-09-2023

Revised: 18-09-2023

Accepted: 30-09-2023

ABSTRACT

In the current competitive environment, precise data collection and analysis are critical for many professional divisions to ensure smooth daily operations. Artificial intelligence (AI), which includes subfields like machine learning, makes it possible for industries to work quickly and efficiently in a field of computer science that mimics the thought processes of humans. In human resources, AI tools can automate routine tasks, allowing employees to focus on more strategic and engaging work, including subfields like machine learning, and making it possible for industries to work quickly and efficiently. Adopting cutting-edge technology within an organization is crucial for effectively deploying AI due to increasing business pressures. Even demanding bosses recognize the value of AI in the workplace. This paper explores the impact of AI on human resources.

Keywords-- Artificial Intelligence, Human Leadership, Cognitive Representations, Human Resource Management

I. INTRODUCTION

Defining artificial intelligence is challenging due to its ambiguity. The first dimension relates to whether the definition is based on logic or social behaviour, while the second concerns whether it refers to a person or an idea. Defining artificial intelligence is challenging due to its ambiguity. The first dimension relates to whether the definition is based on logic or social behaviour, while the second concerns whether it refers to a person or an idea. Turing expedited computer science research to revolutionize the world, even though the phrase "artificial intelligence" was not even used until 1956. Minsky built the first microcomputer, leading to robot studies and the commencement of artificial intelligence research in 1970 despite early promises.

There is a dispute surrounding the scope of AI. As robotics advances, tasks once considered to require "intelligence" are redefined. This phenomenon, known as the AI effect, has led to the formulation of Tesler's Theorem. This theorem humorously suggests that "Artificial intelligence (AI) refers to tasks or skills that have not yet completed." Despite its widespread use, Optical Character Recognition (OCR) is often not

considered a part of "Artificial Intelligence." Successfully understanding human speech, competing at the highest level in strategic gaming systems (such as chess and Go), autonomously functioning cars, intelligent routing in content delivery networks, and military simulations are all examples of modern machine capabilities defined as AI. Kaplan and Hahnlein divide artificial intelligence into three types: analytical artificial intelligence, human-inspired artificial intelligence, and humanizing artificial intelligence. Analytical AI has only two characteristics consistent with cognitive intelligence: creating a cognitive representation of the world and using learning based on experience to make future decisions. AI technology has evolved to combine mental and emotional intelligence, taking cues from human behaviour and incorporating emotions into its decision-making process. AI with human-like abilities in cognition, emotion, and social interaction can confidently interact with others.

Human resource management involves managing employees to improve productivity and well-being. However, managing a workforce can be a difficult and crucial task due to the diverse and ever-changing nature of employees. Every individual has unique mental abilities, strategies, emotions, and behaviours, making them different from one another and influenced by various factors. People react, feel, think, and act, so you can't treat them like machines and move and change them like a room layout template. Human Resource Management (HRM) involves managing individuals within an organization with a people-centric approach. An HR approach that views employees as a critical resource enables managers to maximize their workforce's potential. This approach benefits the organization and its employees' growth, development, and self-satisfaction. Thus, HRM is a system that focuses on the development of human resources on the one hand and the effective management of human resources so that people can enjoy human dignity in employment.

Our understanding of HRM derived from Boselie's (2014) definition, which states that HRM encompasses management decisions concerning policies and practices that influence employment relationships and pursue specific objectives. These objectives are performance goals that are defined and evaluated

through various means. Using the Harvard model of HRM, Beer, Boselie, and Brewster (Citation 2015) integrate these goals into a multidimensional performance construct. Performance is not only about organizational effectiveness (as reflected in financial performance indicators and productivity indicators) but also employee well-being (as reflected in employee satisfaction and health) and societal well-being (as reflected in influence). It is also considered the creation of a corporate organization.

II. AIM

1. To research artificial intelligence as a concept.
2. Research artificial intelligence and its place in managing human resources.
3. Researching the advantages of artificial intelligence in managing human resources
4. Research the difficulties presented by AI for the human resources division.

III. ROLE OF ARTIFICIAL INTELLIGENCE IN HR

HR divisions are adopting digital techniques like data analysis, AI, and cloud computing to streamline resources (Amla Malhotra, 2017). Artificial intelligence, digital technologies, and chatbots have become common in human resource management.

Artificial intelligence plays the following functions in human resource management:

1. Recruitment: According to the researcher's article (Amla Malhotra, 2017), barely 40% of businesses and sectors use artificial intelligence. SAT, Facebook, and GE all use digital tools during the hiring process to evaluate job applicants, conduct interviews, and identify fresh talent.

The hiring manager can review the application using AI, and the applicant can expect a prompt response. When it comes to answering questions and resolving issues about the recruitment process in a business, a chat box system or automated answering machine is crucial.

2. Screening and Interview Process: Artificial intelligence can automate the interview process using word or voice pattern tests. AI software is used for digital interviews, improving the candidate experience. Software applications such as Amy and Clara are commonly employed to arrange and coordinate interviews and meetings within a business context.

3. Lessen the Administrative Burden: HR must perform multiple tasks in a company, and businesses use technology and artificial intelligence to lighten the load. AI offers solutions to issues and aids in boosting HR productivity inside an organization.

4. Selecting: The researcher (Rajesh, 2018) looked at how AI can help human resource managers find the ideal applicant quickly and discover candidates who are a

good fit for an organization. Employers aim to reduce workload by leveraging technology and artificial intelligence in multitasking HR functions. AI offers solutions to issues and aids in boosting HR productivity inside an organization.

5. Reduce Discrimination: Nowadays, AI is being used to reduce favouritism, which will help increase transparency in the workplace. In such a way, organizations can select the resume. Job descriptions can be analyzed using AI applications (Albert, 2019).

6. Increase Efficiency: Artificial intelligence can reduce employee redundancy and increase workplace efficiency by automating tasks.

7. Strengthen Workplace Learning: In the modern world, digital and computer technology can play a hidden function in business. Businesses can use computers and modern technology to analyze data, provide real-time feedback to trainees, and adjust their actions based on feedback and progress (Albert, 2019). Businesses adopt Microsoft 365, which facilitates employee work and boosts workplace productivity, to save time. According to Amla and Malhotra (2017), AI technologies include Engazify (for feedback), Obie and Niles (for knowledge exchange), Wade and Wendy (for job progression), and Duolingo (for the learning domain).

IV. ARTIFICIAL INTELLIGENCE IN HR

Benefit

1. Lighten the workload for the company and administrative staff.
2. It will assist in finding the best applicants for the position and acquiring talent.
3. AI enables the prediction of staff turnover rates in the workplace.
4. It can function appropriately and get over human limits.
5. There will be a lower probability of error.
6. It will keep the various departments and workflows running smoothly.

Limitations

Artificial intelligence in HR requires specific employee competencies. Employees often struggle to adopt and use AI tools despite their familiarity with digital technology (Albert, 2019). Every organization's core is its human resources. Implementing AI systems may empower employees and affect management levels. One of the primary challenges facing the sector is finding the right employees who can work with AI tools, which can be challenging for the HR division. The constraint on the HR department's ability to make judgments in day-to-day affairs when technology overrides the authority and role of HR in decision-making in a business is another limitation and issue.

V. CONCLUSION

The industrial sector is expanding rapidly in this cutthroat period. Industry leaders must manage continual improvement, among other things. Many sectors are embracing new technologies to streamline their operations and accelerate their pace. Many academics and industry experts recommend that businesses incorporate digital and artificial intelligence solutions. In the realm of human resources, AI has become an indispensable tool. It helps with recruitment, performance analysis, collecting employee data, and providing accurate real-time information. Numerous businesses have leveraged machine learning and artificial intelligence in this capacity.

REFERENCES

- [1] Jhansi. (2022, January). Artificial intelligence in human resource management. *National Conference on Latest Innovations and Future Trends in Management*.
- [2] Duchessi, P., O'Keefe, R. & O'Leary, D. (1993, August). A research perspective: Artificial intelligence, management and organizations. *Intelligent Systems in Accounting, Finance and Management*, 2(3), 151–159. Available at: <https://doi.org/10.1002/j.10991174.1993.tb00039.x>.
- [3] Amla, M., & Malhotra, P. M. (2017). Digital transformation in hr. *International Journal of Interdisciplinary and Multidisciplinary Studies (IJIMS)*, 4(3), 536-544.
- [4] Rajesh, S. (2018, July). Being human in the age of ai can we draw a line?. *NHRD Network Journal*, 11(3), 74–80. Available at: <https://doi.org/10.1177/0974173920180319>.
- [5] Albert, E. T. (2019, October 14). AI in talent acquisition: a review of AI-applications used in recruitment and selection. *Strategic HR Review*, 18(5), 215–221. <https://doi.org/10.1108/shr-04-2019-0024>.