Artificial Intelligence and HR: The New Wave of Technology

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ABSTRACT

One of the most talked about and highly debated drift in the modern organisations regarding HR Technology has been Artificial Intelligence (AI). Most re-searches of the topic on Artificial Intelligence induce high guesses that believe artificial intelligence will be a game-changer for higher productivity and efficiency in HR professionals. It began with talent acquisition and is moving fully across various other areas of skills and performance to succession planning. While it is seen that AI is for the well-being of the organization is vital for its success and long-standing health, there is also the fear and insecurity among employees that, increased automation may reduce the employment rate. This study looks into the state-of-the-art on artificial intelligence and its impact in HR.

Key words: Artificial Intelligence, Information, HR professionals, Organisations.

INTRODUCTION

The reason behind the introduction of Artificial intelligence (commonly referred to as AI) in the modern organisations is the gigantic growth of data and information not being managed efficiently by most organisations. Due to this reason, most organisations now are/have used some degree of digital transformation, and rely on this type of technology. HR professionals are recognizing that this valuable data plays a major role in effective decision-making, when it comes to promotions, individual performance and organizational performance. Meghan M. Biro (2016) opines artificial intelligence as an area of computer science where computers are "developed" to behave much the way humans do.

Dr Jeremy Nunn (2019), AI is becoming a key driver behind job-candidate matching and automating communications with candidates, including applicant feedback. These are arguably the two biggest areas where AI is at its most effective, eliminating human bias and increasing efficiency in candidate assessment and communication. With AI, candidates aren't being disregarded, as matching isn't entirely based on keywords, and there's enough time to cover everybody. When taking a manual approach, there are ways to hack the system by stuffing the resume with the right keywords in order for it to land into human hands. He further states that through AI, organizations are able to better grade and rank qualifications during the screening process, develop candidate profiles, interact with job candidates and

quickly reach out to the best ones before other companies take action.AI can pinpoint individual development opportunities without bias and connect the dots between the company's strategic vision and opportunities and employees' top strengths and skills in order to identify and assess specific candidates for future leadership roles. The entire process is faster and more efficient as the majority of time-consuming tasks are handled through smart data matching. Human resource management is the key for the success of any organisation but recent technology will help the human resource to operate with the help of machine which will reduce their work and help them to concentrate more on other aspects of the organisation.Meghan (2016) also describes the three levels when it comes to AI, depending on how advanced the computers get, and the measuring stick is "human reasoning." Strong AI genuinely simulates human reasoning. These systems not only think, but can also "explain" how humans think and reason. Weak AI includes systems that can "think" but don't tell us anything about how humans think, and the systems don't really think themselves. In-between AI includes systems that are informed by, or inspired by human reasoning. Examples include Google's Deep Learning (driven by big data) and IBM's Watson, a system that can answer questions by analyzing thousands of pieces of text, discerning patterns, and weighing evidence, a sort of "layered learning," much like the way our brains learn. This in-between area is where most AI work is being done today.

OBJECTIVES

1. To understand the areas of research carried out with reference to artificial intelligence in HR.

2. To examine the impact of artificial intelligence on HR.

METHODOLOGY OF THE STUDY

The study is based on secondary data. This study pays relevance to the secondary data with the base of relevant studies in the field of artificial intelligence in HR. In this regard various libraries were visited and some on-line journals, books and research papers on the internet were also reviewed in this direction.

Historical Perspective

In a study by E. S. Brunette, R. C. Flemmer and C. L. Flemmer (2009), the field of AI is generally said to have begun at a conference in July 1956 at Dartmouth College when the phrase "Artifical Intelligence" was first used. It was attended by many of those who became leaders in the field including John McCarthy, Marvin Minsky, Oliver Selfridge, Ray Solomonoff, Trenchard More, Claude Shannon, Nathan Rochester, Arthur Samuel, Allen Newell and Herbert Simon. Lipson, 2007 considers the nature of intelligence and believes it relates strongly to a creature's ability to be creative because people often consider creative children to be intelligent. Chella and Gaglio(2007) attempted to create a selfaware robot using 2D and 3D image processing. The main problem they found was a lack of good image processing capabilities and an information storage problem. S AOke (2008) says Knowledge bases are used to model application domains and to facilitate access to stored

information. Parisi and Mirolli(2007) believe that robots need to know the difference between inputs relating to objects in the external environment and those relating directly to themselves. By knowing the difference, a robot can predict whether actions will affect it directly. They extend this concept to telling the difference between public and private knowledge in social situations. Research in AI has built upon the tools and techniques of many different disciplines, including formal logic, probability theory, decision theory, management science, linguistics and philosophy.

According to Y. Zhang, D. K. Robinson, A. L. Porter, D. Zhu, G. Zhang, and J. Lu, (2016), todays AI (robotics) has the capabilities to imitate human intelligence, performing various tasks that require thinking and learning, solve problems and make various decisions.

In the recent past, with the improvement of the technologies associated with Artificial Intelligence for HR, it outlines the value AI can add to HR. It features discussions on the challenges that can arise from AI and how to deal with them, in terms of data privacy, algorithmic bias and how to develop the skills of a workforce with the rise of automation, robotics and machine learning in order to make it more human.

Impact of AI on HR

Today, **Artificial Intelligence** (AI) is reshaping the way that companies manage their workforce and make HR plans, which increases productivity and employee engagement in general.

AI in Talent Acquisition- Using AI, the HR managers can remove a lot of stressful and monotonous work generally performed by HR managers in the form of talent acquisition software which can scan, read, and evaluate applicants and quickly eliminate 50% of them from the recruiting process.This serves as a huge benefit as it allows the recruiter to spend more time analyzing and evaluating only a smaller group of eligible candidates. In such circumstances, HR units are drastically increasing the quality of hiring decisions. Additionally, organisations can also save a lot of money this way because they don't have to pay the cost of poor hiring decisions.

AI in Organisational Adaptation- Once the employee is taken on board, the HR managers need to look into various other aspects of the employee. Adaptation is the second step in the process as many prospects can't fit in the new environment due to lack of onboarding procedures. Namely, new employees demand a lot of attention and it is often impossible to dedicate enough time to each one of them.That's where AI steps in – it determines customized onboarding procedures for every single position. This proved to be extremely productive in practice since new workers who went through well-planned onboarding programs had much higher retention rates than their peers who didn't have the same opportunity.

AI in Succession Planning- Through AI, the HR managers, can predict the future turnover rates, reduced (or increased) employee engagement levels, concerns about internal employee communications, project completion problems, and any other unexpected hidden issues that would usually take years to surface. AI will most likely be able to predict in near accuracy regarding the employee turnover and can prove to be successful when it comes to

cost savings and overall organizational efficiency.

AI in Training- With rapid technological changes happening almost every day, it is important that all employees are aware of the day-to-day improvements made in the organisations therefore, a key to keep learning and improving professional skills can be in the form of training facility. AI can successfully plan, organize, and coordinate training programs for all staff members. Online courses and digital classrooms are the most common solutions in that regard. But this is not the only job of AI because it also determines the best timeframe for new courses and schedules lessons so as to fit the preferences of all employees individually.

AI in Performance appraisal- Higher efficiency, participation and productivity are essential traits of successful professionals. However, most organisations are struggling to find employees who have those traits. That's why it is easier to monitor their behaviour and analyse key performance indicators. Using AI, HR managers are able to set concrete objectives and let all units work in smaller increments. This type of work is easier to follow and assess and it generates better overall results.

AI in Human Capital Management- HCM is a set of practices related to people resource management. These practices are focused on the organizational need to provide specific competencies and are implemented in three categories: workforce acquisition, workforce management and workforce optimization. AI helps in enabling organizations to meet increasing employee expectations by helping HR teams reimagine people and talent processes to build stronger teams, reduce employee turnover, and enhance the employee experience. A few major impact areas for AI in HCM include Performance management, Workforce planning, People analytics, Virtual assistants for self-service/HR service delivery, Career pathing, Leadership and coaching

AI in Retention- One of the most challenging task of an HR manager is to retain the talented employee. However, AI has the ability to analyze and predict the needs of staff members. AI has the ability to determine individual affinities and reveal the performances of every employee and justice can be done to those hard-working employees. Such analysis gives room to HR professionals to be proactive and solve the problem even before it actually occurs.

CONCLUSION

With the kind of benefit AI accrues to organisations, human resources professionals need to start embracing today, so they can be prepared to embrace the incredible advancements in artificial intelligence of tomorrow. Transparency will be essential in making sure that employees trust the new technology.More importantly, AI also helps in solving some of the most critical challenges faced by HR people today i.e. creating and executing strategies for improvement, and taking specific actions to tackle these problems well ahead of time. In the words of Jeremy Nunn, A more productive and efficient workplace begins when HR leaders implement numerous layers of AI to deliver more value to their organizations.

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