# Role of Artificial Intelligence In Human Resources Management

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*Abstract* - **Working remotely or work from home is now new normal in this COVID 19. Face to face interaction and rushed workstation is now avoided due to social distancing and most of the targets or job has been done thorough online mode. In this era, technology gained momentum which resultant into growth or application of artificial intelligence in various functions of management. It helps the organizations to work in faster way and efficient way to complete the work. Like any other functions AI also enhanced the function of HR which begin with the automated recruitment process to performance appraisal and T&D. The present articles analyzethe role of AI in various HR functions. It also tries to explore various opportunities and challenges of AI in HRM. The article has concluded that a role of AI is very important to carry out the various functions of human resource department where by AI can handle recruitment, hiring, performance appraisal , T&D, allocating the Jobs, reducing workload at workplace and enrichingworkplace efficiency. The study will also give a brief understanding of the future goal of artificial intelligence.**

*Keywords*: **Artificial Intelligences, HRM, HR Functions.**

## I. INTRODUCTION

In 21st Century technology has been used widely across all the fields. Intelligence systemmanages quite a large part of every human being. The internet has changed our lives a lot. Technology gives us a mantra of Ease of Doing, in today's world we are much more dependent on the technology. And for that awareness about technology development is very essential. Now, the human being wants machines or technology which helps them in their lives and that also act intelligently. Artificial, defined according to Oxford Dictionary is something "made or produced by human beings rather than occurring naturally, especially as a copy of something natural" (Oxford Dictionary, 2019). Therefore, it can be established that artificial is what humans have made to simulate something that usually occurs naturally. We are living in an era in which AI capabilities are reaching new heights and have a major impact on how we operate our business. Artificial intelligence refers to the technology that

is similar to human mind. AI is defined as the ability of such things as machines to learn, interpret and understand on their own in a similar wayto that of humans. Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving (Investopedia, 2020) .AI can do the task as it done by human being through their intelligence. Salin and Winston (1992) defined AI as being a set of techniques that allow computers to accomplish tasks that would otherwise necessitate the reasoning skills that human intelligence brings. High speed computation, huge amount of quality data handling and advancedalgorithm will make AI unique. Speed and right decision are the strength for any organization in this competitive environment. According to Nilsson (2005) machines should be able to do most of the jobs that human intelligence demand, which he calls for human-level AI. The use of AI is endless; it can be used in different sectors and industries. AI will not only help in routine jobs or tasks but it also important for strategic decisions. AI technologies offer significant opportunities to improve HR functions, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, access policies and procedures. Most of the companies have been adopting modern technology in various HR process like recruitment process, performance appraisal process, cloud-based HR systems (Jain, 2018). HRM involves many different aspects, such as training employees, recruitment, employee relations and the development of the organization (Wall & Wood, 2005).

## II. LITERATURE REVIEW

Merlin & Jayam, "Artificial Intelligence in Human Resource Management" - International Journal of Pure and Applied Mathematics (2018) This paper tries to address the possibilities of how Artificial intelligence is transforming and supporting the Human Resource functions like recruitment, training, talent management & retention through real time examples, gives insights on intersection of Artificial intelligence & Human resource management cases and finally it addresses the future impact on the HR workforce. Kapoor B. (2010) examines leading business intelligence vendors to look into the business intelligence and data analytics features

incorporated in human resource management modules. The author examined that the human resources can position itself as essential value-adding department of the organization by taking the advantage of business intelligence.

A researcher in his research paper, title "The Impact of Robotics, Artificial Intelligence on Business and Economics" has studied that use of Robotics and Artificial intelligence in business may have negative impact on the overall functions of an organization like production, performance management, sale, strategic planning, customer relationship management, banking system, coaching, training, taxes etc. (Dirican, 2015)

Ulrich and Dulebon (2015) described the emergence of HR and propose the future of HR for increased and sustainable value. The authors have studied the HR's transformation waves from administrative to HR strategy waves.

Buzko et al. (2016) found that the main factor for influencing the amount of training in the company is the net income of the company for the previous year and the transition from discrete paradigm of information processing to continuous paradigm allow faster and more accurate adapting to environment requirements. The authors have concluded that in the modern business conditions, it becomes more relevant to use artificial intelligence technologies for decision making

### III.     RESEARCH OBJECTIVES

1. To understand the concept of artificial intelligence.
2. To understand the role of artificial intelligence in HRM functions.
3. To study the opportunities of artificial intelligence in HRM.
4. To study the challenges of artificial intelligence in HRM.

### IV.     RESEARCH METHODOLOGY

The research study is using the descriptive research design. Secondary data has been used in this research. The secondary data has been collected from research papers, published materials, online websites, HR blogs, and survey reports published by various research organizations.

#### A.   Role of AI in HR Functions

Effective utilization of manpower for attainment of organizational goals is called to be human resource management. Procurement of manpower, recruitment, selection, training, development, compensation, performance appraisal and separation are the main functions of HR. Schemerhorn (2001) is that HRM is how you are able to gain and develop a workforce which is talented, to help the company achieves its goals, as well as its mission, vision and different objectives at hand. To retain best talent and maintain the satisfaction level of human resource are the prime objective of HRM. And this is because human resources are such a dynamic part of the company and is ever changing,

therefore it needs the right management by an organization (Bibi, Pangil & Johari, 2016).

In current scenario, HR department heading towards the digital revolution and using various methods to simplify the resources by using big data analysis, artificial intelligence, and cloud computing (Amla & Malhotra, 2017). The AI offers much great opportunity to lift up the HR world. It will facilitate the organizations to achieve their desired objectives in limited time. With the advancement of technology, the organization will be requiring high skilled professionals which can make the machine to perform the task as per the requirement. Artificial Intelligence will assist the employees to manage their work life balance effectively. Employee will be able to complete their task before the deadline. The dependency on employees will reduce in the organization. Following are the role of artificial intelligence in human resource management:

➢ **Recruitment**

Most of the organizations are using artificial intelligence in the process of recruitment. Facebook, TCS, Infosys, HDFC and many more organizations are using digital platform in the process of screening and interview which help them to identify the new and best talent. AI can help the recruitment managers to examine the applicant quickly and effectively. Interactive Chat box system or automated answering machine plays important role to solve the quires like about job description and specification or any other problems regarding the process of recruitment in an organization. AI compares the interviewed applicants to the top talent employees in the company and finally suggests the best applicants to recruiters (HireVue, 2018).

➢ **Selection**

The next process in procurement of manpower is selection. It usually takes place after the organization have been doing initial recruitment where they establish a pool of possible qualified applicants, and now have to select the right applicant for the job (Newell, 2005). With the help of 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 (Rajesh, Kandaswamy, & Rakesh, 2018).

➢ **Post-Offer Acceptance**

After submitting the job application by the applicant, the applicant not receives any type of communication or interaction from the employer. When HR selects the candidate and they accepts a job offer, it will take normally 2-3 weeks to join or start the new assignment. At that time period or gap period AI could help these new candidates by engaging and following up with the candidate so that they will connected with the company and also increase the acceptance-to- start rates of selected candidate. AI can be integrated into these types of candidate automation, however messages, responses and engagements can, with AI, be real-

time and unique to the individual candidate and not just driven by a tags, positions, locations or categories.

### ➢ Induction

Induction program plays very important role for the new employees. It helps to understand the organizational culture, plan, polices, structure and processes. AI can answer other common questions, information and resources that may help the new join to understand better.

### ➢ Employee Relations

Employees must have some queries related to benefit coverage, vacation time and how they are paid which require in depth conversation with HR manager or coordinator. Once data feed in the AI system, AI can answer all queries in chat form. Artificial intelligence technology can be used in chat form, email or a virtual meeting room, handing over and even booking a meeting between your HR generalist and the employee.

### ➢ Work Scheduling

Assignment of job, scheduling interviews and meeting needs lots of attentionof HR mangers, although these are very unproductive activities which are not only waste their time but also restrict them to be more innovative. Here, AI will play a very vital role, it assist HR managers in work scheduling, information circulation and collecting the information or preferences from the employees through the automated chat box.

### ➢ HR Payroll

Tradition administration of wages & salary was called to be very complex process because if it was not done properly then it may create various interpersonal conflicts of dissatisfaction. Now, AI will help in wages & salary administration as all the data are now transparent, employee's bank accounts are linked and salary will automatically credited to their accounts and all the tax related issues are also resolved.

### ➢ Training & Development

Now a days, computers and digital technology can do the behind the scenes role in industry. Training & development activities are now performed on digital platform. It becomes easy for organization to conduct the session across the country or globe. 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 (Riebli, 2018). AI offers the ability to scale a career development program or company coaching for each and every employee. HR Managers will plan digital or online training programme for employee which help them in eliminating the gap. AI facilitates the HR Managers and employee to track their progress.

### ➢ Performance Appraisal

Appraising employee's performance in a definite time period is an important part of HR functions. If employees will not appraise regularly their satisfaction and performance may goes down. AI application for performance appraisal not only helps HR managers to get feedback from the immediate supervisor or the concerned individual related to employee's performance but also enable them to take effective measures to improve the performance of employees.

### B. Opportunities of AI

- It reduces discrimination: - Nowadays, AI is being used to reduce the favoritism 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 analyze job descriptions (Rathi, 2018).
- Artificial Intelligence will helpful to reduce the redundancy of employees at workplace. It helps HR team to eliminate day-to-day routine task so that they get more involved in more productive task.
- AI is based on algorithms and logic, so the chance of accurate result is high.
- AI based application on recruitment and selection helps in talent acquisition and identifies the right candidate for the right job.
- AI will maintain the workflow in various departments.
- Chance or error must be minimized.
- AI is useful in workplace and help to HR professional to understand their working and to identify the problems and trends in advance.
- Artificial Intelligence will helpful to reduce the redundancy of employees at workplace.

### C. Challenges of AI

The whole world is now moving towards fast changing technologies and organization might choose the wrong path for making themselves more competitive and sustainable. Proper implementation of AI is very necessary which make organizations more effective and efficient. Here are the few challenges which organization faces while adopting AI system:

- While using AI, organizations will start underestimating the competencies of human resource and exaggerates the importance of AI. Human beings are really good at the least routine, most complex, most collaborative, most creative work. And we're much better than computers at this stuff (Sen, 2018)
- Some time the results of AI were not compatible with manager's decisions or managers needs some modification or manipulation in desired data. So they may ignore or underestimate the results of AI and found solutions as per their requirement. This

could happen where managers ignore the recommendation of the AI recruitment system and usetheir intuition instead, despite the evidence that AI is a better predictor of candidate success than humans (Agrawal, 2018).

- Handling AI required proper knowledge and training. Getting right candidate is also a challenge for organizations.

- Human-machine interaction is one of the challenges for AI. As most of the HR functions are performed by machine but they do not have emotional aspect. Empathy & understanding are the main essences of HR but these are not associated with machine. So might be machine will not take the appropriate decisions which required emotionalintelligent.

- Confidential HR data must be accessed by the authorized person but still there will a chance of hacking information.

## V. CONCLUSION

AI based HR functions have strong impact on HR team which make them more productive and innovative. It not only helps them to enrich their knowledge or skills but also help to boost the motivation and performance of employees. Do not believe that AI will make the decisions it is only for HR Managers assistance which help them in making the decisions whether strategic or operational. It is not always possible that AI will provide the correct response or make the best decision, the HR manger should revisit and check the algorithms and logic before making any important decisions. Saving time in repetitive HR jobs will help managers to do more creative and strategic tasks for the success of the organization. The company's success will depends on how they effectively and intelligently combine or mange people, process and technology to deliver transformational value at optimal cost. HR applications empowered by AI have an ability to analyze, diagnose, predict, execute and become more potential and dominant resource. Organizations should determine the need of AI and see how it can fit with your organizational values & culture before adopting the solutions from AI. Employees may get affected with AI in many ways so careful assessment is must and that should be aligned with the need and potential of employees.

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