



# Application of Artificial Intelligence: A New Approach for Human Resource Management

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## ABSTRACT

Technology used to perform tasks requiring intelligence is referred to as artificial intelligence. It is a technological device intended to perform tasks that a human could. Artificial intelligence has resulted in significant changes to today's organisations. Since human resource management is the area where the majority of employees work, it is important to examine not just one aspect of the company but all of its activities and how they impact it separately. This study proposes a conceptional framework of artificial intelligence (AI) technology application for human resource management (HRM). This review highlights the role of AI in human resource management. Most of the organization has been using artificial intelligence or digital technologies in HR like chatbot, machines learning, and robot process automation in human resource management which support in recruitment, screening, onboarding, and interviewing etc. Therefore, AI implementation should be considered a good expectation opportunity, because AI improves lives, AI builds a better future if properly understood and applied to the right way.

**KEY WORDS:** ARTIFICIAL INTELLIGENCE, HUMAN RESOURCE MANAGEMENT, RECRUITMENT, SCREENING, IMPLEMENTATION.

## INTRODUCTION

Technology has always been an amazing tool that enhances and strengthens individuals, increases living standards, creates new opportunities, encourages employee creativity, and levels the playing field for all.<sup>[1]</sup> Robots have been taking the place of humans in the production department since the 19th century. Personal computers and the internet introduced a third revolution into the workplace during the 1970s, replacing human labour with machine labour. Modern digital technologies, such as artificial intelligence (AI) and machine learning (ML), are permeating the workplace and will revolutionise the commercial world.<sup>[2]</sup> Artificial intelligence has drawn the attention of researchers and practitioners since Google's Alpha Go system defeated South Korean player Lee Sedol with great ease<sup>[3]</sup>

The field of computer science known as artificial intelligence (AI) or machine intelligence refers to the intelligence exhibited by machines as opposed to the natural intelligence exhibited by people and animals.<sup>[4]</sup> Understanding human intelligence and creating intelligent objects that can carry out tasks that humans are thought to need intelligence for are the two main goals of artificial intelligence (AI). There are many opportunities and difficulties associated with every significant technological innovation. Even though artificial intelligence (AI) is expected to significantly boost economic growth, it is anticipated that automation will result in the loss of some jobs. As a result, it is essential to implement the infrastructure and policies that are needed.<sup>[5]</sup>

Artificial intelligence is now permeating every aspect of an organization's operations, including the human resources department. In this department, AI systems have taken the place of human workers, performing tasks like performance management, candidate screening, recruitment, and alignment of HR activities.<sup>[2]</sup> Nevertheless, a comprehensive AI application framework that combines the unique aspects of human resource management with the field's research on AI is still lacking in the analysis of the

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technology's particular application. In this article we have explore a brief study of AI and their application for human resource management.

Artificial intelligence (AI)-based technological solutions are used for many business functions, such as social media, data mining, customer growth, better consumer engagement, data collection and segregation for further decision making, improved logistics operations, and increased business efficiencies. Wang et al.<sup>[6]</sup> has defined intelligence as the characteristic that permits an entity to function effectively and with foresight in its environment, and artificial intelligence as the activity committed to making robots intelligent.

Artificial intelligence (AI) is the term used in computer science to describe the intelligence exhibited by machines as opposed to the natural intelligence exhibited by people and other living things. AI research is described by computer science as the study of "intelligent agents": any technology that senses its surroundings and makes decisions that increase the likelihood that it will accomplish its objectives. According to Kaplan and Haenlein,<sup>[7]</sup> artificial intelligence (AI) is the capacity of a system to accurately read outside data, learn from that data, and apply that knowledge to adapt and change in order to accomplish particular tasks and goals. The phrase "artificial intelligence" is used colloquially to describe the mimicking of "cognitive" capabilities by a machine, such as "learning" and "problem solving," that people identify with the minds of other humans.

Jarrahi,<sup>[8]</sup> in his research paper titled, artificial intelligence and the future of work provides information on human- AI symbiosis in organizational decision making. The study has discussed how AI can benefit humans. Artificial intelligence has been useful in helping decision-makers in organisations deal with uncertainty and, in particular, ambiguity in their decisions. Even in this field, human interaction is crucial, and technology cannot replace humans when making subconscious decisions is necessary to assess and expedite decision outcomes.

Geetha and Bhanu,<sup>[9]</sup> describe recruitment through artificial intelligence, where the researchers have described how artificial intelligence functions in the hiring process, emphasising its centrality to the process. Artificial intelligence assists with employee interactions, interview scheduling, candidate screening, and auto-generated messaging to candidates. Similarly, Jain,<sup>[10]</sup> has identified the role of artificial intelligence in human resource management. According to the report, the majority of businesses have been implementing contemporary technology in a variety of HR processes, including hiring, performance reviews, and cloud-based HR systems.

## RESEARCH METHODOLOGY

This article is based on a literature review. The research study is using the evocative research design. In the research study the researcher has used secondary data. The secondary data has been collected from research papers, published materials, online websites, HR blogs etc.

## Role of Artificial Intelligence in HR

Now a days HR department heading towards the digital revolution is using various method to simplify the resources by big data analysis, artificial intelligence, and cloud computing.<sup>[11]</sup> Most of the organization has been using artificial intelligence or digital technologies in HR like chatbot, machines learning, and robot process automation in human resource management which support in recruitment, screening, onboarding, and interviewing etc. Following are the role of artificial intelligence in human resource management;

### Recruitment

The researcher<sup>[11]</sup> in his paper defined that only 40 percentages of companies and industries are using artificial intelligence. Organizations like SAT, Facebook, GE are using digital technologies in screening, interview, and identify the new talent for the recruitment process in an organizational. Through AI recruitment manager can examine the application and candidate can get quick response. Chat box system or automated answering machine plays essential role to solve the quires and problems regarding the process of recruitment in an organization.

### Screening and Interview Process

Artificial intelligence is helpful in automating the interview process by examining them with word or speech patterns exams. Through Ay software digital interview can take place and AI also helps to improve the candidate experience. Tools like Amy and Clara are used to scheduling interviews, working meetings.

### Reduce Administrative Burden

In an organization HR have to play multitasking roles where using technology and Artificial intelligence companies try to reduce workload. AI provides solutions of problems and it helps to increase the efficiency of HR in an organization.

### Selecting the Right Candidates

The researcher<sup>[12]</sup> has examined that through AI human resource manager can able to trace right candidate in short time of span and technology will helps out to identify the suitable candidates as per required skills sets.

### Reduce Discriminations

Nowadays, AI is being used to reduce the favouritism and will help to increase the transparency at workplace. In such a way organization can able to select the resume. AI applications can be used to analyse job descriptions<sup>[13]</sup> 6. Increase Efficiency: - Artificial Intelligence will helpful to reduce the redundancy of employees at workplace. Various robotic task has been carried out to increase the efficiency at workplace. Robotic task includes collecting data, filing reports, copying data, identifying required data from available data, processing, collecting data for HR and payroll systems etc.

### Enrich workplace Learning

Now a days, computers and digital technology can do the behind-the-scenes role in industry. Through computers and modern technology industries can able

to manage data analysis and provide real-time feedback during training, alteration of course of actions based on progress and responses which industries got.<sup>[14]</sup> To save a time companies used Microsoft 365 which helps employees to work and increase the efficiency at workplace. AI tools like Engazify (To Provide feedback), Obie and Niles (For knowledge sharing), Wade & Wendy (For Career advancement), and Duolingo (Learning domain) are used.<sup>[11]</sup>

### Role of AI In Human Resource Management

Nowadays HR professionals strive to maximise the benefits of human-machine collaboration to establish a straightforward, well-organized, and user-friendly work environment. It provides time for applicants and employees to apply their imagination, expertise, and comprehension to create a positive experience. The HR procedure could be confusing, repetitious, and prone to errors and misinterpretations. Transactions involving human-machine duplication and artificial intelligence (AI) technology has been developed to assist humans in a variety of fields to manage challenging and tiresome tasks.<sup>[15]</sup>

AI has advanced significantly over the last 10 years, making it essential to address a wide range of challenging market issues, including human resource management. A deeper understanding of the software tools used in all human resource management (HRM) processes to locate, train, and hire employees has resulted from the implementation of important AI concepts including expert programmes, machine learning, and analysis of natural languages and patterns.<sup>[16]</sup> "Artificial intelligence" has a broad, nuanced definition that is ever-evolving. AI is opening up more and more opportunities in a number of HRM domains, including talent acquisition, candidate assessment, employee retention, and career development.<sup>[17]</sup>

The foundation for AI applications has been established by the creation of the Human Resource Information System (HRIS). HRIS With AI's growing capabilities for human-computer interaction, managers now have more opportunities to use AI to increase management effectiveness. "HRIS is a procedure for gathering, storing, preserving, retrieving, and verifying data that an organisation needs regarding its personnel activities, organisational unit characteristics, and human resources".<sup>[18]</sup> <sup>[19]</sup> The information that HRIS can provide for labour force supply and demand projections, application qualifications, training development, performance evaluation, and other areas can help with strategic planning.

Though the information system deals more with data intake and storage than AIHRM does, the intelligence decision assistance function is still somewhat restricted. The system's capacity for business analysis can be strengthened by artificial intelligence, resulting in more output references that can be used in decision-making. Additionally, data mining techniques are suggested for e-resume scanning. Expert systems are suggested as a solution to the problem of business knowledge management. There is also debate over whether artificial intelligence (AI) can take the role of

human resources.<sup>[20, 21]</sup> The use of AI technology to HRM sectors is currently lacking in research.

## CONCLUSION

The development of organisational performance is undoubtedly significantly impacted by the integration of AI-based applications with HR practices. These sophisticated HRs are built on AI applications, which can analyse, anticipate, diagnose, and so forth—a tremendous resource for any kind of organisation, even though these apps may not be as emotionally capable as humans and cognitive talents. The way AI is demonstrating its impact on the leading edge of work sectors worldwide, however, is what really horrifies global employees. But the truth is that human beings are not going to be replaced by sophisticated technology; rather, it is all about how people view and use this technology to create wealth and prosperity. So, AI implementation should be considered a good expectation opportunity, because AI improves lives, AI builds a better future if properly understood and applied to the right way

### Conflict of Interest

Author declares no conflict of interest

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