

COMMENTARY



Ethical and operational challenges in AI-empowered employee recruitment: Insights and suggestions to the managers and managerial practitioners

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ABSTRACT

Integrating artificial intelligence (AI) into hiring processes can revolutionize employee recruitment and talent acquisition by increasing efficiency and objectivity. Yet, adopting AI in recruitment may raise ethical, operational, and fairness concerns. The current commentary therefore aims to explore the benefits and challenges associated with AI in employee recruitment policy and practice, focusing on unintentional bias, loss of human judgment, erosion of personal interaction, ethical concerns, skill relevance, and human-AI collaboration. Drawing from research papers and empirical investigations, the current commentary has scrutinized the literature of AI-empowered talent acquisition and analyzed cognate applications in employee recruitment, resulting in several important themes and issues. Specifically, AI algorithms are capable of perpetuating biases from historical data, executing discriminatory profile examination, inspecting the trueness of personal career journey, and improving the effectiveness of candidate assessments. Having said this, however, AI-driven processes may hinder soft skill demonstrations and cause alienation among employee with different levels of AI knowledge and ability. Opacity in AI decision-making may also raise concerns about fairness and transparency, risking organizational trust in employee selection process. Following the literature consolidation and analysis, the current commentary would like to recommend a hybrid approach melding AI efficiency and human judgment, in order to enhance AI-empowered talent acquisition process. While AI can potentially improve hiring processes, its implementation must be carefully crafted and managed to address ethical concerns and ensure fairness. A balanced approach that includes transparency, regular updates to AI criteria, and human oversight is imperative for creating an inclusive and an effective strategy of talent acquisition. Continued dialogue and research are crucial for navigating the complexities of AI in recruitment.

KEYWORDS

AI-empowered; Bias; Ethics; Fairness; Hiring; Human-AI; Recruitment

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Introduction

Artificial Intelligence (AI) indices in rapid technological advancement and affects almost every existing sector in the modern world, and one salient effect is related to the employee recruitment and talent acquisition [1]. Historically, recruiting has been time-consuming and heavily dependent on people to filter through resumes to match them with job descriptions, sifting the suitable candidates. Its purpose is to automate and streamline the profiling process, which in turn carries the promise of making the process faster, consistent, and objective. AI capabilities for quick and accurate data analysis have delivered values and efficacy to organizations looking to optimize their recruitment strategies [1].

Algorithms of AI-driven hiring systems can examine a huge pool of candidate data (e.g. resumes, cover letters, social media profiles, and more) to match job openings with the best candidates [2]. The main benefit of these systems is automating the initial screening process, which lightens up unnecessary work for human recruiters and speeds up the time between hiring requisition and a candidate on-staff. In addition, AI can also help reduce human errors and prejudice that tend to creep into recruitment by ensuring a fairer result [3]. Supporters of AI-empowered recruitment indicate that the technology may

lead to increased diversity because it only zeroes on qualifications and capabilities, not subjective biases [3].

The adoption of AI in hiring poses challenges and controversies, with concerns about unintentional bias arising from historical data used to train algorithms [3]. Biased data can perpetuate discriminatory practices, limiting diversity and potentially causing legal issues. Another issue is the lack of human judgment and contextual understanding in AI processes, leading to the exclusion of candidates with unique backgrounds that AI may overlook. The absence of personal interaction in AI-driven hiring can impact candidate experiences negatively by hindering the assessment of soft skills like communication and emotional intelligence, ultimately affecting perceptions of the company [4].

Ethical concerns and transparency are also critical issues [5,6]. The decision-making processes of AI systems can be opaque, making it difficult for candidates to understand why they were selected or rejected [5]. This lack of transparency has damaged organizational reputation and erode public trust towards organization [7]. Ethical AI usage in hiring requires organizations to provide clear explanations of how decisions are made and to offer candidates the opportunity to appeal or

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challenge these decisions if necessary. Additionally, AI systems may prioritize specific skills over others based on current market trends, potentially leading to overemphasizing skills that may soon become obsolete [8]. This narrow focus can limit an organization's skills diversity and hinder its adaptability to future challenges.

Following the iteration above, we believe a hybrid AI-human approach shall pre-empt strengths and alleviate risks in hiring; for instance, AI manages data tasks and initial screenings while humans focus on cultural fit. This collaboration ensures a balanced and effective process. That is, through ongoing dialogue and research, organizations can stay informed on AI's capabilities and limits to navigate ethical and practical challenges. Organizations can also enhance their hiring process with AI while ensuring fairness and inclusivity.

The Commentary

In the current commentary, we have scrutinized literature of AI-empowered employee recruitment and analyzed cognate applications in talent acquisition, drawing from research papers, industry reports, and expert commentaries. The analysis has led to several important themes and issues. These are, respectively, AI algorithms are capable of perpetuating biases from historical data, executing discriminatory profile examination, inspecting the trueness of personal career journey, and improving the effectiveness of candidate assessments. But unfortunately, everything has two sides and there is no exception for AI-empowered recruitment. Based on recent studies, we have discovered that AI-driven processes may hinder soft skill demonstrations and cause alienation among employee with different levels of AI knowledge and ability. Opacity in AI decision-making may also raise concerns about fairness and transparency, risking organizational trust in employee selection process. In view of what has preceded, this article now turns to clarify the merits and challenges in AI-empowered employee recruitment and talent acquisition.

Unintentional bias and fairness

Integrating AI into hiring processes promises enhanced efficiency and objectivity [9]. However, one of the most significant concerns is the potential for AI to unintentionally perpetuate biases. AI algorithms learn from historical data, and if this data contains biases related to gender, race, or other factors, the AI can unwittingly continue these discriminatory practices. For instance, if historical hiring data favors specific demographics, the AI might replicate these patterns, leading to biased decision-making and a lack of diversity within organizations. This issue can manifest subtly, such as the AI prioritizing resumes with specific names, terms, or educational backgrounds typically associated with specific groups.

Addressing this challenge requires a multifaceted approach. Organizations are advised to assure that the training data for AI models is diverse and representative of the broader candidate pool. Continuous monitoring and auditing of AI systems are essential to identifying and correcting biases as they arise. Implementing fairness-aware algorithms and transparency in AI decision-making processes can also alleviate the impact of discrimination and facilitate a more inclusive hiring environment [10].

Loss of human judgment and contextual understanding

While AI can process vast amounts of data quickly and consistently, it may lack the nuanced understanding that human

managers bring to the hiring process [11]. Human evaluators can appreciate personal growth stories, nontraditional experiences, and specific abilities that may not immediately appear in a resume. For example, a candidate with a unique problem-solving approach or creative thinking skills might not use the specific keywords that an AI system is programmed to recognize. This can lead to the exclusion of potentially valuable candidates who do not fit the predefined molds set by the AI.

Following the same logic, a hybrid hiring approach should be implemented to address the aforementioned limitation. By doing so, AI assists in the initial screening of candidates, filtering out those who clearly do not meet the basic requirements, whereas human managers conduct more nuanced evaluations, considering factors such as cultural fit, team dynamics, and individual potential that AI might overlook. In our opinion, this collaborative approach (AI-Human) can leverage the strengths of AI and human judgment, ensuring a more comprehensive assessment of candidates.

Erosion of personal interaction and empathy

Despite of its versatile functions, AI-driven hiring processes may lack the personal interaction opportunity, which is critical for assessing a candidate's attributes, such as interpersonal skills, communication styles, and emotional intelligence [12]. In our opinion, personal attributes are complex for AI to measure accurately, as they often rely on subtle cues and context that are best evaluated through human interaction. Our proposition is: when candidates engage solely with AI systems, they may miss the opportunities to demonstrate their interpersonal skills and build connections with the hiring organization. Very likely, the missing opportunity may lead to a sense of alienation and a negative perception of the organization.

Therefore it is essential to integrate hiring stages involving direct human interaction to mitigate the impact of missing opportunity aforementioned. One expedient way is: after an initial AI screening, candidates could participate in interviews, group discussions, or interactive exercises with human evaluators. By doing so, candidates can better showcase their soft skills and feel more connected to the organization [3]. Simply put, ensuring the hiring process includes opportunities for personal engagement, which in turn enriches application experience (for the candidate) and leads to better hiring outcomes (for the organization).

Ethical concerns and transparency

The opacity of AI-driven decision-making processes poses significant ethical concerns (11). For instance, candidates may find it difficult to comprehend why they were selected or rejected by an AI-empowered recruitment system, which can lead to doubts about the fairness and ethics of the hiring process. Truly a lack of transparency in how AI makes decisions may damage an organization's reputation and erode trust among job applicants and existing employees in the organization. Ethical AI usage in hiring requires that organizations provide clear explanations of how AI-driven decisions are made and offer candidates the opportunity to appeal or challenge these decisions if necessary.

Organizations should strive for transparency in their AI systems by making the decision-making criteria accessible and understandable to the job applicants. In a similar vein, the

employer, particularly for the recruiting panel (committee), should implement mechanisms that allow for human oversight and intervention when necessary. By maintaining transparency and providing candidates with avenues to question and understand AI decisions, organizations can build trust and ensure that their hiring practices are perceived as fair and ethical [8].

Skill relevance and adaptability

When hiring, AI-empowered systems prioritize specific skills based on current market trends and historical data [12]. As default in algorithm calculation, this priority can result in an overemphasis on skills 'currently in demand', but may become obsolete 'later on'. For example, AI might prioritize coding skills for various roles, overlooking candidates with other valuable competencies such as critical thinking, creativity, or leadership potential. In our opinion, this narrow focus can limit the diversity of skills within the organization and hinder its adaptability to future challenges.

To address challenges discussed above, it is thus crucial for organizations to regularly update the criteria used by their AI-driven recruiting systems to reflect the evolving needs of the industry and the organization. A balanced approach that considers both technical skills and broader competencies can ensure a more versatile and adaptable workforce. Organizations should also emphasize continuous learning and development, encouraging employees to acquire new skills that align with future trends and organizational goals.

Human-AI collaboration

While AI can significantly enhance the efficiency of the hiring process, it should not replace human managers entirely. The most effective hiring strategies often involve a combination of AI and human judgment [13,14]. On the one hand, AI can assist in processing large volumes of applications, identifying candidates who meet basic qualifications, and highlighting potential matches based on objective criteria. On the other hand, human managers can focus on more heuristic and/or strategic aspects of the hiring process, such as assessing cultural fit, team dynamics, and individual potential. [7].

Following the same logic, we propose a collaborative approach for the employee recruitment practices, which allow organizations to leverage the strengths of both AI and human evaluators. That is to say, AI and human play different roles in recruiting. AI can handle mundane, repetitive and data-intensive tasks, allowing human managers to engage in more meaningful interactions with candidates [1]. This collaborative approach ensures a comprehensive evaluation process that balances efficiency with empathy and contextual understanding [15]. Our proposition is: when integrating AI and human judgment, organizations are more likely to create an effective and inclusive hiring process that aligns with current needs and future aspirations.

Final Remarks

AI-empowered hiring processes have shown great potential and promise for recruitment efficiency and objectivity; however, such processes may also pose ethical and operational challenges. To overcome the challenges embedded in AI-driven employee recruitment and talent acquisition, we encourage organizations and hiring managers to devise anti-challenge

strategies and policies, aiming to eradicate and/or mitigate the influence of unintentional bias, incomplete judgment, and ethical concerns during the recruiting process. Supporting infrastructure and guidance (e.g., data handling workshop, job market updates & transparent operation criteria) should also be designed and deployed in place, further assisting hiring staff in their recruitment practices.

Moreover, there is an important need to combine AI's capabilities with human judgment in recruitment, as the combination can breakthrough limitations in data analysis (e.g., candidate profiling, authenticity examination), further fostering an inclusive and equal recruitment environment. Absolutely, continuous dialogue, research, and ethical scrutiny are also crucial as AI evolves in hiring. Prioritizing fairness, transparency, and adaptability also allows organizations to use AI effectively while maintaining human elements. Finally, we would like to advise organization and hiring managers that, in terms of employee recruitment and talent acquisition, adopting a balanced AI-human approach is imperative and, probably the most important factor, for creating a diverse, creative and resilient workforce.

Disclosure statement

No potential conflict of interest was reported by the author.

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