The Applicability of Artificial Intelligence in Candidate Interviews in the Recruitment Process

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ABSTRACT

This research paper examines the applicability of artificial intelligence (AI) in the recruitment and selection process, with a specific focus on the Interview phase. The study conducted qualitative interviews with 17 recruitment professionals, including hiring managers, recruiters, and HR executives, to gather their perspectives on AI adoption. The Unified Theory of Acceptance and Use of Technology (UTAUT) framework was utilized as the theoretical model to guide the research.

The findings indicate that the recruitment professionals were generally receptive to using AI in various recruitment phases. However, when it came to the interview phase, there was a distinct lack of enthusiasm for AI adoption among the professionals. They expressed concerns about providing a better candidate experience and perceived AI-based interviews as a lack of commitment to candidates. As a result, regardless of the hiring volume or job group, the professionals were hesitant to integrate AI into the interview phase.

The research underscores the importance of carefully selecting the appropriate recruitment stage for integrating AI and addressing the concerns raised by recruitment and selection professionals. It highlights the need to consider the candidate's experience and maintain a sense of commitment throughout the recruitment process.

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Introduction

AI technology has witnessed significant advancements in recent years, leading to its widespread adoption across various industries. Organizations are increasingly exploring the potential of AI to improve operational efficiency, enhance decision-making processes, and gain a competitive edge [1]. The recruitment sector is no exception to this trend, as AI has emerged as a promising tool to streamline and optimize hiring processes [2,3].

AI has been widely applied in the recruitment function, encompassing a range of applications, including candidate sourcing, resume screening, skills assessment, and candidate selection. Through AI-powered algorithms and machine learning techniques, recruiters can analyze large volumes of data, identify patterns, and make data-driven decisions, thereby making recruitment practices more efficient and effective.

A. Hiring practices of organizations

The recruitment process serves as a gateway for organizations to identify and attract skilled candidates who align with their objectives and cultural values. Thus, efficient and effective hiring practices are crucial for organizations as they directly impact the quality of talent acquisition and subsequent organizational performance [4]. However, in today's dynamic and competitive business landscape, organizations face several challenges when it comes to hiring [5, 6]. These challenges include managing high volumes of applications, identifying the most suitable candidates, reducing bias in the selection process, and ensuring a positive candidate experience [7]. Inefficient or ineffective hiring practices can lead to increased time-to-hire, higher recruitment costs, and potential mismatches between candidates and job requirements which may lead to employee retention issues [8, 9].

In today's competitive job market, organizations face numerous challenges in effectively and efficiently selecting the right candidates for their teams. To overcome these challenges, innovative approaches are being sought to leverage technology, particularly AI, in order to enhance the recruitment process [10].

The adoption of AI in recruitment offers several potential benefits, including reduced time and cost per hire, an enhanced candidate experience, improved quality of hires, and increased overall organizational performance [9]. Consequently, organizations have been applying AI in various recruitment phases, with particular emphasis on the initial stages, such as recruitment pre-planning, sourcing, and pre-screening. Existing literature highlights the positive outcomes of AI applications in these stages, despite some concerns regarding algorithmic bias that may inadvertently disqualify potentially qualified candidates [11, 12]. However, organizations have been cautiously implementing AI in these recruitment phases.
Nevertheless, one area that remains relatively under-researched is the applicability of AI in the interview stage of the recruitment process. Interviews play a crucial role in assessing candidate fit, skills, and cultural alignment [13]. Therefore, it is essential to investigate the perspectives of recruitment professionals regarding the use of AI in interviews. Such insights are pivotal in evaluating the potential advantages, challenges, and implications of integrating AI into the overall recruitment process.

With this in mind, this research aims to contribute to the existing knowledge base by examining the applicability of using AI specifically in the interview stage from the perspective of recruitment professionals. By delving into this topic, we can gain valuable insights that will inform and shape the future utilization of AI in the recruitment process, ultimately enhancing decision-making and ensuring the selection of the best-suited candidates.

Through this research, the researcher seeks to shed light on the applicability, benefits, challenges, and potential implications of using AI in interviews. By understanding the perspectives of recruitment professionals, it can generate valuable insights that will inform organizations in their adoption of AI-based interview solutions, ultimately leading to more effective and efficient hiring practices. Overall, this research aims to contribute to the growing body of knowledge surrounding AI in recruitment and provide valuable insights for organizations seeking to optimize their recruitment processes.

B. Importance of the interview phase

Interviews play a pivotal role in the hiring process as they provide an opportunity for organizations to directly assess candidates' qualifications, skills, experience, and cultural fit. While resumes and application materials offer valuable insights, interviews enable recruiters to gather more nuanced information and make informed decisions about potential hires [14].

One of the key advantages of interviews is their ability to evaluate candidates beyond their qualifications on paper. Interviews allow recruiters to interact with candidates in real time, ask specific questions, and gauge their responses, problem-solving abilities, and communication skills [15]. This interactive process provides a holistic view of the candidate's potential to succeed in the role and contribute to the organization. Furthermore, interviews enable organizations to assess a candidate's cultural fit within the company.

Cultural fit refers to the alignment between an individual's values, attitudes, and behavior and the organizational culture [16]. A candidate who aligns well with the company's values and work environment is more likely to integrate smoothly into the team and perform optimally [17]. Interviews allow recruiters to evaluate the candidate's alignment with the organizational culture, team dynamics, and the company's vision. In addition to evaluating technical skills and cultural fit, interviews provide an opportunity to assess a candidate's
interpersonal skills, problem-solving abilities, adaptability, and critical thinking [18]. These skills are often crucial for success in a professional environment, and interviews offer recruiters a chance to observe and evaluate them firsthand.

While interviews have long been a staple in the hiring process, they also come with limitations. Traditional interview methods heavily rely on subjective assessments and personal biases, leading to potential inconsistencies in candidate evaluation [19]. Moreover, interviews can be time-consuming, especially when dealing with a large pool of candidates [16]. The need for scalable and efficient interview processes has prompted the exploration of AI-based solutions as a means to address these challenges [20].

Understanding the importance of interviews in the hiring process and the potential limitations associated with traditional methods underscores the need to explore innovative approaches like AI to enhance and optimize this critical stage of recruitment. By leveraging AI technologies, organizations aim to improve the objectivity, efficiency, and effectiveness of interviews while ensuring a fair and accurate evaluation of candidates.

C. Research objectives and research questions

The primary focus of this study is to understand how recruitment professionals perceive the use of AI in interviews, identify the perceived benefits and challenges associated with its implementation, and compare AI-based interview tools to traditional interview methods. To achieve this objective, the following research questions will guide the investigation:

1. How do recruitment professionals perceive the use of AI in interviews?

   This question aims to delve into the attitudes, beliefs, and opinions of recruitment professionals regarding the adoption of AI in the interview process. It seeks to understand their perspectives on the benefits and potential drawbacks of using AI in interviews.

2. What are the perceived benefits and challenges of using AI in interviews?

   This question aims to identify and analyze the perceived advantages and disadvantages of employing AI-based interview tools from the perspective of recruitment professionals. It explores the potential benefits, such as improved efficiency, reduced bias, and enhanced candidate experience, as well as the challenges and concerns that may arise, such as technical limitations, ethical considerations, and the impact on human interaction.
D. Research contribution

This study offers empirical evidence derived from recruitment specialists, examining the strategic integration of AI within the recruitment process to leverage its advantages in enhancing outcomes for both job seekers and organizations. While the proliferation of AI technologies is evident, this research also addresses the negative repercussions and apprehensions influencing the adoption of AI in various recruitment stages, thereby shedding light on the judicious utilization of AI tools during the interview phase of the recruitment process. Consequently, the research presents data-driven recommendations aimed at mitigating these concerns, ultimately maximizing the benefits derived from AI implementation in a manner that is mutually advantageous to all stakeholders involved.

Literature Review

A. Overview of AI and its applications in recruitment

In recent years, AI technologies such as natural language processing, machine learning, and predictive analytics have been applied to various aspects of the recruitment process [21]. These technologies offer potential benefits in terms of efficiency, objectivity, and decision-making capabilities [22].

AI-based applications in recruitment encompass a wide range of functionalities. For instance, AI-powered chatbots and virtual assistants can automate candidate screening and respond to candidate inquiries, providing a personalized and efficient experience [8]. AI algorithms can analyze resumes and job descriptions to identify the best-fit candidates based on keywords, skills, and experience [23]. Machine learning algorithms can also be employed to predict candidate performance and retention, aiding in more effective candidate selection [24].

The application of AI in recruitment has witnessed significant augmentation, particularly subsequent to the introduction of ChatGPT, a language-based AI model, in 2022 [25]. Notably, ChatGPT has presented numerous propositions and applications, including the facilitation of job description composition through its assistance, as well as the formulation of interview questions [23, 25].

B. AI-based interview tools

Several studies have investigated the use of AI in interviews and its impact on the recruitment process. For example, research by Smith et al. [26] explored the implementation of AI-powered video interviews and found that it improved the efficiency of candidate screening and reduced time-to-hire. Similarly, the use of AI chatbots in interviews highlighted the potential benefits of personalized candidate experiences and improved engagement. Additionally, technologies like HireVue and ChatGPT are being used by companies like Unilever
for their recruitment and selection processes [14]. AI-based video interview tools are also in place in some organizations. In recent times, the advancement of natural language capabilities in AI tools, such as ChatGPT, has evoked the possibility of leveraging these technologies to conduct interviews [28]. However, all these studies have been done from the point of view of the candidates or the organization rather than focusing on the perspectives of recruitment professionals. The existing research indicates a need for further exploration of recruitment professionals' perspectives on AI in interviews, which will be addressed in this study.

C. Benefits of using AI in interviews

The existing research has pointed out that some organizations have benefited from using AI in interviews [7]. AI-based interview tools can significantly reduce the time and resources required to conduct interviews, especially in cases where a large number of candidates need to be evaluated [7]. The automation of interview scheduling, question generation, and evaluation processes can streamline the overall interview process, allowing recruiters to focus on more strategic tasks [3].

Secondly, AI has the potential to minimize biases that can emerge in traditional interviews [29, 30]. Research has shown that human interviewers are susceptible to biases based on various factors such as gender, race, and appearance [31]. By employing AI-based tools, organizations can strive for greater fairness and objectivity in candidate evaluation, ensuring that the focus remains on skills, qualifications, and competencies [10]. This can lead to a more fair and unbiased selection process, ultimately resulting in the hiring of better-suited candidates.

Using AI in the interview process can save businesses a significant amount of time and resources [32]. Furthermore, AI can analyze large volumes of data and information about candidates, including their resumes, work experience, skills, and qualifications [33]. This can assist in identifying the most suitable candidates for a position, ensuring that businesses are able to find and hire top talent.

Moreover, AI-enabled interview systems can also provide valuable insights and analytics to recruiters. These insights can help recruiters make more informed decisions and improve their overall recruitment strategies. For example, AI can analyze interview responses and assess candidates' communication skills, problem-solving abilities, and job-specific knowledge [34].

However, all these AI tools and propositions of using AI predominantly take the viewpoint of the AI developers and AI technology providers rather than considering the perspectives of recruitment professionals who are the individuals using these AI technologies [35]. Thus, this research draws upon the UTAUT theoretical framework to provide a
comprehensive understanding of the use of AI in interviews from the perspective of recruitment professionals.

**Theoretical Background**

The Unified Theory of Acceptance and Use of Technology (UTAUT) provides a theoretical framework to understand individuals' intentions and behaviors regarding the adoption and use of technology. Developed by Venkatesh et al. [36], UTAUT integrates various theories and models to explain the factors influencing technology acceptance and use. UTAUT identifies four key constructs that influence individuals' intentions to use technology.

**A. Performance expectancy**

This construct refers to the belief that using technology will enhance job performance and productivity [36]. In the context of using AI in interviews, recruitment professionals' performance expectancy could be related to their perceptions of how AI-based interview tools can improve the efficiency, accuracy, and objectivity of the interview process.

**B. Effort expectancy**

Effort expectancy relates to the perceived ease of use and the belief that using technology will be free from complexity or challenges [36]. In the context of AI-based interviews, recruitment professionals' effort expectancy may encompass their perceptions of how user-friendly and intuitive the AI tools are and whether they require extensive training or technical expertise.

**C. Social influence**

Social influence refers to the impact of others' opinions and norms on individuals' intentions to use technology [36]. In the context of AI in interviews, social influence could involve the influence of colleagues, superiors, or industry peers on recruitment professionals' perceptions of the appropriateness and effectiveness of AI-based interview tools.

**D. Facilitating conditions**

Facilitating conditions refer to the availability of resources, support, and infrastructure necessary for technology use [36]. In the context of AI-based interviews, facilitating conditions could include factors such as access to appropriate AI tools, organizational support for their implementation, and technical infrastructure to facilitate smooth integration and usage.
In addition to the four core constructs, UTAUT also incorporates moderating factors that can influence the relationships among the core constructs. These include individual characteristics (such as gender, age, and experience), job relevance, and voluntariness of use.

**Methodology**

This study employs a qualitative research design to gain an in-depth understanding of the perspectives of 17 recruitment professionals regarding the applicability of using AI in interviews. These professionals encompass recruiters, hiring managers, talent acquisition professionals, HR executives, professionals in recruitment agencies, and headhunters. Qualitative research enables a comprehensive exploration of participants’ experiences, opinions, and attitudes, providing rich and nuanced insights into the research topic. By conducting semi-structured interviews, this research aims to capture the participants’ thoughts and reflections on the use of AI in interviews.

The research process consists of several key stages, including participant recruitment, data collection, data analysis, and interpretation. The following provides an outline of the overall research process.

**A. Participant recruitment**

Recruitment professionals were purposefully selected as research participants, employing a purposive sampling technique to ensure adequate representation from diverse industries, organizational sizes, and roles within the field. Diligent efforts were made to recruit a heterogeneous group of participants, allowing for the capture of a wide spectrum of perspectives.

LinkedIn was identified as the principal platform for participant recruitment, and personalized messages were sent to potential candidates. The selection criteria ensured that all participants possessed a minimum of one year of experience in the recruitment domain and were familiar with both AI technologies and conventional, non-AI recruitment methods. This approach was adopted to mitigate the potential influence of interviewees' personal biases regarding the use or non-use of AI on the collected data.

To further diminish the impact of personal biases, comprehensive preparatory steps were undertaken before conducting the interviews. An explanation of AI, the contextual framework of the research, as well as definitions of AI and AI tools were provided to the participants. By offering this contextual information, the intention was to foster a clearer understanding among interviewees and consequently reduce the influence of their personal biases on the data collected.
In the context of research methodology, Lincoln and Guba’s recommendations were considered and applied [37]. Their methodological approaches were deemed suitable to address potential biases arising from research participants, ensuring that the data gathered remains as unbiased as possible throughout the research process.

The consenting research participants were interviewed for one hour based on a semi-structured interview using the UTUAT framework.

B. Data collection and analysis

The recorded interviews were transcribed verbatim, and thematic analysis was employed to identify recurring patterns, themes, and perspectives. The data analysis process involved coding, categorizing, and organizing the data to identify key themes and sub-themes. These themes followed the theoretical framework of UTAUT to understand the benefits and expectations associated with using AI in the interview phase.

The identified themes and sub-themes were interpreted to gain a comprehensive understanding of the recruitment professionals’ perspectives on the applicability of AI in interviews. The findings were presented in a coherent and meaningful manner, supported by relevant quotes from the interviews.

Results

The study involved semi-structured interviews with 17 recruitment professionals from diverse industries and organizations. The participants had varying levels of experience in recruitment, ranging from entry-level recruiters to senior HR managers, as summarized in the following subsections.

B. Demographic data

The demographic profile of the interviewees is presented in Table 1

<table>
<thead>
<tr>
<th>Number</th>
<th>Country</th>
<th>Experience (years)</th>
<th>Industry</th>
<th>RSP Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saudi Arabia</td>
<td>13</td>
<td>Manufacturing</td>
<td>Recruiter</td>
</tr>
<tr>
<td>2</td>
<td>Australia</td>
<td>10</td>
<td>IT and Telecom</td>
<td>Recruiter</td>
</tr>
<tr>
<td>3</td>
<td>Pakistan</td>
<td>5</td>
<td>HR &amp; Admin services</td>
<td>Recruiter</td>
</tr>
<tr>
<td>4</td>
<td>India</td>
<td>14</td>
<td>IT and Telecom</td>
<td>Recruiter</td>
</tr>
<tr>
<td>5</td>
<td>Philippines</td>
<td>10</td>
<td>HR and Admin Services</td>
<td>Recruiter</td>
</tr>
<tr>
<td>6</td>
<td>Philippines</td>
<td>4</td>
<td>Business process outsourcing (BPO)</td>
<td>Recruiter</td>
</tr>
<tr>
<td>7</td>
<td>India</td>
<td>4</td>
<td>Transportation and logistics</td>
<td>Recruiter</td>
</tr>
<tr>
<td>8</td>
<td>Pakistan</td>
<td>12</td>
<td>IT and Telecom</td>
<td>Recruiter</td>
</tr>
<tr>
<td>9</td>
<td>Nigeria</td>
<td>9</td>
<td>Aviation</td>
<td>Recruiter</td>
</tr>
</tbody>
</table>
Each of the interviewees has been involved in various recruitment work, with some having experience in hiring blue-collar workers while others focused on recruiting white-collar workers. A few interviewees were also involved in executive hiring. The details of specific hiring functions are summarized in Table 2 below.

<table>
<thead>
<tr>
<th>Number</th>
<th>Role</th>
<th>Pseudo Code</th>
<th>Candidate details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Recruiter</td>
<td>R1</td>
<td>R1 had extensive experience in recruitment, having worked as a national talent manager for a manufacturing company in Saudi Arabia, as well as in a retail company in the same region. With a total of 13 years of experience in recruitment, R1 was responsible for all aspects of the recruitment process, from candidate engagement to hiring manager collaboration, and focused on recruiting for middle to senior-level positions. Notably, R1 did not utilize external recruitment firms as part of the sourcing process.</td>
</tr>
<tr>
<td>2</td>
<td>Recruiter</td>
<td>R2</td>
<td>R2 was a talent acquisition partner for an IT company in Australia and was responsible for managing various HRM activities, including recruitment and strategic planning. He had a total of 10 years of experience in the RSP, focusing on recruiting for IT companies. R2 was involved in all phases of the recruitment process and did not rely on external recruitment companies for candidate sourcing. However, for middle to senior positions, he searched for potential candidates in other countries who were open to relocating to Australia if the recruitment process was successful.</td>
</tr>
<tr>
<td>3</td>
<td>Recruiter</td>
<td>R3</td>
<td>R3's professional experience is characterized by his dual roles as a Human Resource Manager and Operations Manager, which also encompass recruitment responsibilities. As an external recruiter, he managed his own recruitment agency and provided recruitment services to clients. While involved in all aspects of the RSP, he was not responsible for the final hiring decision, which was made by the hiring manager of the client company. R3 has worked in different industries, including IT, hospitality, and facilities management.</td>
</tr>
</tbody>
</table>
where he primarily focused on recruiting junior blue-collar workers. R3's tenure in the RSP industry spans five years.

R4 worked as an internal recruiter, assuming the role of HR business partner, with an experience of 14 years in recruitment, primarily in the IT sector. She was associated with a global IT consulting company, which has a workforce of over 2.5 million employees. During her tenure, she was actively involved in all phases of the RSP, recruiting junior to mid-level experienced candidates. R4's recruitment workload was high, with a volume of 250 candidates per month, which necessitated her to compete with other IT consulting companies in attracting and hiring top talent. She also led the hiring of MBA graduates from prestigious Indian universities, which she considers a successful strategy for attracting young talent to the organization.

R5 had the official designation of Human Resources Specialist and worked as a recruiter in the Philippines for a total of ten years. During this time, he gained experience in recruiting for various junior to mid-level roles. Further details regarding his involvement in different recruitment processes, industries, or organizations are not available.

R6 worked as a recruitment specialist in the Philippines, and all four years of her career involved hiring for junior to mid-level roles. Her primary focus was on business process outsourcing (BPO) roles, where most of her clients were based in the USA and had call centers or administrative services established in the Philippines. She had an average monthly fulfillment target of 65, which refers to the number of positions she was required to fill in each month.

R7 worked as an internal recruiter for four years in India in the transportation and logistics industry, holding the official title of Recruitment and Payroll Manager. During his tenure, he was primarily involved in recruiting blue-collar workers, specifically drivers, for the organization. R7 was responsible for all phases of the recruitment process, including sourcing, screening, interviewing, and onboarding new hires. His average monthly fulfillment target was 28.

R8 held the position of Technical Recruitment Specialist and worked as an internal recruiter with a focus on middle to senior-experienced candidates. He worked in Pakistan and hired an average of 20 candidates per month. In addition to his work as an internal recruiter, he was also an external recruiter for IT and startup firms and established his own recruitment agency.

R9 served as a Talent Acquisition Manager in the aviation industry and was primarily involved in the recruitment of skilled and senior positions, such as pilots, cabin crew, and airport security agents for a Nigerian airline company. Having nine years of experience as an internal
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recruiter, R9 held the responsibility of overseeing the entire recruitment process for the company, from sourcing potential candidates to conducting interviews and making hiring decisions.

R10 was employed by a multinational corporation that has a century-long history and is part of the Fortune 100 list. The corporation specializes in developing AI technologies that function as platforms for global companies. R10 worked for a division of this corporation, which functioned as a recruitment agency for other Fortune 100 companies on a global scale. Although based in the United Kingdom, R10’s clients were primarily located in the United States of America. R10 held the official title of Talent Acquisition and Offering Lead and was responsible for designing and implementing talent acquisition strategies for other global corporations.

HRE1 served as an HR Executive and held the position of Human Resource Manager for an Indian financial institute in the banking and financial sector. In addition to his role as an HR Executive, he acted as an internal recruiter, being responsible for hiring approximately 150 candidates monthly, resulting in 1800 candidates annually. HRE1 was involved in the recruitment of credit analysts, risk analysts, credit monitoring professionals, sales, and marketing managers, among others. His total experience in the industry amounts to eight years.

HRE2 served as an HR manager and as a recruitment specialist. He also has his own recruitment agency, which has been involved in hiring for various companies in India. He has been using LinkedIn as the main sourcing platform and had exposure to many AI technologies which have been requested by the companies he worked for.

R11 was employed in an Australian professional services company and served as an internal recruiter. With the official title of Talent Acquisition and HR Business Partner, she was responsible for recruiting candidates for middle to senior positions, including director-level positions, in the accounting and auditing profession. In addition to being involved in all phases of the recruitment process, she also collaborated with external recruitment agencies to source suitable candidates.

HM1 was employed as a Business Development Manager and acted as a hiring manager for a natural resources company. His primary responsibility was to recruit sales and marketing professionals, with an average hiring volume of 2-4 hires per year. HM1 relied on the internal recruitment function of the HR division to aid in making hiring decisions, and although external recruitment agencies were available to him, he opted to utilize the internal recruitment team due to the low volume of hiring in his business division. HM1’s career history
The analysis involved coding and categorizing the interview transcripts to identify recurring topics and ideas. Four main themes were identified and used for further analysis to understand the recruitment professionals' perspective on using AI for interviews. These four themes included the perceived benefits of AI in interviews, concerns and challenges, human interaction and judgment, and organizational readiness and adoption. The findings of each theme are presented next.

C. Perceived benefits using AI in Interviews

The interview stage of the hiring process is frequently recognized as the most time-consuming and costly component of recruitment, resulting in increased hiring expenses and longer time-to-hire [38]. Thus, it can be assumed that recruitment professionals would consider using AI in the interview phase if it could help reduce the time to hire and the cost of hire, among other factors.

However, all 17 recruitment professionals interviewed in this study did not find AI in the recruitment phase beneficial. They expressed concerns about the lack of human connection and intuition that AI may bring to the interview process, which is explained by the perceived challenges of using AI in interviews.
D. Perceived challenges

All 17 recruitment professionals who participated in this study explained that the integration of AI in the interview phase brings forth a set of challenges. These challenges encompass several key areas that influenced their perceptions and reservations regarding the utilization of AI in interviews.

1. Lack of human connection

Participants expressed concerns about the diminished human connection when using AI in interviews. They emphasized the importance of establishing rapport and building a connection with candidates, which they believed could be challenging to replicate through an AI-driven process. R2 mentioned, "Candidates are people. People need to talk and connect to people. Not to machines like AI". The absence of human interaction was perceived as a potential limitation, particularly in assessing candidates’ soft skills, cultural fit, and interpersonal dynamics.

2. Diverse and complex assessments

Recruitment professionals highlighted the diverse and complex nature of assessments required during interviews. They felt that AI, as it currently stands, may not adequately address the multifaceted aspects of candidate evaluation. Participants emphasized that certain assessments require contextual understanding, nuanced interpretation, and the ability to adapt based on real-time cues, which they believed AI might struggle to fulfill.

For example, R9, who was involved in hiring professionals like pilots, explained that such roles required industrial knowledge and various traits such as specific leadership qualities and personal characteristics. She explained:

"In the aviation world, the pilot is the one in charge and has the highest authority when flying. However, let’s imagine a scenario where the co-pilot, who is junior to the pilot, says something that contradicts the commands issued by the pilot. In such a situation, it is important for the pilot to listen to the co-pilot, assess their input, and consider following their instructions if they make sense. This requires a combination of personality traits and leadership skills. AI will not be able to fully assess and understand these aspects and characteristics."

HRE2, who used to work in the automotive industry, explained a similar scenario specific to industries like automotive. She pointed out that certain jobs, such as mechanics, rely heavily on practical skills rather than being explained or assessed through verbal exchange. She explained:
"Some of the best mechanics I've come across had a unique approach to diagnosing and fixing mechanical problems. It's like they had this special intuition or sixth sense about it. Instead of being able to explain the exact steps or techniques they used, they would simply open up the car, give it a sniff, touch a few things here and there, and then magically know what needed to be done to fix it. It was almost like they had some kind of superpower!

However, here's the catch. If we asked these mechanics to explain what they did or how they fixed the problem, they couldn't really put it into words. It was as if their expertise was so deeply ingrained in their hands-on skills that it couldn't be easily translated into a verbal explanation. And this is where AI falls short. AI, as advanced as it is, won't be able to recognize and appreciate the kinds of hands-on skills that these mechanics possess. It's something that requires a level of experience, intuition, and practical know-how that goes beyond what AI can currently replicate."

Those who have worked in industries like hospitality also shared a similar notion. For instance, R7 highlighted that AI could not assess how a candidate showcases friendliness toward a tourist, which is often an essential quality sought when hiring front-office receptionists in hotels.

This highlights the uniqueness of certain industries, where expertise is best demonstrated through practical application rather than verbal explanation. AI, despite its capabilities, falls short in recognizing and replicating these types of hands-on skills and experiences that are vital in fields like automotive.

3. Lack of transparency

Another challenge raised by the participants was the lack of transparency in AI algorithms used during interviews. Concerns were expressed regarding the opacity of decision-making processes and the potential for hidden biases within the algorithms. Participants emphasized the need for transparency and explainability to gain confidence in the reliability and fairness of AI-based interview assessments.

R10 provided a detailed explanation based on his experience working for AI product development companies, including the organization he was employed with. He had the opportunity to work for a global IT company that had developed over 1000 AI products and held patents for some of the AI algorithms they created. In his role, he was also involved with numerous AI product development companies. However, R10 pointed out that none of these companies disclosed their algorithms or the datasets used to train their AI products. Consequently, only the companies themselves had the ability to accurately test the products for their effectiveness.
Furthermore, R10 expressed that many of these AI development companies published misleading information. "They claimed to incorporate advanced techniques like Natural Language Processing (NLP) in their algorithms and boasted about various capabilities, but in reality, as someone directly involved in algorithm development, I knew that their algorithms did not possess the features they claimed. So literally, you cannot trust what they claimed."

R10's insights shed light on the lack of transparency and accuracy within the AI development industry. The secrecy surrounding algorithms and datasets inhibits external verification and hinders the ability of others to evaluate AI products. Additionally, R10's observations regarding the dissemination of untruthful information raise concerns about the integrity and credibility of certain AI development companies.

Another aspect of AI transparency revolves around the necessity of providing explanations for why AI disqualified certain candidates. According to R10, in the UK, it is a legal requirement that if a candidate is disqualified and the need arises (such as in a legal pursuit initiated by the disqualified candidate), there should be an ability to explain the reasons for disqualification. However, since AI fails to provide transparency regarding the algorithms used to disqualify candidates, R10 emphasized that it would not be feasible to use AI in highly sensitive areas such as legal or government service recruitment.

These revelations emphasize the importance of transparency and accurate representation in the AI industry. Without clear disclosure of algorithmic details and truthful claims about product capabilities, it becomes challenging for users and stakeholders to make informed decisions and fully trust the AI technologies they encounter.

4. Lack of trust

Trust emerged as a significant challenge in the adoption of AI in interviews. Participants expressed skepticism and apprehension toward fully relying on AI-driven assessments. Trust-building was seen as crucial to gain acceptance among recruitment professionals and candidates alike.

One of the participants, R11, shared her experience of using AI technology for candidate sourcing, which led to her decision not to use AI in the interview phase. She described employing an AI product offered by LinkedIn, which was customized to assist in sourcing candidates for a strategic role she was recruiting for. She invested AUD 35,000 in this AI tool, expecting it to streamline the candidate sourcing process.
However, she expressed her frustration when the AI tool failed to yield any worthwhile candidates for interview.

Due to the lack of success with the AI tool, R11 resorted to employing traditional sourcing mechanisms. She utilized methods such as placing job advertisements and leveraging referrals to actively pursue potential candidates. R11 explained that these manual sourcing methods proved successful in finding the right candidate for the position. Her unsuccessful experience with this customized tool, developed by a well-reputed company, led her to believe that AI is not yet capable of conducting the complex assessments required in the interview phase.

Another aspect that diminished trust in AI is its perceived capabilities. According to the interviewees, AI is not capable of assessing some very specific capabilities of candidates. HM1, who hired sales professionals, explained it as follows:

"A candidate may give the right answer by using many words and takes ten minutes to answer a question which should only take 2 minutes. The answer may be correct, but if the communication skills are good, it should not take 10 minutes to give the answer. I don't assume AI is going to help with such situational-based complex assessments."

Thus, the perception that AI is not capable of assessing the "approach" of the answers given by candidates has diminished trust in using AI in the interview phase.

5. Perceived human interaction and judgment.

Recruitment professionals acknowledge the potential limitations of AI when it comes to replicating human connections and meeting the candidate's need for personal interaction with representatives of the company they are considering working with. R12, for instance, described it as "respecting the candidates by investing time to connect with them personally during the interviews."

This personal touch is particularly important in executive hiring, as mentioned by R13, who deal with C-level executives. He explained that candidates being considered for such high-level positions need to feel that their time and expertise are valued. One critical way to demonstrate this is through face-to-face interviews conducted in private settings. Using AI for such interviews may give the impression of disrespect, and candidates may not show genuine interest.

Similarly, R11 emphasized the significance of meeting and getting to know candidates before making a hiring decision. In the hospitality industry, R5, R6, and R8 all agreed that face-to-face interviews were necessary to develop a subjective understanding of a candidate's suitability. R8 put it simply, saying, "You wouldn't marry
someone you only dated online, would you? You want to meet and know the person better before selecting them for marriage. The same analogy applies to hiring someone."

On the other hand, R12, who assists large firms in hiring professionals like auditors, Certified Practicing Accountants (CPAs), and financial advisors, opposed the use of AI in candidate selection due to the scarcity of skills in this domain and the limited pool of qualified candidates. She explained, "Finding qualified candidates is already a challenging task because there is a scarcity of highly qualified individuals. So, when we come across a potential candidate who meets our requirements, we want to make sure that we establish a connection with them and ensure they are not disqualified by AI algorithms. We understand that AI has its limitations and may not fully capture the unique qualities and potential of these candidates. That’s why it’s crucial for us to personally engage with them and evaluate their suitability through human interaction. By doing so, we can ensure that deserving candidates are not overlooked or unfairly eliminated by automated processes." This can be interpreted as reducing the risks and taking matters into human control by not involving AI in a situation where there aren’t many options in terms of potential candidates.

6. Organizational readiness and adoption

According to the recruitment professionals interviewed, organizations are hesitant to adopt AI in the interview phase, despite acknowledging the existence of various AI products and technologies. Their perception of readiness revolves around the facilitating conditions and infrastructure setup, extending beyond the mere availability of technology or tools.

For instance, R2 highlighted that AI technologies providing interview capabilities are not integrated with other HR systems. As a result, AI tools operate in isolation. One of the challenges he mentioned is that different AI products used for the same interview function sometimes produce varying results. This raises concerns about the accuracy of the AI products and poses integration issues. Additionally, R10 noted that some AI developers are unwilling to collaborate and integrate their technologies with other products due to competition.

The reluctance to adopt AI in the interview phase stems from these challenges related to integration, consistency, and competition. Organizations recognize the potential of AI but are cautious about implementing it until these issues are addressed. They seek a more comprehensive and integrated approach that goes beyond standalone AI tools, ensuring compatibility with existing HR systems and reliable accuracy of results. He added:
"AI product developers and companies should prioritize collaboration over competition. They need to work together and provide more integrated products. For instance, they should openly share guidelines on how their AI products can be seamlessly integrated with other technologies or systems. Additionally, they should offer support and assistance with the integration process, so that end users like us don't have to deal with isolated products or figure out complex integration procedures on our own. By fostering collaboration and providing comprehensive solutions, AI developers can help streamline the adoption and implementation of AI technologies in the interview phase, making it easier and more efficient for organizations to leverage the benefits of AI while ensuring seamless integration with existing systems.

Discussion

These findings, based on the perceptions of recruitment professionals, provide valuable insights regarding the adoption of AI in the interview phases. These insights suggest managerial interventions that can be summarized as follows:

A. How to use AI in the interviews

By analyzing the findings of the study, it becomes evident that recruitment professionals are not particularly enthusiastic about adopting AI technologies in the interview phase. This sentiment persists despite the increasing availability and utilization of AI technologies in recruitment, such as HireVue, which facilitates AI-based interviews [14]. As a result, organizations may opt to prioritize the use of AI in other recruitment phases while relying on human-driven interviews during the interview phase.

A "hybrid model" was proposed by a few recruitment professionals, wherein AI and human resources work collaboratively. The idea is to strategically employ AI where the most significant benefits are anticipated and where the associated risks are deemed minimal. Conversely, human involvement is leveraged in instances where the potential risks of relying solely on AI are predicted to be higher. This approach seeks to strike a balance between the advantages of AI technology and the human expertise required for thorough assessment and decision-making.

B. Perspective

One critical aspect warranting consideration is the contextual framework of AI adoption, as unveiled by this research. The insights obtained from recruitment professionals, who are prospective users of AI in their daily job functions, constitute a significant portion of
this study's findings. However, it is equally important to recognize and acknowledge the organizational perspective.

From the organizational standpoint, strategic leaders are actively endorsing AI-driven Human Resource Management, with specific emphasis on recruitment, to achieve strategic objectives like enhanced profitability through operational cost reduction [20]. The automation capabilities of AI present compelling use cases, especially in scenarios where AI can potentially conduct interviews, yielding superior outcomes, thus piquing the interest of strategic leaders. Nevertheless, these leaders must duly consider the insights furnished by end-users, such as recruitment professionals, regarding the utilization of AI tools. If the suggested AI functionalities are not embraced by these professionals, it could impede the realization of anticipated returns on investments.

Hence, strategic leaders can effectively leverage the insights shared by end-users, such as recruitment professionals, to make informed decisions on the suitability of AI implementation in specific scenarios. Additionally, such insights offer valuable inputs to address the primary concerns articulated by these professionals, ensuring a more seamless adoption and integration of AI technologies within the recruitment process. By attending to these perspectives, organizations can optimize the strategic utilization of AI, identifying areas of benefit and potential limitations, while also addressing any apprehensions, thus fostering a more efficient and effective integration of AI into their HR practices.

C. Addressing concerns

Addressing the specific concerns of using AI in the interview phase requires careful consideration and appropriate measures. The findings of the study revealed several concerns expressed by recruitment professionals when contemplating the implementation of AI in interviews. These concerns encompassed the inability of AI to effectively assess complex criteria, such as comprehending subtle nuances, interpreting body language, and understanding non-verbal communication cues. Additionally, recruitment professionals highlighted practical challenges, such as the lack of infrastructure requirements for utilizing AI, including the integration of multiple systems with AI technology. Furthermore, the lack of transparency surrounding AI algorithms was identified as a significant factor that eroded trust in AI.

From a strategic standpoint, concerns regarding the absence of transparency and governance processes in algorithms can significantly impact the trustworthiness of AI systems. Notably, instances of algorithmic bias, as documented in the literature, further complicate the issue, giving rise to contentious trust issues associated with the utilization of AI for decision-making purposes [39, 40]. Consequently, it becomes imperative for leaders and AI developers
to actively engage in addressing these challenges and working towards minimizing inherent biases within algorithms.

Furthermore, it is crucial to underscore that the ramifications of inherent bias can have substantial costs, as exemplified by a recent court case under investigation. As of August 2023, a significant number of court cases, exceeding 90 in the United States, have emerged, all pertaining to the erroneous outcomes or utilization of AI algorithms and Machine Learning outputs in real-world business contexts, particularly concerning instances of racial discrimination [25].

Moreover, the ethical underpinnings of AI, particularly in the context of recruitment, hold paramount significance and should not be underestimated as ethical considerations surrounding the use of AI in the recruitment process have become increasingly significant in recent times [28]. As AI technologies are integrated into various stages of recruitment, there arise concerns related to fairness, transparency, and potential biases. The decisions made by AI algorithms can profoundly impact the lives and careers of job applicants, raising questions about the ethical implications of relying on automated systems for such crucial matters. For instance, algorithmic bias, a phenomenon wherein AI systems perpetuate and even exacerbate existing societal biases, can lead to discriminatory practices in candidate selection [41]. Moreover, the lack of transparency in AI decision-making processes can erode trust and accountability, making it essential to ensure that AI-driven recruitment remains ethical, unbiased, and respectful of individual rights and privacy. To address these ethical concerns, organizations must adopt robust governance frameworks, emphasize transparency and fairness in AI algorithms, and regularly monitor and audit their AI systems to prevent and rectify potential biases. Additionally, regulatory bodies such as GDPR need to establish clear guidelines and standards to guide the ethical use of AI in recruitment. This convergence of ethical principles, technological advancements, and regulatory oversight is crucial to ensuring that AI-driven recruitment processes align with ethical norms, safeguarding the interests of both job seekers and organizations alike.

Given these concerns and issues, further research is necessary to gain a deeper understanding of the capabilities and limitations of AI in the interview process. Additionally, managerial interventions are required to address these concerns effectively. This may involve developing and implementing AI systems that can better assess and understand complex assessment criteria, investing in the necessary infrastructure to support AI integration, and ensuring transparency and explainability of AI algorithms to build trust among recruitment professionals. By addressing these concerns, organizations can enhance the adoption and utilization of AI in the interview phase while mitigating potential challenges and risks.
Conclusion

In conclusion, this research conducted interviews with 17 recruitment and selection professionals across diverse industries, revealing that the adoption of AI in the recruitment process is contingent upon the different phases involved. While these professionals acknowledged the capabilities of AI and its potential to automate certain tasks, they exhibited hesitancy when it came to utilizing AI during the interview phase.

The professionals expressed concerns regarding the candidate experience, as they feared that relying on AI as the initial interaction with the company might convey a lack of commitment to the candidates. Furthermore, they deemed specific selection criteria for certain positions as unsuitable for assessment by AI algorithms. The limited transparency, accountability, and infrastructure constraints associated with AI contributed to a lack of trust in its utilization.

Consequently, the use of AI during the interview phase was perceived as a risk by the recruitment professionals. They emphasized the importance of maintaining a human touch in this critical stage of the recruitment process, prioritizing candidate satisfaction and personalized interactions.

The findings of this research shed light on the complex dynamics surrounding the integration of AI in recruitment and selection processes. Organizations should carefully consider the concerns raised by recruitment professionals and design AI implementation strategies that address these apprehensions while capitalizing on the benefits offered by AI in other phases of recruitment.

References


The Applicability of Artificial Intelligence in Candidate Interviews in the Recruitment Process (Hewage)


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