



# ROLE OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT

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**Abstract :** The ever-growing role of artificial Intelligence has its advantages in various tasks of human resource management. This paper is made in order to analyse the role of artificial intelligence in human resource management, the advantages of artificial intelligence in human resource management and how it impacts working also to discuss the limitations or challenges it possess to human resource management. It helps to analyse the recent trends of artificial intelligence in Human Resource Management and how it increases overall efficiency and effectiveness of an organisation. The aim of this paper is to analyse how artificial intelligence can be of great importance in the field of human resource management. Artificial Intelligence can be a boon to an organisation and also a loss if we are overdependent over use of artificial Intelligence neglecting the role of humans and human intelligence in human resource management.

**IndexTerms - Artificial Intelligence, Human Resource Management, Advantages of artificial intelligence in Human Resource Management, changing of different functions of Human Resource Management with use of Artificial Intelligence (Training and Development, Recruitment and Selection, Technology), Challenges posed in human resource management with use of artificial intelligence.**

## INTRODUCTION

The role of Artificial Intelligence has been increased in the recent times whether it is small business or an MNC. It has been now an essential and inseparable part of any organisation. Human Resource is an important factor and it is one of 5 M of Management which are Money, Manpower, Materials, Machinery and Methods. The 4 factors can be same for everyone but the 5<sup>th</sup> factor i.e., Manpower is the only factor that determines success of the organisation. Efficient Manpower means more benefit to the organisation and increasing the efficiency of the Organisation.

## Human Resource Management:

Human Resource Management refers to the management of the manpower for increasing the efficiency and overall effectiveness of the organisation. Since each association is comprised of individuals, securing their administrations, fostering their abilities, propelling them to more elevated levels of execution and guaranteeing that they try to keep up with their obligation to the association is fundamental to accomplish hierarchical targets. This is valid, no matter what the sort of association - government, business, training, wellbeing or social activity.

Human Resources Management (HRM) is that piece of the board cycle which creates and deals with the human component of the endeavour considering their cleverness as far as all out information, abilities, imaginative capacities, gifts, aptitudes and possibilities for really adding to the hierarchical targets. The main resource of the association is its representatives, so the single obligation of the executives is to oversee human asset in powerful way. The fundamental capability of the executives is to welcome representatives and association on a similar stage to meet the singular objectives as well as hierarchical objectives simultaneously. Human Resource Management definition given by some prominent authors are as follows:

Human Resource Management (HRM) governs the personnel of a company. HRM can be simply said as Human Resources (HR). The process of managing people in a corporation in a specified and organized way is the initial definition of human resource management. Staffing, hiring, keeping employees, managing pay and benefits and setting them, performance management, managing changes, and many other duties fall within the purview of HR. This definition of personnel management is conventional and contemporary at the same time.

HRM (Human Resource Management) includes Talent Retention, Training and Development, Recruitment and Selection, Employee engagement & communication, Health and safety regulations, Personal support for employees, Succession Planning, Industrial Relations.

#### **Artificial Intelligence:**

Artificial intelligence is defined as when machines, particularly Computers or any other device try to replicate human intellect and reasoning. Some examples of specific AI applications are Professional systems, Automatic language processing, speech recognition, and machine Learning. Enormous amount of data is processed by AI systems, which then examine the data for correlations and patterns before employing these patterns to forecast future states.

By observation and analyzing of different instances over different time periods, an image recognition tool can learn to recognize and describe objects in photographs, just as a chatbot that is given examples of text chats can learn to make life like exchanges with people.

Three abilities—Learning, reasoning, and self-correction—are the main topics of AI programming

**Learning processes:** This includes of gathering data and creating various set of instructions on how to change data or raw data into useful information. This set of instructions which are called algorithms, provide computing devices with step-by-step instructions for how to accomplish a given task.

**Reasoning techniques:** This area of AI programming is concerned with selecting the best algorithm to achieve a specific result.

**Self-Correcting mechanisms:** This feature of AI programming is to continuously improve algorithms and make sure they deliver the most precise results.

#### **NEED OF THE STUDY.**

The reason for the study of relation of artificial intelligence with human resource management. Slowly artificial Intelligence is taking over jobs that are done by humans. The increasing role of artificial Intelligence is helping organization to achieve goals and targets in stipulated time. It has helped organization to work with less manpower and also has increased efficiency and overall effectiveness of the organization. Although it has so many positive impacts over any organization but one can't neglect the negative impacts like no software or program is 100% full proof or perfect it always has some or the other flaws or bugs which are bound to create the errors. Human Intelligence and Emotional Intelligence cant be exactly replicated and no software can match it .So in order to find out the role of artificial intelligence with human resource management, its positive and negative factors and how it is helping organizations to increase efficiency

#### **RESEARCH METHODOLOGY**

For making the inference from the topic 18 different Research Papers were thoroughly observed and analysed to make a clear understanding of the topics. The keywords used to acquire accurate results were *Artificial Intelligence, Human Resource Management, Advantages of artificial intelligence in Human Resource Management, changing of different functions of Human Resource Management with use of Artificial Intelligence (Training and Development, Recruitment and Selection, Technology), Challenges posed in human resource management with use of artificial intelligence*. These keywords gave me brief idea about different aspects of human resource management and its different relations with the use of artificial intelligence.

The above listed keywords were put into binary search over Google Scholar, Research Gate, Academia.com and the data was carefully chosen from last 5 years of related articles as the articles after last 5 years were not chosen due to the need to observe the recent changes in the human resource management in relation with artificial intelligence. It was also done in order to check the recent relevance of artificial intelligence and challenges and opportunities it brings to human resource management.

After careful segregation of related research papers, they were studied and analysed to answer the following objectives of this paper which were as follows:

- To describe and observe the role of Artificial intelligence in Human Resource Management.
- Also, How Artificial Intelligence can change the dimensions of the Human Resource Management,
- Positive Influence of Artificial Intelligence in Human Resource Management,
- Challenges posed in Human Resource Management to by using Artificial Intelligence.
- How Artificial Intelligence is changing the different Functions of the Human Resource Management.

Keeping these objectives in mind, 18 different Research Papers and different articles related to keywords and objectives were thoroughly studied in order to draw inference and coming to some definite findings and a well-drawn conclusion.

#### **IV. RESULTS AND DISCUSSION**

Various findings on how artificial intelligence affect human resource management and its cycle were found after analysis of different Research Papers and articles which are discussed below:

##### **Role of Artificial intelligence in Human Resource Management:**

With use of artificial intelligence or integration of it with human resource management it has become easier for the human resource managers to reduce time periods for selection and recruitment, also it helps to provide individual or personalized training , giving feedback on time

##### **How Artificial Intelligence is changing the different Functions of the Human Resource Management:**

###### **Recruitment and Selection:**

The main problem in recruitment is finding the right candidate for the right job and being unbiased. Using of artificial Intelligence creates unbiased criteria for the recruitment and also One of the main problems in the talent acquisition industry is still effectively and strategically screening resumes. According to research done by Ideal, a proponent of HR technology and solutions, finding the best individuals from a large application pool was the process' most difficult challenge for 52% of talent acquisition leaders. It helps in saving time and shortening of the whole process of recruitment and selection.

Also, The AI programme helps recruiters and HR teams choose new hires based on their talents and place them in the best position to maximise their talent by creating the important candidate insights. By unifying the matching among job requirements and candidate knowledge, skills, and experience, the AI claims to increase the quality of hires. This strategy not only improves candidate

abilities but also productivity. By using big data analytics, AI software provides more accurate findings that enable you to make more informed judgments. Usage of chat bots and ai robots helps in solving Candidates questions and providing them relevant help and also to collect the contact details of the candidates and when they can expect a call back from the organisation.

#### **Training and Development:**

Use of artificial intelligence helps in creating personalized training and learning plan for every individual in an organisation, giving them an experience of personal learning and personal feedback at the same place and increasing return on investment and helping to increase workers participation, saves a lot of time and whole process becomes automated and simpler than to hire a specialist trainer for giving specific trainings. It also helps in providing accessibility to different users in different languages and one can easily focus on the number of activities done, also the time spent in learning and what are the strengths and weakness of the individual employee. Artificial Intelligence also can create learner profiles combining diverse statistics resources, which would take days if it is about to be done manually. It is able to effectively detect the competencies missing for our employees, automatically, in a quick time. AI enhances your worker training sessions with unique and innovative literacy styles. It can truly give feedback on our workers areas for enhancement. One can indeed use virtual reality for practical ways to develop your staff's soft skills and give immediate feedback on their weaker areas and also, program bots to pick up on assignments opened up by workers, tag them contextually, and circulate them to others who preliminarily suggested their interest in the subject.

#### **Benefits of Artificial Intelligence in Human Resource Management:**

1. **Easing of HR functions:** The Artificial Intelligence helps in simplifying of whole human resource functions and leads to increase in efficiency and effectiveness of organisation and also helps to save time and reduce human efforts.
2. **Enhances On-Boarding Experience:** It helps to enhance the on-boarding experience of the new employee also it does help to automatically verify and check the authenticity of the documents given by the new comers. It also helps new-comers to understand various job description and whom to report and what activities to perform. It makes new employees understand company's policies and vision and mission.
3. **Increasing Workforce Analytics:** Real time data and Use of real time analytics help the human resource manager to check for attendance, leaves, schedules and working pattern and job effectiveness and its overall efficiency.
4. **Facilitate Long term and short-term Planning:** With the use of artificial intelligence one can easily forecast with the help of past data and latest trends about near future trends which can help in long term and short-term planning.

#### **Challenge to Human Resource Management from Artificial Intelligence:**

Chances of job reduction in human resource department as artificial intelligence is capable enough to do this work and that is one of the reasons that people are hesitant to join hands with artificial intelligence and work in collaboration with them.

There are very high chances of data breach and also chances of huge loss of a company as data is the new gold and data breaches are very common due to huge dependencies over artificial intelligence and internet.

There can be times when there is over-dependence over the artificial intelligence over human mind. Over dependence can cause mismatch or misalignment of goals and vision of goals and incompleteness of daily tasks and misalignment and lack of trust and group conflicts.

#### **THE CONS OF ARTIFICIAL INTELLIGENCE WITH REGARD TO HUMAN RESOURCE MANAGEMENT:**

- There can be errors in programming and codes written and no computer program or any software is bug free so there are high chances of errors and it can cause mismatch between employee and affect daily performance, also can increase employee dissatisfaction level.
- Some critical decisions require Human Intervention as one can't neglect human intelligence, intellectual as well as understanding of emotions. Humans are the only social animals that have high level of emotions and high level of intellectual over any computer system or any artificial intelligence software.
- There is always risk of cyber-attacks over different chat-bot, different software and there is always risk of data breach and loss of data can cause of loss of every critical information as data is the new oil , it has high value in market can cause company to lose its value and market value .

#### **Conclusion:**

After profound study, I came to a conclusion that although Artificial Intelligence has some disadvantages in its over use but, joining hands or working in collaboration with artificial Intelligence would help in increasing efficiency, decrease overall time period of recruitment and selection, easy selection of individuals, helps in personalized training and personalized feedback. Also, it helps to have real time data analytics and helping in setting current and long-term goals with past data analysis, it helps to analyse near future trends and makes short and long-term planning. It also makes human resource management aware about the overall efficiency, attendance, daily tasks and schedule daily tasks also to maintain daily records of employee tasks and duties.

Nobody can entirely replace humans with technology. Even tools that use Artificial Intelligence to automate processes are created by humans and consequently subject to error. In Human Resource, artificial intelligence is indeed useful. One only need to keep in mind the essentials that will enable you to benefit from its advantages while preventing potential risks. Create and employ Artificial Intelligence systems with equity and empathy in mind, and take the necessary security safeguards. At work, the relationship between people and machines is changing, and managing this transition effectively cannot be done in a one-size-fits-all manner. Instead, in order to satisfy the evolving expectations of their teams globally, enterprises must collaborate with their HR organisation to tailor the approach to integrating Artificial Intelligence at work. One can successfully integrate Artificial Intelligence into your Human Resource procedures with the appropriate strategy, keeping your business at the forefront of today's changing workplace.

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