

# Artificial Intelligence And Human Resources – Exploring The Integration As Colleagues

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**Objective:** This paper aims to explore the impact of Artificial Intelligence (AI) on human resources (HR) and investigate whether AI will completely replace HR or serve as a powerful enabler.

**Methods:** The study examines the growing prominence of AI in the HR industry by analyzing the valuations of HR tech companies specializing in job task automation and enhancing the job search experience. It also evaluates the capabilities and limitations of AI in replicating human consciousness and rational understanding.

**Results:** The findings reveal that while AI has made significant advancements, it still falls short of replicating human consciousness. However, it has become an indispensable tool for streamlining HR processes, improving efficiency, and providing valuable decision-making insights. Integration of AI into HR practices presents challenges, as it cannot replace the human touch in areas such as employee relations, conflict resolution, and strategic decision-making.

**Conclusion:** HR professionals should embrace AI while acknowledging its limitations. Instead of perceiving AI as a threat to jobs, a strategic approach to AI governance should be adopted. Collaboration between AI and HR professionals can create a harmonious work environment where technology complements human expertise, leading to increased productivity and efficiency.

**Keywords:** Artificial Intelligence, HR functions, AI in HR, talent acquisition, employee onboarding, data analysis, ethical use of AI, collaboration between AI and HR, future of work.

## Introduction

We have different companies banning AI and also on the other side some techgiants pausing the hiring process and making a significant impact in back-office including human resources ,and adding on that within next five years approximately 30% of non-customer-facing roles in these areas could be replaced by AI and automation technologies.

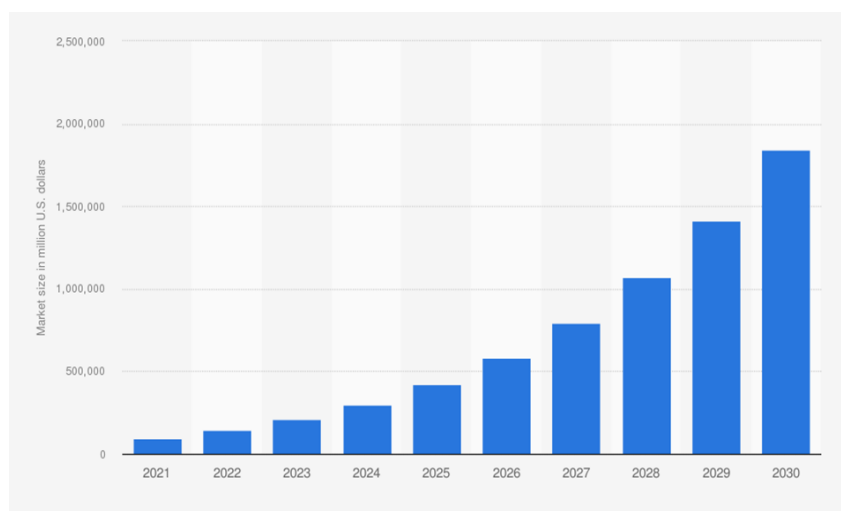
Does that mean Artificial Intelligence (AI) is going to replace all the Human Resource Functions or will it be just a powerful enabler? Let us try to unmask the illusion of AI in HR

We cannot think of a life where AI is not there, in this technological era. AI has undoubtedly made its mark across various industries, raising questions about the role of humans in the workforce. AI has become omnipresent, ranging from self-driving vehicles to dancing robots featured in Super Bowl commercials. But then, not everything we call AI is actually Artificial Intelligence.

According to an article by Kelly (2021), Forbes reported that Phenom, an HR technology company specializing in automating job tasks and enhancing the job search experience, has quietly achieved a valuation of over a billion dollars, making it a unicorn in the industry. Another London-based startup called Beamery, that deals its own recruitment operating system, received a strategic investment from Accenture and is valued at \$800 million (Lunden, 2021). In addition, prominent technology companies have increasingly incorporated AI into their HR management systems and processes (van den Broek et al., 2021). IBM, for example, stated that its implementation of AI in human resources resulted in cost savings exceeding \$100 million within a single year (Guenole & Feinzig, 2019).

A generative AI in the form of ChatGPT has reached our mobile phones and the desktops broke free from the sci-fi speculations and research labs. This Generative AI can generate quantum computing, create a school assignment, create a cooking recipe and a shopping list and even create a poem in the style of Keats. Though AI may not have a living consciousness, it is getting closer to at least disrupting what we think artificial intelligence systems can do.

Nevertheless, as we all know, whatever that is mentioned, if not in the script will yield random results. The important inadequacy of the AI as we call it today, is its absence of rational understanding. Whatever we call AI is a single algorithm. It goes under the monikers of deep learning, machine learning, artificial neural networks, and even spiking neural networks. The presentation of this is “*working like your brain.*” But if you can think of AI as an authoritative arithmetical technique, you are almost there.



Fig(i) : AI market size worldwide in 2021 with a forecast till 2030  
Source: Statista 2023

According to a report by Next Move Strategy Consulting, the AI market is projected to experience substantial growth in the coming years. With a current value of approximately 100 billion U.S. dollars, it is expected to expand twenty times by 2030, reaching nearly two trillion U.S. dollars. Generative AI market has exhibited continued growth and is expected to grow even more through the forecast period.

The utilization of AI and machine learning (ML) in the retail and distribution sectors is reshaping the future of work. These industries heavily rely on algorithms to classify and predict efficient work methods, often leading to the extraction of maximum effort from workers who are employed in low-paid and insecure positions. This digital Taylorism, as described by Moore (2019), emphasizes the use of algorithms to streamline tasks while offering limited job security.

Notably, accounts of Amazon warehouses have highlighted instances of workers experiencing severe injuries and extreme physical exhaustion due to the demanding speed and concentration of work (Bloodworth, 2018; O'Connor, 2021). Amazon has faced criticism for implementing automated firings of workers (Bort, 2019). In the marketing sector, programming algorithms aim to minimize labor costs for retailers while also reducing the number of workers eligible for enhanced benefits, leading to unstable working periods and pay (Schulte, 2020; Ton, 2012). Similar algorithmic management methods are being developed and utilized in the emerging "gig work" sector, characterized by technically mediated and highly flexible employment (Duggan et al., 2020; Möhlmann et al., 2021).

Until now, the application of algorithmic management has primarily been limited to controlling relatively simple tasks and generating structured data through automated sensors. However, as AI advances, its ability to recognize images and perform difficult design recognition jobs is expected to increase watching and diminish worker independence in new employment sectors. For instance, restaurants are starting to employ safety cameras that feed AI systems to screen and achieve the performance of waiters (Matsakis, 2019). Healthcare sector are also adopting algorithm-based systems to prioritize and allocate nursing tasks, while Amazon has recently begun utilizing AI-linked cameras to monitor the activities of its delivery drivers (Sonnemaker, 2021). This trend raises concerns about the pervasive surveillance enabled by AI in the workplace.

Presently, the term 'strategic HR' is employed to describe HR strategies that offer organizations a competitive edge. Over time, the strategic HR movement has witnessed a change in HR's emphasis, transitioning from administrative practices to those that promote high performance. These practices, such as teamwork and performance management, concentrate on pivotal positions rather than every role and prioritize groups of essential employees rather than every individual.

Coming to the various functions of HR, the traditional recruitment being time-consuming, it also makes for less time for the recruiters to take the best decisions. Moreover there is lot of faking done by applicants. From recruiters we also face biases, racism and judgement in traditional recruitment.

Various models of the recruitment process proposed by authors such as Muller and Baum (2011), Thebe and Van der Waltd (2014), and Breaugh (2008) provide valuable insights into the traditional recruitment practices adopted by companies and their benefits. Among these models, Breaugh's (2008) framework holds significance; however, it fails to address the impact of technological advancements such as AI.

### *Literature Review*

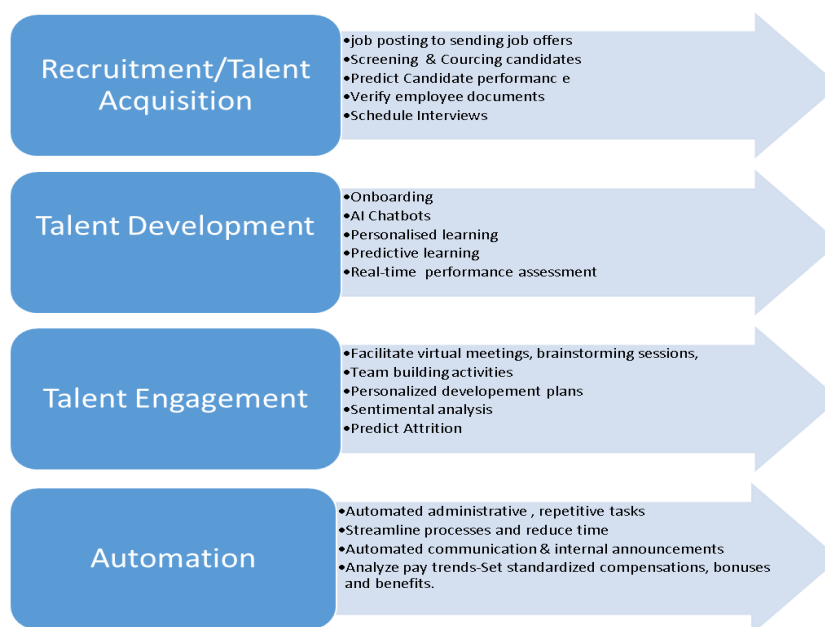
AI is a broad concept that encompasses various fields, including machine learning and cognitive computing. It is a discipline within computer science that focuses on replicating intelligent behavior in computers. AI has demonstrated its efficacy in multiple domains, including visual perception, natural language processing, speech recognition, converting speech to text, language translation, tone analysis, and other related fields. HR development translates into the formation of new knowledge, the generation of new ideas, and the development of innovative products and technologies. (Klimovskikh, et.al., 2023). AI opens the door to previously unimaginable possibilities

Expectations from AI in Human Resources are Sky High now. Much as AI infuses the social platforms which are very much used by children and grown-ups alike, related “*smart*” procedures are rooted in current people management products. Several talent acquisition explanations today have algorithmic visions that can aid recruiters determine apt applicants; other algorithms regularly deployed to propose career choices both to applicants and existing workforces within the business. According to reports, this AI has the capability to forecast which candidates are likely to accept a job offer and which employees are displaying signs of potential departure. AI shows promising potential in employee training and upskilling, as it can personalize learning based on roles, interests, and relevance. But then, everywhere AI just provides a new smart underbelly for applications and procedures that are in extensive use in HR today. Goswami, et.al (2023) indicate that HRM policies have a positive impact on business growth and enhance the delivery of quality work to customers. This is achieved through a comprehensive understanding of both external and internal factors. By effectively addressing external challenges and internal dynamics, HRM policies contribute to the overall success of the business and ensure customer satisfaction.

According to the World Economic Forum, the application of new technologies has the potential to create twice as many jobs as it displaces. However, the emergence of these new professions will necessitate collaborative efforts from employers, policymakers, and governments. Additionally, (Gratton, 2018) emphasizes that these new jobs will demand a different set of skills, particularly those centered around interpersonal interactions. Moreover, it is crucial for companies and HR teams to consider the time gap between the creation of these new jobs and the elimination of existing ones. Consequently, HR teams should play a proactive role in re-skilling and up-skilling employees to adapt to the changing job landscape.

Organizations are facing challenges when it comes to recruiting and retaining skilled employees, but there is hope on the horizon with the advent of AI technology. AI tools have the potential to provide much-needed support in various aspects of talent acquisition, growth, and retention for companies. By examining the transformative impact of AI from different angles, *the author* attempts to highlight how AI has already revolutionized human resources practices and holds even greater potential for the future. According to researchers, global experience demonstrates that achieving economic development necessitates the enhancement of human resources (HR). This is due to the fact that for changes to be effectively implemented, there must be individuals who can organize and lead the change initiatives, as well as a highly competent workforce capable of translating these ideas into practical action. (Fedchenko et al., 2023).

Flexibility in enterprise HRM allows creating conditions for the training, adaptation, and development of personnel. In the present day, employees exhibit a strong inclination towards growth-oriented roles rather than settling into a single job for an extended period. They actively seek new opportunities within a span of two to five years and continuously strive for professional advancement. This shift in mindset has been influenced by the rise of remote work, freelance positions, and other consultative work arrangements, which have revolutionized the recruitment landscape. Consequently, HR departments are now targeting Generation Z as potential candidates. This new generation is characterized by their digital proficiency, independence, fearlessness, global outlook, and is referred to by various names such as iGeneration (iGen), Gen Tech, Gen Wii, Net Gen, Digital Natives, and Plurals. As HR adapts to the changing times, it is increasingly leveraging AI, blockchain, augmented reality, experimentation, and cognitive thinking to enhance its processes. To meet the expectations of Generation Z, HR must provide challenges that foster creativity, innovation, and ultimate success.



Fig(ii) :AI and HR Functions  
Source: Author

Will it put an end to the human touch of HR? That is a very big question. From reducing the time consuming process of a highly subjective talent acquisition, to using AI-powered personalized chatbot for onboarding process making sure that the candidate will at no point be ‘left hanging’ or ‘ghosted,’ to handling administrative tasks like providing IDs and access to company hardware and software and providing employees with compliance related matters, to analyze large amounts of data and provide insights that can help HR teams make better decisions, to improve communication and collaboration within organizations, to facilitate virtual meetings, brainstorming sessions, and even team-building activities, role of AI in HR is plenty. While AI can augment HR professionals by providing data-driven insights, improving efficiency, and streamlining processes, it may not be able to replace the human element in areas such as employee relations, conflict resolution, and strategic decision-making.

AI-focused HRM systems have been found to contribute to favorable employee outcomes, including job satisfaction, commitment, employee engagement, and participation, ultimately leading to improved performance (Aouadni & Rebai, 2017; Azadeh et al., 2018; Castellacci & Viñas-Bardolet, 2019). Additionally, employees can leverage the internet to develop realistic expectations and perceptions of their working conditions and to enhance their competencies and training (Castellacci & Viñas-Bardolet, 2019). Furthermore, the implementation of AI applications can help alleviate humans from mundane and predictable tasks, enabling them to allocate their time more efficiently (Maedche et al., 2019).

No, AI is not a replacement for human HR professionals, it can certainly enhance their work and make HR functions more efficient and effective. AI is winning more hearts and minds at the workplace now. Companies like Zerodha have come forth with policies ascertaining employees that they won't be fired even if AI makes some job replacements. TCS believes that ChatGPT may create AI co-worker, change definition on the jobs, but not replace jobs.

### Methodology

Our methods included a qualitative exploratory analysis of the advent of AI in the Human Resources Practices. The study employed various methods of synthesis and analysis. The classification and systematization of information played a significant role in organizing and categorizing the data. Induction, the process of drawing general conclusions from specific observations, was also utilized. Comparison was employed to identify similarities and differences among the data sets. In addition, tabular and graphical methods were used to present and visualize the findings, allowing for a clear representation of the information gathered. These diverse methods collectively contributed to the comprehensive analysis of the study.

### Discussion

#### Challenges of AI adoption in HR

Integrating AI into talent management procedures is not a straightforward plug-and-play process. It requires careful consideration of significant dangers and challenges that organizations must address. Specifically, they need to tackle issues related to the lack of trust in AI decision-making, potential biases and ethical concerns, as well as legal risks.

Another major challenge is the huge amount of data used for AI. This has sensitive employee personal data and needs to be kept private and confidential. The ethical issues, biases and the copyright infringements are yet other challenges.

On one hand though AI is indeed a game changer, we shouldn't view AI as a problem solver or purpose to make a tough choice for all the HR functions, instead it should be used as an instrument to enhance value to our information. And it does come with some challenges. Though the algorithm has been carefully drafted, will AI clearly understand that specific characteristic which you may be looking for in a candidate and then land up in a wrong hire? Well, AI definitely can't account for human emotion and "read" people.

Can AI replace human intuition, which was developed over the years is a question to be answered. And unless regulated at government or global level, this technology can cause significant harm to the world, if it goes wrong (and it can go quite wrong too). Every technology that has disrupted the world, from electricity, to mobile phones to the internet, has inherent risks associated with it too.

### Conclusion

Generally, though the use of Generative AI in HR is still in its initial stages, it is clear that this technology has the possibility to bring important changes to every field. As HR specialists and establishments continue to discover the use of AI and ML in HR, it will be vital to carefully reflect the possible benefits and dangers related with these technologies and confirm the use of them in an ethical and responsible manner. Blockchain is revolutionizing the way HR practices are performed, as its decentralized nature automates the verification of information, resulting in more accurate approaches to hiring employees.

According to several studies, the integration of AI into HRM functions, specifically in areas like e-based performance management and training and development, has been shown to enhance communication effectiveness (Bharadwaj & Shipley, 2020; Bititci et al., 2016). Scholars have also argued that in order to facilitate learning and innovation within organizations, the presence of a feedback loop is essential (Grønsund & Aanestad, 2020).

While the HR folks need to experiment with AI in the HR space, it is all the more important to note down all AI related software which are being used and that would impact decisions related to any of the stakeholders of the business. Moreover define the processes involving AI and also ensure that employees are trained on AI compliance and its ethical use. And if HR, Tech-teams and data scientists collaborate, wonderful ways in which HR function works can be re-imagined by AI. The mechanization, working investigation, and predictive analysis provided by AI methods can certainly help to upsurge efficiency and performance of HR function, and enhance its role as a strategic partner in a business.

Hence it is important to overcome the fear of AI taking over jobs and stay ahead of the curve, but all the while be aware of its limitations. While experiencing the AI processes in the department, HR leaders get prepared for having a broader and strategic outlook on AI governance in the organization as they will be aware of the fine line between AI and employee productivity. As HR leaders navigate this ever-evolving landscape, the collaboration between AI and HR professionals will be vital in shaping a future where technology complements human expertise, creating a harmonious and productive work environment for all.

Let HR embrace AI, revolutionizing the workforce, one algorithm at a time.

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