## Artificial Intelligence Technology Integration in Human Resources Management: Implications for Recruitment and Retention

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#### Abstract

Recruiting employees with the technology of artificial intelligence is considered important in talent acquisition. This machine learning technology helps in the shortlisting of candidates suitable for the required job and in the automation of the task or work, which is done manually in the recruitment process. The technology of artificial intelligence reduces the time taken to complete a repetitive job by streamlining the process of recruitment. The talent acquisition makes the process of retaining employees more effortless. The integration of artificial intelligence into human resource management streamlines the process of Human resource management functions by enhancing efficiency and improving the overall performance of the employees and the organization as a whole. Predictive analytics is considered a worthwhile application of artificial intelligence in the retention of employees. The prediction can be done by analyzing the previous data and patterns of the employee's behavior. This can determine the risk factor of employees leaving the job or retaining in the company. Certain measures have to be taken to provide support and opportunities to the employees for the sustainable development of the company. The job Matching, Pre-screening, and Pre-Selection are some of the processes in which the technology of artificial intelligence has been applied for the recruitment and retaining of employees. Virtual assistants, chatbots, Machine learning, and Robotics of artificial intelligence have proven to be beneficial in the process of recruitment, selection, training, and development and retaining of employees. Despite the growth and development of companies, there are certain limitations in the integration of artificial intelligence technology with human resource management, which can be overcome by using it efficiently and effectively.

**Keywords:** [Artificial intelligence, Recruitment, Retention of employees, Human resource planning, Technology in Human Resource Management, Sustainable development]

#### Introduction

A Technology of artificial intelligence is considered one of the major influencing factors in the industry of human resources. Artificial intelligence is also known as an ideal intelligent machine that is flexible in perceiving the functions of human resource management, namely recruitment. and retaining employees. The technology of artificial intelligence helps in reducing the burden of repetitive tasks of employees and enhancing the performance of the employees by acquiring the latest updation of tools and techniques of artificial intelligence. The implementation of these technologies is very important as there should be adequate knowledge about the tools and should be used efficiently and effectively. The tools of artificial intelligence namely machine learning, and robotics play a significant role in the process of recruitment and retaining employees. The application of artificial intelligence technology is crucial in the phases of recruitment, such as pre-screening and pre-selection, which helps in the identification of the right candidates for the right job. The adoption of this technique has proven to impact significantly the retaining of employees in the organization.

The technology of the applicant tracking system is a

kind of software that improves the quality of hiring the candidate who is suitable for the job. The quality of recruiting employees is improved by the standardization of job-matching qualities. The techniques of machine learning and deep learning have the potential in the process of retention and retaining of employees. Strategies should be framed along with the technology in such a way as to retain the employees, which is considered one of the most important objectives of the organization. Care should be taken to prevent the employees from switching over of jobs, which can be achieved by motivating the employees and updating the skills and talent of the employees.

#### **Review of Literature**

Hewage (2023) the author suggests that proper utilization of artificial intelligence in the process of recruitment and selection of employees helps in analyzing the sector that is not explored, and its impact in the phases of recruiting the professionals in the organization. It extends in adapting the theory of technology within the information systems and its integration with human resource management. The adoption of artificial intelligence in certain recruitment phases namely sourcing, Pre-screen-

ing, pre-selection, and engaging the candidates has proven beneficial in identifying the right candidates. There is one limitation in using artificial intelligence in the process of pre-planning and interview stages of recruitment. This process of recruitment has a significant impact on the retaining of employees and also the performance of the organization.

Banumathi et al. (2023) the adoption of knowledge in artificial intelligence technologies is important as it implies in functions of human resource management. The impact of this integration of technology in some functions of human resource management namely, planning, tracking, management of workforce, acquisition of talent, recruitment, training succession, and retention of employees is very wide. Certain software tools are available for the smooth functioning of human resource management. The main limitation of traditional human resource management is the increase of human bias in the organization.

Paiyude et al. (2023) the automation of the major functions of human resource management, namely employee enhancement, improvement in decision-making, engaging, and retaining the employees are possible by the potential utilization and implementation of artificial intelligence technologies. The techniques of machine learning and deep learning help in boosting the retention and retaining of employees in the organization. Though artificial intelligence technology has the potential to retain employees, it requires planning and should consider the possible risks and issues that are legal and ethical.

Budhwar et al. (2022) in domestic and international organizations, the approaches of human resource management have been integrated with the applications of artificial intelligence. A new streamline of research practices has been carried out with the integration of artificial intelligence technology in human resource management in the areas of adoption of artificial intelligence, on the outcomes of business and individual levels, implementation of robotics and artificial intelligence, and evaluation of artificial intelligence technology-enabled practices of human resource management. Despite the growth of companies, there are certain limitations of artificial intelligence technologies in the integration of human resource management functions such as recruitment of staff and retention of employees.

Anita et al. (2021) the greatest asset in the field of human resource management is retaining employees who have talent and skills. The main goal of the companies is to frame strategies and policies to retain employees. The retention is the process through which proper ac-

tions are taken by the employer to prevent prominent and efficient employees from switching their jobs. The practices of human resource management namely leadership, communication, and value of profiles have to be integrated with the goals of the organization which leads to retaining and retention of employees.

Sai et al. (2020) the role of human resource manager has been changed to a greater extent the recent times. The role of the human resource manager in planning, recruitment, and retaining is considered important and is related to the growth of technology. The human resource has changed drastically from a slower pace to the adoption of sophisticated technological advancements which supports the tool of artificial intelligence, namely machine learning. After the pandemic covid-19, many organizations realized the need for technology for their growth and development of themselves. This has brought dynamic changes in the job and sustainability of the organization. The tools of artificial intelligence are described as an intelligent agent that tries to copy, think, and act like humans. The digital integration of artificial intelligence with human resource management has been beneficial in various processes, namely recruitment, selection, training and development, and retaining employees in the organization.

Wright & Atkinson (2019) the technology of artificial intelligence has a major impact and influence on industry of recruitment at the initial stages of the process. This technology influences the recruitment process by reducing costs and increasing effectiveness while recruiting candidates. Semi-structured interviews, online service, observations, and analysis were done to assess the impact of artificial intelligence technology in the process of retention of employees.

Vedapradha et al. (2019) the innovative technology of artificial intelligence is an emerging trend of human resource technology which plays a major role in the area of recruitment. This technology reduces the operations that are time-consuming and helps to streamline the resumes by screening and matching with the requirements of the job and skills of the candidates to perform the task and make decisions effectively and efficiently. The quality of recruiting candidates is improved by the standardization of qualities of job matching. The automation of resumes is done by the intelligent screening process. Virtual assistance and chatbots encourage candidates by developing bonds with the company while hiring employees. Another technology, namely applicant tracking system software helps in improving the quality of hiring the candidates.

#### **Machine Learning**

The machine learning is the process of developing algorithms and models that help in learning and making predictions in many aspects. It is categorized as supervised learning where the patterns and structural formation of data are collected. Machine learning techniques are used very widely in the process of recruitment and enhancing the performance of employees by updating the skills and talent and retaining them in the organization.

### **Deep Learning**

The subject of machine learning is called deep learning which mainly focuses on the techniques of artificial neural networks. The deep learning helps in the automation of the extraction of the data by eliminating the things that are not necessary. It is in learning the techniques of the complex data that have to be applied in the process of human resource management. The performance of deep learning techniques is very high when compared to that of traditional machine learning techniques.

### **Artificial Intelligence Technology**

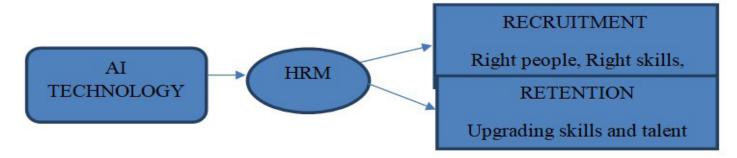
The complex organizational process can be simplified with the technology of artificial intelligence that enables the organization to complete the task or work in a faster and more efficient way. The automation of hiring or recruitment of employees with artificial intelligence technology makes the employees perform their tasks by reducing repetitive and time-consuming jobs.

The organizations can collect the data and analyze it through the process of automation. The tools of artificial intelligence help in analyzing the descriptions of the job and help in the effective postings of the job. It also helps streamline the process of recruitment of employees. The tools of artificial intelligence, namely applicant tracking system and video interviewing, create the efficient recruitment of the Candidates. Artificial intelligence technology helps identify the candidates who are likely to show interest and accept the job. Predictive analytics help in identifying the risk of the employees leaving the job.

### **Recruitment and Retaining of Employees**

The concepts of recruitment and retention of employees both are vital for the growth and success of any organization. The recruitment is a process that makes you choose the talented candidate who is suitable for the job while retainment or retention is the process of holding the employees who have talent and skills and is necessary for the long run of the organization. Recruiting and retaining employees is the biggest challenge for any organization. To overcome this, the framing of proper strategies is considered as a potential to attract the employees and retain them in the organization. Adaption and the implementation of giving benefits, recognition, motivation, diversification, and reviewing make the process of recruitment and retaining employees stronger in the organization.

#### **Conceptual Framework**



#### **Objectives**

- To adapt the techniques of artificial intelligence in the human resource management process of recruitment.
- To facilitate the screening of the candidate who is ideal and suitable for the job.
- To achieve the goals of the company by implementing technological resources and remaining sustainable in the environment.
- To eliminate the human resources and reduce the repetitive tasks of the employees.
- To upgrade the skills and talent in retaining the employees of the organization.

### Findings and Results

 Artificial intelligence technology helps in assisting the process of sourcing screening of the candidates

who have applied for the job analysis, the resumes, and evaluation of the Candidates.

- Artificial intelligence technology streamlines the process of recruitment by quickly identifying the potential candidate and having the skills and talent that are required for the job.
- Artificial intelligence technology helps the organization in identifying the top performers of the company and plays a key role in retaining employees.
- By analyzing the employee's performance and engaging them with work, the artificial intelligence technology predicts the. Employees who can perform the task efficiently and effectively and retain them in the organization.
- The technology of artificial intelligence has the potential to make significant changes in the functioning of human resource specifications in the areas of recruitment and retaining of employees.
- The tool of predictive analytics helps in analyzing the behavioral patterns of employees and predicting the risk of employees who are leaving the job.

### Methodology

The secondary data method adapted health in carrying out a systematic study and in analyzing the roles of technologies in human resource management. The method of secondary data has been applied in collecting the information. The secondary source of data has been collected from various magazines, articles that have been published, Journals, books, proceedings of seminars, websites, and technologies of information systems. Such collected data helps to increase the efficiency and quality of the research and to further continue the research in this regard.

#### **Conclusions**

The technology of artificial intelligence is vital in reshaping the functions of human resource management. With the integration of technologies in human resource management, organizations will be able to enhance the practices and functions of human resources, optimize the recruitment process, and retain the employees in the organization. The artificial intelligence technology enables the streamlining of the recruitment process by enhancing the performance of the employees and by retaining them in the organization. The human resource professionals should have the knowledge and application of the tools and techniques used and implement it effectively and efficiently.

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