Artificial Intelligence in Recruitment: Understanding the experiences of Human Resource Professionals and Candidates

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Master of Arts in Human Resource Management

National College of Ireland

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Acknowledgment

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Artificial Intelligence in Recruitment: Understanding the experiences of Human Resource Professionals and Candidates

Abstract

The study explores the use of Artificial Intelligence (AI) in recruitment considering the experience and perception of applying AI in recruitment with regard to the Human resource (HR) professionals and job seekers. AI applications such as resume screening algorithm, virtual assistant, and biometric assessment are aiding the hiring process to make better decisions and be more efficient. However, analytical aspects of transparency, justification, and development of human judgment in the process of recruitment take centre stage because of these innovations.

The main research issue aims to question the functionality of AI systems within the context of recruitment jobs and the creation of ethical complications to both the employers and the job candidates. Based on a pragmatic paradigm of research study, the investigation uses a mixed-methods research design, which will include two custom surveys. The two surveys provided quantitative and qualitative data respectively on the prevailing trends on AI usage and qualitative insights about the attitudes and experience of stakeholders on the same.

The results show that the HR practitioners noted greater efficiency and less bias in the early resume-screening stage but both groups see many issues with transparency, algorithmic decisions and the possibility of the loss of human touch. Specifically, the job seekers express the need of having a hybrid model which involves AI-based tools and human practitioners.

The research comes to the conclusion that to ethically and effectively use AI in the recruitment process, organisations are advised to embrace transparent practices, involve various stakeholders in designing AI systems and focus on recruitment decisions made on the basis of fairness and explainability.

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1. Introduction

The use of Artificial Intelligence (AI) technologies is drastically transforming worldwide recruitment and selection for organisations. Conventional resumes reviews and in-person interviews are becoming more supplemented, or even replaced nowadays, with AI-based tools. These are screening robots, chatbots, and biometric evaluation, which have already become common in the many hiring processes. The reasoning prompting this change, is largely at the organisation level as they hope to cement their effectiveness, reduce the administrative overheads, and conduct recruitment using a data-driven approach (Upadhyay & Khandelwal, 2018; Tambe *et al*., 2019). In the present-day competitive labour market, AI is required to swiftly and efficiently recognise and hire the best talent, which has promoted from being a simple preference in many cases to an absolute need (Garg *et al*., 2024).

Although the idea of using artificial intelligence (AI) in recruitment has its operational value, it has also raised serious concerns especially in terms of transparency, fairness, and how it will change the existing traditional roles of human resource departments. The fears about the utilization of AI, algorithmic bias and the lack of human connection had been raised by both HR workers and job seekers as well (Horodyski, 2023; Wong, 2024). Although AI tools are efficient, they involve some ethical issues that are still not fully understood and rectified. Despite some research into the organisational implications and technical offerings of AI-based hiring systems (Chamorro-Premuzic *et al*., 2016; Meijerink *et al*., 2021), little is known about the perceived and experienced outcomes of such hiring systems by HR professionals and more so the job candidates.

This dissertation being addressed comprises three major research questions as follows:

1. How many people can consider the application of AI tools effective or problematic in the hiring procedure as examined by HR professionals?

2. What experience do job candidates have when it comes to being recruited with the help of AI (especially in terms of transparency and fairness)?

3. Which ethical actions do organisations use with AI in staffing recruitment practice?

4. Do perceptions of AI in hiring differ and/or align between employers and candidates of interest?

The study is conducted to answer these questions and is based on a pragmatic mixed-methods design that combines quantitative and qualitative data obtained with the help of two customized surveys, one of which is administered to HRs, and the other is the survey that was created to target job seekers. The said methodology can help conduct a more holistic examination of the trends in the operations as well as those of the stakeholders, thus examining the effects of AI on recruitment in a more subtle manner (Soleimani *et al*., 2025; Kelan, 2024)

The dissertation will have the following structure: Chapter 2, will conduct a literature review on technological, ethical and experiential sides of artificial intelligence (AI) in recruitment. Chapter 3, describes the research design, and this research would be conducted as a mixed-method approach with data collection processes. The results are shown in Chapter 4, where the trends of quantitative results are analysed as well as qualitative ones. Chapter 5, talks about these results with literature and practical significance. Chapter 6, ends up by recommending policy, practice, and future research.

Through a comparative paradigm that uses both HR practitioners and the job applicants, the paper attempts to fill a gaps in the current literature. Most of the prevailing studies mainly focus either on the organisational benefits of AI or the technical challenges related to the implementation of the same. Interestingly enough, at the moment, the existing literature lacks works that go further into the ethical and experiential aspects of AI recruitment in terms of various stakeholders (Binns *et al*., 2018; Raghavan *et al*., 2020). This study is relevant to this debate in detailing insightful perspectives on ethical and efficient adoption of AI in a recruitment system. There are various common themes that come out in the literature review. To begin with, it is a well-known fact that AI may increase efficiency in recruitment processes and minimize bias (Chamorro-Premuzic *et al*., 2016; Tambe *et al*., 2019). However, these benefits, in many cases, are a theoretical concept and not evidenced being either non-verified or lacking. Second, candidates often get a poor experience due to transparency issues and limited human contact (Van Esch *et al*., 2019; Langer *et al*., 2021). Also, algorithmic bias remains an issue leading to unconscious segregation on the lines of gender, age or socioeconomic status (Mehrabi et al., 2021; Dastin, 2018). Finally, ethical governance is not consistently enforced throughout organisations, and various organisations do not have the necessary means or structures to ensure responsible AI usages (Hunkenschroer & Luetge, 2022; Suen *et al*., 2019).

The present paper builds on such findings by researching how AI-based recruiting applications are being carried out in the real world. It not only takes a look at the operational outcome but also the emotional and ethical aspect of the stakeholders involved. With the involvement of HR professionals and job applicants, the research offers a rounded scope on the advantages and constraints of AI. Additionally, it provides practical suggestions to organisations that wish to incorporate AI in an effective way without losing their ethical orientations. AI integration into the recruitment process is a complex process that goes far beyond technological breakthrough and must take into consideration, applicable stakeholders, ethical protections and organisational readiness. This research paper also aims to contributes to this knowledge by extensively analysing the perceptions and experiences of AI use and implementation by individuals affected and using it. Using mixed methods and a comparative approach, it aims to contribute to the future research and policy making in the area of AI-based recruitment, defining the best practices, and influence policymaking.

2. Literature Review

Use of artificial intelligence (AI) as a means of automating the recruitment process by leveraging predictive analytics and data-driven actions is a massive industry in the modern-day recruitment systems. This trend has driven a consistently expanding body of literature that examines the consequences of the increasing infiltration of AI tools in the hiring process by organisations in an attempt to optimise hiring. This current literature review summarises the key works in four general themes, namely, efficiency and automation, candidate experience and transparency, algorithmic bias and fairness, and ethical protections and monitoring. Simultaneously, it seeks to provide methodological implications in existing body of work, shed more light on the limitations of the methodology, and identify the gaps that this research seeks to address.

2.1. Efficiency and Automation

The analysed literature sources emphasise on the fact that artificial intelligence (AI) has a potential to boost the effectiveness of the recruiting process. Upadhyay and Khandelwal (2018) present a conceptual analysis based on industry reports, secondary literature and claim that the AI solutions like resume parsers, and chatbots are able to reduce time-to-hire process and administrative overheads. Although the study by the authors does have some operational advantages, the study lacks empirical research and is purely hypothetical. At the same time, Chamorro-Premuzic *et al.*, (2016) suggest that predictive algorithms can facilitate faster candidate hiring as they would minimize human biases and instead provide more consistency. Nevertheless, their claims are by and large theoretical with no field data to support them. There is a possibility that once the predictive algorithms have been trained on historical biased data sets then, they would automatically develop a bias nature when used in practice.

The article by Dastin (2018) is a journalistic case study about Amazon AI hiring tool that led to discrimination against women during training through the biased training data. This has the potential of taking us back to our earlier argument of the AI algorithms coming up with a biased prediction model when trained under historical biased datasets. Despite this case study being interesting, it is subjective and, consequently, does not facilitate generalization and can only be applied to this individual case. By contrast, Meijerink *et al.,* (2021) study was based on surveys

and interviews with HR professionals in Europe. According to their findings, the use of predictive analytics is limited because of the absence of technical skills in the HR departments which is in line with the issues mentioned by Suen, Hung, and Lin (2019) about the gap between the power of technology and an organisation's current capabilities.

The given interdisciplinary analysis conducted by Binns *et al*. (2018) interconnects the perspectives of law, ethics, and technology. They discuss both a case study and algorithmic audits and conclude that despite the benefits of AI providing consistency, there are threats to concealing human judgment and leaving behind bias. This is useful in final hiring decisions as they require subtlety, like judging the candidate's leadership potential, their critical thinking or emotional intelligence.. Mehrabi *et al.,* (2021) introduce a technical catalogue of different biases, their remediation methods, and a methodology for the analysis of algorithms fairness. Their study is distinguished by the completeness and methodical accuracy; nevertheless, the professional sophistication of the research can make it inaccessible to an HR practitioner who does not adapt it to his needs.

Across the literature, the articles point to the operational potency of artificial intelligence (AI) in recruitment, while also foreseeing the substantial empirical shortcomings of the phenomenon, as well as the lack of engagement of stakeholders and its practical use. The high effectiveness of AI tools, as highlighted by Suen *et al*. (2019), is critically dependent on training data quality and the transparency of the algorithms as well. These constraints make it apparent that more thorough and empirically sound studies that go beyond examining only the efficiency but also evaluates the possibilities of using AI to its fullest capacity in the recruitment procedure.

Tambe, Cappelli, and Yakubovich (2019) study how human resource (HR) functions in the context of the recruitment area are being transformed by the application of artificial intelligence (AI) and data analytics. Their field research noted that organisations using AI-based recruitment technologies significantly minimise the time it takes to address the entire recruitment process as well as the costs associated with a hire. The authors warn, however, that the success of the tools is determined by whether they are incorporated with the organisational level of readiness and data maturity. One of the points that the authors emphasize is that the efficiency benefits that this group of technologies will bring do not exclusively depend on the technology but on how well AI is able

to integrate itself into HR processes as well. Their results coincide with the general discussion that AI can be used to boost the efficiency of the recruitment process at a strategic level with proper human control.

2.2. Candidate Experiences and Transparency

Candidate experience has come out as being critical in determining the effectiveness of AI recruitment systems. Van Esch, Black, and Ferolie (2019) utilize a mixed-method research approach, by combining the surveys and interviews with employment candidates. In their research, it was found that AI tools speed up the hiring process and add to the convenience but have a potential to alienate candidates that are not technologically literate. It is consistent with what Langer, Konig, and Papathanasiou (2021) determine that while efficiency is noted by candidates, human interaction is valued the most, especially at later stages of the recruitment process.

The study by Lee (2018) uses survey-based research design and provides an exploration into how artificial intelligence (AI) is regarded by the candidate in the recruitment process. His analysis reveals the presence of considerable amount of discomfort on the part of candidates in opaque decision-making and the unavailability of feedback. It should be noted though that his survey sample is confined to the technology industry. Raghavan *et al.,* (2020) go a step further in this criticism and provide their critical review of algorithmic decision-making. They use such supporting examples as the law cases and technical audits. The authors argue that metrics like educational level and geographical area are proxies that can unintentionally incur socioeconomic bias, which reduces the level of trust of the candidates and may lead to rejection of said qualified candidates due to a poor socioeconomic background.

Another valuable contribution is from Chamorro-Premuzic *et al*., (2016) who noted that automated scheduling tools and chatbots have the potential to decrease application turnaround time and deliver real-time feedback that is highly appreciated among many candidates. Nevertheless, these benefits tend to undermine the aspects of personalization and transparency. Binns *et al.*, (2018) warn about the fact that an algorithmic system can hide the decision-making process, leaving the candidates with uncertainty about how their applications are going to be reviewed and if rejected, what criteria was the decision based on. Although these observations can be made, however, few

of these studies present longitudinal data on how perceptions of the candidates are likely to change over time or how repeated exposure to AI systems sheds light on trust and satisfaction.

The literature is unanimous in stating that there is a conflict between automation and human involvement suggesting that artificial intelligence (AI) is supposed to supplement inter-personal aspects in the process of recruitment as opposed to replacing them (Langer *et al*., 2021; Van Esch *et al*., 2019). The resulting discrepancy indicates the need to conduct further research focused on the emotional aspect of the candidate experience and the effects of AI on the candidate trust and perceived fairness.

2.3. Algorithmic Bias and Fairness

The issue of algorithmic bias has become quite an active and controversial topic inside the sphere of AI recruitment. According to Binns et al., (2018) and Mehrabi et al., (2021), this is usually caused by the inequalities which have been inculcated into training set over the years. As a response to this, they have recommended the use of suggestive metrics for fairness and regular audits to detect such possible risks and remediate them, thus preparing the basis for a fairer artificial intelligence systems. However, introducing those protective measures requires technical expertise, costs and organisational commitment, which Meijerink *et al*., (2021) cite is missing on the part of human resource professionals.

The study by Dastin (2018) revealed the extent of bias via the study of the Amazon AI tool which unintentionally discriminated against female applicants because the underlying algorithm was trained using faulty data. Although the case makes an interesting example, it does not show a thorough empirical basis and does not help in identifying the possible incarnation of the same bias in other organisations and industries. On the contrary, Raghavan *et al*., (2020) state that even the variables that appear to have no special influence, such as older age, can impact the minority groups adversely, and highlights that attentiveness and deep reviews are required when designing AI algorithms and selecting datasets for training. They also base their analysis on legal and other technical discourse, yet it has no practical validation at the field level, and this limits the scope of it being applied in everyday recruitment.

According to Suen *et al*., (2019), organisations quite often do not have the necessary infrastructure to execute extensive audits of AI systems, thus causing blind spots that continue to reproduce biases. Chamorro-Premuzic *et al*., (2016) warn that predictive models can worsen the situation with inequality unless they are very carefully adjusted. Also, the literature identifies lack of integration between the theoretical solutions applied and the practical application. Although Mehrabi *et al*., (2021) suggest resilient technical policies, they do not have a wide scope in application in human resource settings. Binns et al., (2018) warn about the possibility about losing ambiguity in human judgment when evaluating soft skills or emotional quotient.

Such issues are reflected in various studies, although not all of them offer specific ideas to incorporate human supervision in AI systems. The literature is limited due to the lack of empirical data on the way bias is viewed and experienced by candidates prevents an informed understanding of how to ethically design and implement an AI-enabled recruitment process. It is also paramount for organisations to reconsider current values and priorities in formulating recruitment, as Raghavan *et al*., (2020) argue, that envisioning the best recruitment practices involves not merely providing a technical fix to the problem of bias.

Based on a participatory framework, Soleimani *et al*., (2025) suggest a method of countering the biased effect of AI in the system of hiring. In their study, they stress that the involvement of a broad range of stakeholders will be critical, and it is preferable to involve candidates, human resource professionals, and ethicists, in the design and implementation of AI tools. The also argue that all technical solutions like debiasing algorithms cannot work without organisational reforms and ethical training. Their analysis highlights deficiency of the strictly data-based methods and advances the argument of the holistic approach, which might support data-driven actions but cannot target structural inequalities. The work of Soleimani offers the practical guideline of what actions are to be undertaken to ensure that AI recruitment practices incorporate fairness in governance and constant monitoring.

2.4. Ethical Safeguards and Governance

The issue of ethical governance appears in the reviewed literature quite frequently. Suen *et al*., (2019) and Lee (2018) support the cause for responsible AI systems that would be in-line with new and existing regulatory frameworks in Europe like the General Data Protection Regulation

(GDPR) and new EU AI Act. Such frameworks put the emphasis on responsibility, user permission and accountability thus prompting the just use of AI and forming a legal and ethical framework of organisations. Raghavan *et al*., (2020) also talk about the impact of these regulations on organisational practices and internal policies in that there is usually a difference in the compliance to them depending on the industry, area, and organisational capacity.

Contrastingly, Langer, *et al*., (2021), suggests hybrid models that combine the use of artificial intelligence (AI) in preliminary screening and human presence for carrying out the final decisions. Their qualitative work indicates that those models have succeeded in the balance of efficiency and ethical requirements, thus maintaining the relational and assessing aspects of recruitment activities. Conversely, Meijerink *et al*., (2021) recognise that ethics boards or governance committees have been established in some organisations, but such measures are not implemented on a uniform basis and are often restricted by constraints in resources available. Chamorro-Premuzic *et al*., (2016) claim that engineers working with AI must take ethics into account in the process of designing and developing such systems, instead of viewing them as secondary considerations.

The study conducted by Hunkenschroer and Luetge (2022) offers a comprehensive discussion of ethical issues associated with the practices of AI-powered recruiting. They identify the major risks including the lack of transparency, accountability, and the freedom of the candidates. Their holistic work supports the multi-level ethical framework that consists of the aspects of algorithmic transparency, the collaboration of stakeholders, and pre-emptive compliance with the changing legal norms. The authors point out that ethical governance is not the measure that should be taken after things happen but a part and parcel of the organisational strategic vision. Their evidence points out that implementing ethical AI cannot only be described as technically difficult but also culturally and managerially.

Notwithstanding such suggestions, as depicted in the literature, there are limited pieces of empirical evidence on the effectiveness of ethics frameworks when applied in real-world situations. Most literature is based on ethics in theory with minimal focus on how candidates and HR practitioners view and relate to such frameworks. Moreover, it is urgently necessary to conduct the research, the goal of which would be to examine the ways in which ethical policies could be explained to candidates and to learn whether they affected trust and job satisfaction in any way.

Such data is important, otherwise, it is hard to know whether ethical governance is serving its intended goals or serves as a compliance tool only.

2.5. Conclusion

In all the literature reviewed, the same concern was shared on how (AI has the capabilities to simplify the recruitment process, enhance the candidate experience and minimize bias. Nevertheless, the advantages outlined are often limited by methodological limitations, sample selection that is sector-specific and stagnation in the perception of stakeholders. Numerous studies are based on conceptual or anecdotal evidence that has diminutive or no empirical support or comparison (Upadhyay and Khandelwal, 2018; Chamorro-Premuzic *et al.*, 2016). The study by Langer *et al*., (2021) had taken the approach of considering HR professionals and candidates as two distinct entities, with slight connection or separation in their cases when it comes to the AI-driven recruitment systems however they only employed a qualitative survey method. Only using a qualitative research method can introduce interviewer bias, subjective nature of gathered data and an overall difficulty in generalizing the findings.

This research is an attempt to fill this knowledge gap by implementing a mixed-methods research design that would incorporate the performance measures, which embrace the quantitative scaling values as well as the qualitative experiences of the stakeholders in order to develop a considerably complete image on the subjective experience of the audience. Engaging both the HR professionals and job applicants, the study aims to fosters a balanced understanding of how AI significantly affects the recruitment procedures. Furthermore, it also explores the aspects of emotional responses, ethical perceptions and organisational readiness- the areas that have been theoretically discussed but lack empirical verification within the available literature. This research not only proves already known challenges, but also exposes novel evidence, which is applicable to candidate trust, fairness, and transparency.

3. Research Question

The current study focuses on the consequences of Artificial Intelligence (AI) in recruitment with emphasis on the perception and practices of the HR specialists and the experiences of the candidates. The literature analysis was multidisciplinary to combine knowledge gained in fields of technological use, ethical regulation, and human-AI interface. It is against this review that the following analysis shall be based on. The earlier studies have already established the possibility of AI being used to facilitate the recruitment process (Garg *et al*., 2024; Hemalatha *et al.,* 2021); however, little attention has been paid to its social and ethical implications, primarily through the lens of the candidate. The current study is based on this gap. To achieve this, the answer to the following intermediate research questions should be found:

1. How many people can consider the application of AI tools effective or problematic in the hiring procedure as examined by HR professionals?

2. What experience do job candidates have when it comes to being recruited with the help of AI (especially in terms of transparency and fairness)?

3. Which ethical actions do organisations use with AI in staffing recruitment practice?

4. Do perceptions of AI in hiring differ and/or align between employers and candidates of interest?

The need to conduct this research emerged as a result of the comprehensive literature review in the field of human resources that demonstrated the optimism and scepticism towards the impact of AI, but did not include a triangulated analysis of the stakeholder attitudes. As a result, the current study employed a mixed-methods design because it facilitated the creation of empirically sound descriptions of the existing practices and the sentiments of the stakeholders. After having defined four broad questions, the research objectives as follows were formulated:

1. To assess the perceived advantages and constraints of AI recruiting tools as viewed from the HR practitioners perspective.

2. Tracing the perceptions of transparency, fairness and human interaction when it comes to AI-mediated hiring procedures on candidates.

3. To identify ethical and practical safeguards deployed by organisations that adopted AI.

4. To characterise the similarities and the differences between employer and candidate experiences and provide insight on enhancing trust and accountability in AI applications in the future.

4. Methodology

4.1. Research Philosophy

This study has a pragmatic research philosophy, which supports the use of quantitative and qualitative researching methods as the way of exploring real-world phenomena. This practical method focuses on the research question first as compared to the research methodology. This allows us enough freedom to choose the right research instruments and methods that best suit the given problem (Soleimani *et al*., 2025; Kelan, 2024). Such versatility is beneficial especially when orienting towards fact-dense, multifaceted subjects like introducing Artificial Intelligence (AI) in the recruitment process, to which both the resultant metrics and the lived human experience are needed in order to develop the full picture.

Pragmatism is also aware that knowledge is relative rather than absolute because it is dependent on the environment as well as the concerned parties (Johnson *et al*., 2022). For AI recruitment, this means that both the HR personnel as well as the candidates can have a different interpretation of the same technology depending on their positions, anticipations as well as experiences. This practical approach will allow the researcher to approach all these perspectives without the need to fix a strict theoretical framework, which helps increase the relevance and usefulness of the results (Ore & Sposato, 2022).

This philosophical orientation is compatible with the implementation of the mixed-methods approach that uses the combination of quantitative surveys and qualitative open-ended responses. Quantitative data can provide information on AI adoption and perceived efficiency that can be measured but are not quantified, whereas the qualitative data portrays the emotional, ethical, and experiential aspects the numerical data fails to express (Hunkenschroer & Luetge, 2022). Such a two-dimensional approach allows encompassing the inquiry concerning both implementation of the AI systems and user experience especially in cases when ethical considerations and emotions play a crucial role in the inquiry.

Finally, the pragmatic philosophy underpins the aim of the given study in the generation of actionable insights by relying both on empirical evidence and taking into account the concerns of the stakeholders. It fits in the functional domain of recruitment practices and the challenges arising

in the world due to artificial intelligence technologies, thus, placing itself as an adequate source of this research.

4.2. Research Design

Two custom surveys were carefully developed, one of them addressed to HR professionals, and another one for job seekers. Both closed- and open-ended questions were carefully included in each survey with the former being used to record measurable information and the latter used to collect comprehensive and narrative answers. Such a framework allowed identifying some recognizable trends in the use of AI, its perceived efficiency, and ethics-related protections. Meanwhile, it also unveiled individual experience and emotional reactions to the undertaking of the AI-mediated recruitment (Horodyski, 2023; Koechling et al., 2023).

This mixed-method design was especially appropriate in the four research questions of the study, which cover the operational, experiential, and ethical aspects. It also indicates how complicated AI technologies are and how they cannot even be completely understood with the help of numbers (Ore & Sposato, 2022; van Esch & Black, 2019). This combination of the two streams of data in the interpretation process allowed identifying convergences and divergences between HR professionals and candidates, increasing the validity and the depth of the results (Garg *et al*., 2024; Lazaar *et al*., 2025).

4.3. Sampling Strategy

The sampling method which was used in the study is a non-probability approach that included a combination of the convenience and snowball sampling methods in recruiting the participants from two different categories i.e. HR personnel and job applicants. The method was chosen as the most effective and convenient to meet with the people directly exposed to AI in workplace recruitment, especially due to limited time and resources (FrăticĂ-Dragomir, 2024; Contreras Pinochet et al., 2024). Despite the fact that such an approach creates the risk of sampling bias, the technique is still commonly acceptable in exploratory studies that do not require representativeness as much as relevance and depth (FraiJ & VArallyai, 2021).

The sample size was comprised of 67 subjects, namely 27 human resources (HR) professionals and 40 job applicants. The HR professionals were surveyed based on whether they were involved

in the AI-mediated part of the recruitment process: resumes screening, interacting with chatbots, and biometric analysis (Albert, 2019; Black & van Esch, 2020). The applicants were polled depending on whether they have had prior experience with AI screening tools, chatbots (Horodyski, 2023; Zhe Wang and Surienty, 2024).

Participants were recruited based on peer and social circles, professional connections, the LinkedIn network, which allowed the proportional and natural growth of the sample through peer suggestions. This snowballing approach was especially helpful when it came to attracting the attention of the candidates that could not necessarily be found via official means (Keppeler, 2024; Lacroux and Martin-Lacroux, 2022).

Statistical representativeness was the goal for this sample but a variety of industries, job roles and backgrounds are represented. This variety makes the data more comprehensive and contributes to achieving the goal of the study that aims to research the operations of AI and the morals of its use in recruiting (Ore & Sposato, 2022; Soleimani *et al*., 2025).

4.4. Data Collection Instruments

The two customized surveys for HR professionals and job candidates were developed in Google Forms; this enabled them to provide maximum accessibility, ensure that the responses were anonymous, and followed the data protection requirements, including the General Data Protection Regulation (GDPR) (Stuss & Fularski, 2024; Future of Life Institute, 2024). The audiences were also notified in advance on how their responses would be used and that also data gathered was merely for research purposes.

The literature review helped in forming the basis of the survey content in terms of comprehensiveness and relevance. The survey was also pilot tested for user acceptance and the responses of a limited amount of HR professionals and candidates helped to polish the language and conduct slight tailoring, where needed. The mentioned approach was validated by the dual-survey design, which played a crucial role in gathering the insights of both stakeholder groups as part of the mixed-methods design and pragmatic philosophy of the study (Soleimani *et al*., 2025; Ore & Sposato, 2022).

The method helped to make sure that the instruments were methodologically valid, ethically accountable, and considerate of the life experiences of the people interviewed.

4.5. Data Analysis

This study applied the pragmatic mixed-methods interaction to its data analysis process because it focuses on the synthesis of quantitative and qualitative information in order to answer complicated research questions (Soleimani *et al*., 2025; Kelan, 2024).

The closed-ended question survey results were analysed manually using frequency counts, percentages, graphs and pie charts. This helped to prescribe tendencies in the adoption of AI, perceived efficacy of AI, transparency and ethical safeguard (Gabriel Koman *et al*., 2024; Balcioğlu & Artar, 2024). Manual analysis and interpretation was favoured over statistics software, as it was necessary to maintain the convenience and fit into the exploratory goals of the study (Kot *et al*., 2021; Allal-Chrerif *et al*., 2021).

Analysis was conducted of open-ended qualitative data by identifying themes of familiarity with AI tools, efficiency and frequency, transparency, algorithmic bias and ethical considerations. The method was inductive, which allowed discovering themes in participant narratives in an organic way. These identified themes were cross-checked with quantitative patterns to identify where there is convergence and divergence in the perspectives of the stakeholders (Ore & Sposato, 2022; Rezzani *et al*., 2020). This combined approach made the findings not only empirically grounded but also conceptually rich, thus enhancing the aim of the study that focuses on the ethical and experience-based dimensions of the realm of artificial intelligence (AI) in the recruitment field.

4.6. Ethical Considerations

Ethical issues were the main focus of designing and implementing this study, especially because the topic of artificial intelligence (AI) in recruitment is highly delicate and can have an impact on the issues of fairness, privacy and transparency. The National College of Ireland ethically approved the study, and the audiences were given all the necessary information about the aims of the study and were made aware that the surveys were completely voluntary (Stuss & Fularski, 2024). Participatory consent was achieved, and the respondent anonymity enabled because of the use of Google Forms, which allowed a respondent to anonymously and safely submit the answers without providing any personal information (Future of Life Institute, 2024).

The research was extremely constructed according to the General Data Protection Regulation (GDPR), thus ensuring the safety storage and the exclusive use of data within the academic context

only. No biometric or sensitive personal data was obtained, and none of the participants were put through automated decision making process during actual research. Such protections were especially important as the issues of algorithmic bias and the misuse of data in AI recruiting systems have come to be issues of particular concern (Sipior *et al*., 2024; Lambrecht & Tucker, 2019).

On top of the procedural ethics, the study included ethical reflexivity, which recognizes the influence that can be exerted by a researcher on the participant, and the emotional weight of sharing the experiences related to the work with artificial intelligence (Tilmes, 2022; Zhisheng Chen, 2023). This was especially relevant to those candidates who said that they did not feel comfortable with the opacity and the possible intrusiveness of AI. Open-ended questions and the freedom to elaborate upon one provided the study with respect to individual agency and the ethical discussion of issues (Ore & Sposato, 2022; Soleimani *et al*., 2025).

On the whole, the focus on ethical integrity was ensured over the course of the study not just by complying with institutional regulations but also by prioritising the duty of transparency, the respect of the dignity of the participants as well as the responsible approach to considerations that pertain to the digital and AI worlds.

4.7. Limitations

Though the given study is meaningful and includes worthy information about the perception of AI in hiring within candidates, it has a number of limitations. The sample used was geographically and relatively small, and could be limiting to the extent research findings can be applied on different geographical as well as cultural backgrounds (Sipior *et al*., 2024; Soleimani *et al*., 2025). Cross-national research on a larger scale would also help identify possible changes in the level of trust, willingness to accept, and ethical and other demands related to the use of AI systems (Zhisheng Chen, 2023; Lambrecht & Tucker, 2019).

Although self-reported data with the use of Google Forms proved to be effective in maintaining anonymity, it had the potential to introduce certain types of biases like the social desirability or inability to correctly decode the questions on the survey (Tilmes, 2022; Ore & Sposato, 2022). Without further qualitative follow-up procedures including interviews or roundtables, the research was not in the position to explore more in-depth emotional and situational feedback on AI-based recruitment (Stuss & Fularski, 2024).

In addition, the study only focused on the HR professionals and candidates opinions leaving out the technical opinions of AI developers who actually work on designing and implementing these systems (Hunkenschroer & Luetge, 2022; Future of Life Institute, 2024). Their opinions may be of great help in giving insights into technical issues and ethical questions that present themselves at the stage of implementation.

In view of the context of the fast development of artificial intelligence (AI) technologies, the present results can be seen as the snapshot of popular opinion at a certain moment in time. In order to acquire as many detailed insights as possible about the way perceptions change with the further evolution of AI and its increasing usage, a longitudinal study is critical. It would allow us with an opportunity to evaluate the shifting nature of the perception of the people and how AI is reshaping the different facets of society. (Zhisheng Chen, 2023; Sipior *et al*., 2024).

5. Analysis and Findings

The survey conducted comprised of 67 subjects, namely 27 human resources (HR) professionals and 40 job applicants. The analysis of the gathered data indicates how these groups perceive the use of AI along with some of the issues such as Familiarity and Usage, Efficiency and Contribution, Transparency, Algorithmic Bias and the call for a Hybrid Approach to hiring.

5.1. Familiarity and Usage

Many HR professionals have already adopted the use of AI to hire. Among the 27 surveyed, 78% stated to be using AI in their organisation which reflects the trend towards the application of technology in hiring. The most widespread AI tool is chatbots, 70% (19 respondents) use them to get in touch with a job applicant and to answer simple questions, assisting at the communication stage. AI screening of resumes is also on the rise and 48% (13 respondents) are using it to handle big volumes of job applications. These observations are in-line with the points highlighted by Upadhyay and Khandelwal (2018) who underline that AI is bringing administrative benefits. The majority of HR professionals do not have a lot of experience with hiring using AI as 52% had only been using it from the last 1-3 years and 43% had only claimed to have adopted it within the last one year. This is in-line with the study by Meijerink *et al*. (2021) that claims a lack of technical skills in HR recruiters could impede complete adoption of AI in recruitment. However we can also see the rapid adoption and implementation of AI in hiring which shows an alignment with the study by Garg *et al*. (2024) which proves AI is no longer considered optional but an essential part of modern recruiting.

Almost half of the candidates(45%) have demonstrated they are slightly familiar with the common AI tools used during the recruitment process. The other 28% are moderately familiar and another 23% are very familiar. The majority of the applicants (75%, or 30 out of 40 respondents) have had their resumes screened using AI, which is one of the critical components of triaging candidates in firms. During the early screening processes, approximately 60% of those surveyed (24 respondents) verified that they had come across chatbot assistants. 40% of respondents said it is a regular element of their job search, and the 38% claimed it to be often and 22% responded it to be neither or never. These numbers coincide with the study by Van Esch and Black (2019), who

highlighted that more and more candidates are becoming familiar with AI use but they tend to remain unaware of the decision-making processes.

There is a strong correlation between the increased rate of adoption of AI by HR professionals with the increased exposure and familiarity of job seekers with the technologies. The current research informs that 78% of HR professionals use AI tools, and most job seekers have already encountered AI-based pre-filtering or a chatbot in the process of searching for a job. The given findings support the literature on the increased role of AI in automating the process and providing insights in the field of HRM, Garg *et al*. (2024), in particular. With the implementation of AI-related technologies by HR professionals, the recruitment process is altered, making the candidates aware and also needing to adapt of these technologies.

However, there is a big gap in knowledge between the HR professionals and candidates. HR professionals receive training and recommendations on implementation whereas the applicants interact with AI on a firsthand basis and are unaware of how its decisions are made. This inconsistency supports Horodyski (2023) in proving the idea that exposure is not the same as understandability and assurance. Furthermore, chatbots are prevalent among both groups (70% of HR professionals and 60% of candidates) however, the former uses chatbots to assist in operations (Upadhyay & Khandelwal, 2018), whereas the latter perceive them as gatekeepers (Van Esch *et al*., 2019). Such structural asymmetry is one of the factors for mistrust and a lack of clarity. These results indicate that there is a lot of familiarity with AI in recruitment but not much knowledge-depth, on the applicant's side.

5.2. Frequency and Efficiency

The questions have received mixed answers by HR professionals in relation to the effect of AI on operational efficiency. 44% suggested that there was no impact of operational changes to them. This aligns with other studies conducted by Meijerink et al., (2021) who point out that the effective adoption of AI in recruiting is based on the technical ability of the human resources employees and the general organisational preparedness. Nevertheless, 33% agreed and 11% strongly agreed that AI has made the process of hiring faster. These results indicate that AI is making the operations seamless for many companies. Speed was the main advantage supported by 19% of the respondents (5 respondents). One HR professional stated, “AI has reduced time-to-hire and sourcing costs,

while improving the quality of hire through more precise candidate-job matching" (Survey Respondent, 2025). This highlights the study by Upadhyay and Khandelwal (2018) who note the process streamlining capabilities of AI. Moreover, 11% (3 respondents) mentioned both speed and cost savings, which implies that AI has reduced the duration of the hiring process.

From the candidates perspective, AI tools have become well-known to streamline the application submission procedure. 50% respondents answered that such AI-based tools make application processing quick, and another 5% strongly agree with the same. This is in line with Chamorro-Premuzic *et al*., (2016), who theorize that AI automation can boost the candidates experience. Those numbers showcase the positive acceptance towards the efficiency that AI can bring to the table specifically when it comes to simplifying what can at times be a tiresome process. A closer look at candidates' experience with AI tools pointed at a more complex and less positive picture as most candidates (48 %) answered that their experience was neutral, 30% stated that they had a negative experience and felt quite frustrated or rather had complications in communicating with AI. The proportion of those who had a positive overall experience was only 23%. One respondent highlighted "Choose AI tools that personalize the candidate experience, reduce bias, and allow recruiters to spend more time building relationships" (Survey Respondent, 2025).

Such discrepancy is indicative of a correlation between the two inconsistencies: Both groups are in harmony about the speed of AI systems, but when it comes to the satisfaction level based on efficiency, there is a stark difference. It confirms the results by Jha *et al.,* (2024), who notes that automation can make the logistical work more efficient but at the same time create friction in the processes that the user interacts with.

Besides, the neutrality that 44% of HR professionals showed can be a sign that while AI helps to accomplish some recruitment maintenance jobs, its overall utility is still being considered. This is supported by Votto *et al.,* (2021), who suggested that tactical AI-facilitated improvement within recruitment does not necessarily result in comprehensive benefit in case of misalignment between technology and human control. Collectively, this portion highlights how despite AI being attributed to efficiency increase, the relationship between the level of enthusiasm on the side of the HR and mixed responses among candidates points to the fact that the streamlined workflow in recruitment does not necessarily translate into enhanced candidate engagement and satisfaction.

This suggests that the quest for efficiency must include ethical design of AI recruitment systems and involve feedback and insights from stakeholders as underlined by Soleimani *et al.,*(2025).

5.3. Transparency

The importance of making AI-based recruitment transparent and fair is the first priority for the surveyed HR professionals. A high percentage of 74% respondents (20 out of 27 respondents), actively offer specific training to their HR employees on the use of AI. This is consistent with the suggestions provided by Hunkenschroer and Luetge (2022) in terms of ethics education. Such commitment is assured to make the users of AI tools deeply aware of the ethical issues and ethical use of these tools. 67% (18 respondents) consider human oversight of AI to be of great importance when it comes to making decisions. This strengthens the claims made by Soleimani *et al.*(2025) about having human oversight to ensure credibility. They claim that not all critical decisions can be automated by AI, some of them will need human touch because they need to be impartial and perceptive. The readiness to inform candidates about the use of AI is also evident as 48% (13 respondents) have gone through steps that makes the candidates aware about AI usage. There were concerns raised on data privacy where 41% responded as having some concerns and 33% indicated that they had moderate concerns. One respondent highlighted, "Prioritise ethical oversight, candidate communication, and transparent data use from day one"(Survey Respondent, 2025). Privacy is an issue that HR professionals are keen on and the proactive steps being taken to deal with privacy concerns makes sure that sensitive candidate information is carefully dealt with.

Applicants feel that the AI-based recruiting processes have no transparency. 73% of the job applicants reported the use of AI tools being only somewhat clear in how they handle information about the candidates. This clearly indicates that candidates require companies to demonstrate more openness about AI decision makings. 18% of applicants feel that these tools are not transparent at all and therefore, do not trust them. Only 10% feel that they are transparent. This is similar to the study by Wong (2024) who emphasises on the need for transparency. 25% of respondents did not know whether their resumes were reviewed by an AI without human oversight. The absence of transparency regarding the processing of their data, i.e., being used to train AI or sell to third-party organizations was also a concern with them. This is aligned with the observations by Binns et al.(2018) and Raghavan et al.(2020) regarding the fact that the AI tools are opaque.

There is a large gap between organisations attempting to enhance communication and the assumptions of the applicants regarding the effort on behalf of the organisation. Although three-quarters of HR professionals claim that they have training and supervision mechanisms that are supposed to raise ethical awareness, almost an equal number of candidates (73%) believe that AI tools are barely or not at all transparent in practice. The discrepancy that comes out of this comparison is that transparency has been mostly viewed as an inward procedure as opposed to being an externally oriented initiative. It is crucial that the transparency is applied not only to all the operational safeguards adopted by the employer but also to the disclosure and clarity of the decision-making process on the side of the candidate (Wong, 2024).

Furthermore, 25% candidate were not able to verify whether an AI or a human reviewed his/her application, whereas 67% of HR professionals admit the necessity of the human factor. Organisations can have internal ethical governance, but the applicants outside the organisation do not trust that the process will be regular. This shows that there is an urgent necessity to make the execution of AI more transparent to enable better candidate understanding.

5.4. Algorithmic Bias

One issue that has remained prevalent and vital in the HR practice is the possibility of algorithmic bias from AI systems. While only 4% of the respondents say they are very confident that their AI systems will be impartial, 59% say they only have slight confidence and 22% expressed a moderate level of confidence. These concerns were also mentioned in the study by Binns *et al*. (2018) and Mehrabi *et al.* (2021) which notes that AI systems can often enhance biases when trained poorly. A small portion 15% expressed not much confidence at all. These concerns were supported by the fact that 37 % of the respondents said they had experienced incidents where AI systems had suggested candidates who, on paper were qualified but later seemed unsuitable in interviews or demonstrated poor performance when hired, which raises further concern regarding the accuracy and fairness. One respondent has concluded, "Above all, our AI must be fair and just. We need to be vigilant about bias... Let's train our AI on diverse data, check its results regularly, and maybe even have an independent eye look it over" (Survey Respondent, 2025). This supports the study by Soleimani *et al.* (2025) that emphasise stakeholder contribution and supervision to remediate bias. Based on these results, algorithmic bias comes out as a major challenge in the extensive use

of AI in the human resources setting, with it being called out by 56 % (15 respondents) of the HR participants.

Nearly half of the candidates thought they were disadvantaged by AI-aided screening system, which unjustly took them off the recruitment process based on information that the AI gathered on their unsuitability to fit the job position. Such a strong number represents a concrete sense of distrust. Another 30% (12 respondents) could not tell whether they had been unfairly screened showcasing a sense of uncertainty in general. This could prove the study by Raghavan *et al.*(2020) which noted that unlikely attributes such as age or location could also serve as proxies for socioeconomic bias. The fear of algorithmic bias is extremely high as 48% (19 candidates) consider themselves to be at the stage of being very concerned, and a considerable 25% (10 candidates) are rated as being moderately concerned. The possibility of AI scanning sensitive personal and biometric data during video interviews has also instilled a level of discomfort with a large proportion of 45% (18 candidates) stating that they are not at all comfortable with AI capturing their tone of voice, facial expressions or body language leaving merely 43% (17 candidates) only slightly comfortable. This strong reservation about the possibility of intrusive AI behaviour points to a wider lack of confidence in the ethical application of AI since just 35% say they somewhat trust employers to apply the technology ethically and 30% say they mildly distrust them

The attitudes toward AI in the hiring process are not completely optimistic as HR professionals engage with it in a cautiously optimistic way while candidates show greater discomfort due to the possibility of bias and how their personal information will be processed. It is understood by both groups that AI tends to be inaccurate or create unintentional bias. Nevertheless, although these problems are primarily perceived by HR personnel as features of workflow, candidates experience them as discomforting or personal rejection due to being directly exposed to the emotional impact of algorithms either through facial recognition or via subjective interpretations of their data. This corresponds to the results observed by Tilmes (2022) stressing the importance of identity and the availability of decision criteria in determining whether people feel that AI recruitment is fair or not. The polling data indicates that such anxiety is common: 56 % of HR personnel and 48 % of job applicants fear underlying defects in AI hiring. This discrepancy is why AI recruiting tools remain unclear in their assessment due to the need to present an objective, fair form of assessment.

The two groups doubt the accuracy and fairness of AI itself and reflect on the study by Ore & Sposato (2022), who premise their conclusions with the notion that technical solutions not being the ultimate solution without transparency and feedback mechanism.

5.5. Hybrid Approach

Majority of the HR professionals suggested that the introduction of AI-based tools has influenced human element and candidate interaction in the recruitment process. Out of the 27 respondents of the HR, 56% (15 respondents) are of the opinion that AI impact was moderate when it came to reducing human interaction whereas 19% (5 respondents) are of the view that AI has small effect when it came to reducing the human element. A lesser percentage 15% (4 respondents) gave neutral or none changes. These findings reflect the fear that automations as operationally helpful tools, it will destroy the human elements within the recruitment process. This is consistent with Langer *et al.,* (2021) who stand to suggest that AI is to assist but not substitute the judgment of a human being, at least when it comes to emotionally delicate decisions. In spite of these concerns, balanced model was supported well. Per the survey results, 89% (24 of 27 HR respondents) have strongly leaned towards a hybrid model of recruitment consisting of AI automation and humans. According to one of the HR practitioners, the optimal scenario is a synergistic relationship in which "AI can do data-intensive, repetitive work, and leave human recruiters to make qualitative evaluations, build relationships, and strategize" (Survey Respondent, 2025). This point is similar to Soleimani *et al*., (2025) who mention that ethical recruiting means demanding algorithmic effectiveness and human empathy.

The candidates also indicated a strong need for human interaction. 50% of the candidates (20 respondents) reported the importance of direct interaction with a recruiter, or in-person interviews as the crucial aspects of the recruitment process in its later stages. 38% (15 respondents) believed that a human contact is needed at each stage in the process. One of the candidates remarked "AI can be used for automation but human interaction is really important in the recruitment process, like interacting with the candidates, to see how they feel and react to what you say as a recruiter.". This is in-line with Van Esch *et al*., (2019), who discovered that during cultural fit and emotional intelligence assessment, interpersonal engagement is appreciated by the candidates. Notably, 88% (35 out of 40 candidates) shared their ideas of the optimal split between AI and human contributions proving the idea of the collaborative model to be shared by most of the respondents

of both groups. This meeting point of the two parties (HR professionals and candidates) explains that hybrid approach is not a compromise, it is rather a strategic development. According to Laurim *et al*., (2021), such an approach is much appreciated in the adoption of AI promoting augmentation instead of substitution.

To sum it up, both groups of stakeholders are aware of the drawbacks of complete automation and recommend a recruitment model where the AI tool is paired with human judgment. Compromising between these, this hybrid would help tackle the issue of fairness, bias and emotional appeal as well as representing a more general move towards ethical, human-friendly AI in hiring.

6. Discussion

6.1. Interpretations

According to the findings of this study, most respondents are of the view that AI has had an impact on human interaction in recruitment. Intriguingly, both HR managers and candidates believe that even though the use of AI could include various positive aspects like time-saving and automation, the human element still remains important. Nonetheless, both groups primarily think differently, HR professionals tend to lean into the benefits and functions that can be automated through the use of AI whereas the candidates who are being recruited are simply expecting to be given a chance to talk and interact with a human being during the recruitment process (Chamorro-Premuzic *et al*., 2016; Horodyski, 2023). This discrepancy shows a subtle distinction that should be taken into consideration when developing or selecting a recruitment system or approach (Soleimani *et al.,* 2025). A huge contrast can be seen in the experience and execution. AI is a strategic driver to the HRs - streamlining the workflow, reduction of bias in initial tests, and reducing the time of hire. In the eyes of the candidates, though, AI frequently reflects unfamiliarity and a lack of transparency.

The hybrid model agreement that is demonstrated by 89% of HR workers and 88% of candidates, possibly signifies a greater move towards AI adoption. It is evident that augmentation rather than substitution is increasingly valued (Laurim *et al*., 2021). This is also similar to those of Garg et al. (2024) who observed that the unregulated development of AI in hiring will lead to ethical issues, especially on the parameters of transparency and accountability. Candidates have emphasised on late-stage human interaction as a need for validation, emotional consideration, and an overall subtle assessment, qualities that AI would lack (Binns *et al*., 2018; Tilmes, 2022). The aspect that the recruiters will gain an "insight into how candidates feel and react" points to an interpersonal element that cannot be replicated by AI.

HR attitudes are also reserved, as much as they perceive the benefit of automation, they do not want to give in to using AI tools completely to make decisions and wish to maintain human supervision which fits the ethical practices postulated by Mehrabi *et al*. (2021). This tactical hopefulness indicates that HR is conscious of the overreliance on the tools especially in

maintaining organizational culture fit and interpersonal evaluation which cannot be entirely replaced (Ore & Sposato, 2022; Garg *et al*., 2024). Moreover, the issue of algorithm bias presented by both parties echoes the work of Raghavan et al. (2020) who warn about the potential practice of perpetuating existing systemic inequalities by letting AIs continue operating with minimal to no regulation.. The hybrid approach does not only come as a compromise, but as an evolution: a deliberate melding of AI efficiency and human empathy to bring out the best of the both worlds in terms of experience and output (Langer *et al*., 2021; Suen *et al*., 2019).

6.2. Implications

The results of the given study contain significant implications of operational and ethical dimensions of the implementation of AI in recruitment. To begin with, the increased use of AI tools by the human resource professionals, especially during resume screening as well as through chatbots, would reinforce the trend just described by Hemalatha *et al*. (2021) and Garg *et al*. (2024), who suggest that AI is no longer the future but has become the essential part of talent acquisition. However, this change of operations should be hand in hand with a parallel development of ethical leadership and candidate feedback mechanisms (Hunkenschroer & Luetge, 2022; Wong, 2024).

Through the research study, there is a dichotomy revealed between the organisational undertakings in instituting ethical protection and how candidates feel about fairness/transparency. Even though 74% of HR personnel stated that they offer AI ethics training and guidelines, 73% of candidates think that AI systems are not transparent enough. This gap suggests that there can be little internal compliance translating into external trust- which aligns with Raghavan *et al*. (2020) and Binns *et al*. (2018) study that express the need to provide explainability and the importance of transparency in algorithmic decision-making. Also, the moral dilemmas highlighted by the candidates in the use of biometric tests, e.g., face recognition and voice test, highlight a moment of great moral choice. These anxieties coincide with those presented by Tilmes (2022) who notes that AI recruitment systems must be reviewed not only for their precision, but also their psychologically and emotionally effect on candidates. The results of the study reveal that organisations should look beyond audit trails and incorporate the concepts of ethical design that places candidate dignity and autonomy as priorities (Ore & Sposato, 2022; Soleimani *et al*., 2025).

Functionally, HR professionals will have to develop twofold skills, one technical in utilizing the AI tools and the other interpretive in assessing candidate responses and understanding the ethical implications of those. It is a similar suggestion given by Laurim *et al*., (2021), who support the use of hybrid recruitment models that balance automation with human judgement. It is the idea that the hybrid solution, which 89% of HR professionals and 88% of the candidates in this research define as the next strategic imperative instead of compromising empathy or fairness, allows enhancing efficiency.

The policy implication of this research is the fact that the AI systems should essentially adhere to regulatory frameworks such as the EU AI Act and the General Data Protection Regulation (GDPR) in the EU because they prescribe requirements in terms of transparency, accountability, and user consent (Future of Life Institute, 2024; Stuss & Fularski, 2024). However, it is not enough to comply with it. Organisations are obliged to take the first step to inform the interested applicants about their ethical values, involve all stakeholders in the design of the system, and execute feedback systems in such a way that they lead to continuous changes (Soleimani *et al*., 2025; Kelan, 2024).

6.3. Limitations

Even though the current study offers considerable input to understanding the artificial intelligence (AI) in recruitment perceptions, there are a number of limitations that should be considered to put the study into perspective. To begin with, the sample size that is composed of 27 human resource (HR) professionals and 40 job candidates is relatively small and geographically limited. This narrows the applicability of the findings to more general cultural, industrial and governmental circumstances (Sipior *et al*., 2024; Soleimani *et al*., 2025). A larger sample would permit to compare more industries and regions for the differences in AI adoption and ethical tolerance across various countries (Zhisheng Chen, 2023). While self-reported surveys have proven to be effective in the identification of trends on large scale, it poses a problem of biases like social desirability and misinterpretation of survey questions. Responses might have been adapted to fit some kind of expectation or the technical jargon was misinterpreted (Tilmes, 2022; Ore & Sposato, 2022). Such limitation is also compounded by the differing levels of technical expertise among the participants which could have affected their ability to meaningfully interact with the content of the survey (Stuss & Fularski, 2024).

The other weak point of this study is the fact that the AI developers and technical stakeholders were not included, although not intentionally. Their perspectives could have provided another view and further information on the design decisions, algorithmic challenges and ethics while developing these technologies (Hunkenschroer & Luetge, 2022; Future of Life Institute, 2024). The study would have displayed further completeness in its interpretations which have played an important role in the evaluation of fairness and transparency. There are also temporal limitations which affect the relevance of the study. Regulations and AI technologies are evolving at a fast pace and the results show a snapshot of attitudes taken at a specific time only. Longitudinal studies would be necessary to follow the changes in the perceptions of the stakeholders once more advanced AI systems will be active and some policies (such as EU AI Act) become more popular (Zhisheng Chen, 2023; Sipior *et al*., 2024). The emotional aspects of the candidate's responses especially on the issues of algorithmic bias and biometric evaluation, were only lightly captured. Even though 48% of applicants raised concerns regarding bias, and 45% stated they were not comfortable with biometric assessment, the survey design was unable to capture further insights about the perceptions. Further interviews or group discussions would have diversified the data by making it more comprehensive in terms of its psychological and ethical implications of AI mediated recruitment (Tilmes, 2022; Wong, 2024).

Finally, the research notes that there is a communication deficiency between the HR professionals and candidates. Although 74% of the HR professionals said that they obtained ethics training, 73% of the candidates regarded AI systems as non-transparent. Such discrepancy indicates internal governance efforts can fail to communicate successfully regarding externalities and presents a limitation that requires additional study on how organisations position their messages and practices to build trust among candidates (Binns *et al.,* 2018; Raghavan *et al*., 2020). Conclusively, even as the study provides a strong idea on the uses of AI in recruitment, its limitations in methodology and context imply that more inclusive, broader, and emotionally complex research is required in the future.

6.4. Recommendations

Using the results of the present study, it will be possible to offer several recommendations that could be followed to improve the responsible and constructive application of artificial intelligence (AI) in the recruitment process. To begin with, organisations ought to implement the hybrid

approach by constituting AI-powered efficiency with the human element of control. Such a strategy also helps in ethically sound decision-making and emotional intelligence when examining the candidates while also aligning with stakeholder preferences (Laurim *et al*., 2021; Soleimani *et al*., 2025). On the issues of transparency, businesses need to adopt open communication policies that will enlighten the candidates on the relevance of using the AI tools, criteria used for decision making and how their data is handled. Such a suggestion is consistent with the results presented by Wong (2024) and Binns *et al*., (2018), who state that candidate trust is an important factor in AI adoption. Giving candidates feedback would allow the companies to improve the level of perceived fairness and engagement significantly.

Investments ought to be made in training the HR professionals and technical teams in ethical coding practices. Algorithmic bias can be reduced and responsible AI deployment prevented only with the help of ethical literacy, as highlighted by Hunkenschroer and Luetge (2022). Fairness and usability could also be increased by engaging more different stakeholders such as candidates in designing and testing AI systems (Soleimani *et al*., 2025). Due to reservations around biometric scanning, organisations must reassess their use of such technologies, provide disclaimers and request consent. Tilmes (2022) argues that maintaining emotional safety and conserving personnel identities should be a priority in AI governance especially when sensitive data is being worked on.

Conclusively, the effect of AI recruitment in the long term, especially the changing nature of the attitudes of candidates, regulatory reforms, and ongoing technology developments, is an area that should be continuously studied in the future. Increased variety in the sample and via follow-up interviews or focus groups, researchers will be able to further understand the experiences and issues of the stakeholders (Zhisheng Chen, 2023; Sipior *et al*., 2024).

7. Conclusion

This paper has researched about the experience and perception of both the recruiter and the applicant with respect to incorporating Artificial Intelligence (AI) into the recruitment process. The mixed-methods design provided a broad overview of the ways in which AI-based tools, which include resume screening algorithms, chatbots, and biometric tests, are changing the practice of hiring. The results can be viewed as a double story: on the one hand, employers disclose that their main interest in AI is associated with its benefits in work, whereas candidates are rather cautious and report worries about lack of transparency, equity, and decreasing the role of people on their terms. The findings from HR professionals have reported increase in efficiency, decrease in administration load, and a higher level of uniformity during the initial screening process comparable to the claim made by both Hemalatha *et al*. (2021) and Garg *et al*. (2024). However, human interaction will always be relevant due to AI's limitations on evaluating candidate behaviour, and emotional intelligence (Laurim *et al*., 2021; Soleimani *et al*., 2025). At the same time, applicants were concerned about non-transparent decision-making and facial scans, which points to the emotional and ethical issues that the AI systems may trigger (Tilmes, 2022; Wong, 2024).

The most significant acquisition of the study is the fact that most HR professionals strongly recommend a hybrid recruitment approach where AI is used to perform tedious and repetitive tasks but human oversight still exists. 89% of the HR professionals and 88% of the candidates support the hybrid recruitment strategy. This represents a wider change in the philosophy of recruitment; one driven by the idea of augmentation over substitution and attempting to find that balance between technical efficiency and relational depth (Van Esch *et al*., 2019; Ore & Sposato, 2022). Hybrid model is not a trade off since it is a strategic development that can be aligned with ethical thinking and expectations of stakeholders. Although measures towards ethical protection are being taken, including AI ethics training and human supervision, candidates do not feel that AI applications are transparent and fair. Such an imbalance suggests that there is a problem in conveying internal governance measures at the external level creating a possible gap where that impacts trust and engagement (Binns et al., 2018; Raghavan *et al*., 2020). Also, the study reveals that human-centred design principles specifically focused on emphasising candidate dignity,

emotional well-being and informed decision-making need to be considered in the case of the biometric data collection process.

In spite of the insights that have been gained through this study, it is not free of limitations. The survey was limited in size and scope therefore restricting applicability. Also, the self-reported nature of the gathered data may have biases. A longitudinal study can be conducted in the future involving more sampling, and more qualitative research such as follow-up interviews to gain more insights and clarifications from stakeholders (Sipior *et al*., 2024; Zhisheng Chen, 2023). To sum up, the concept of using Artificial Intelligence (AI) in recruitment practices may be considered as a socio-technical system. The organisations which follow this comprehensive view will find it easier to build trust, improve the candidate experience and eventually lead to sustainable results. The future of recruitment is not in either choosing between the AI or humans but in the creation of the systems which enable both to work in tandem and bring beneficial impact to recruitment.

8. References

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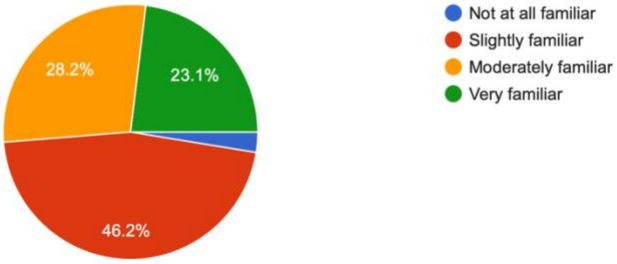
9. Appendices

9.1.Candidate Survey

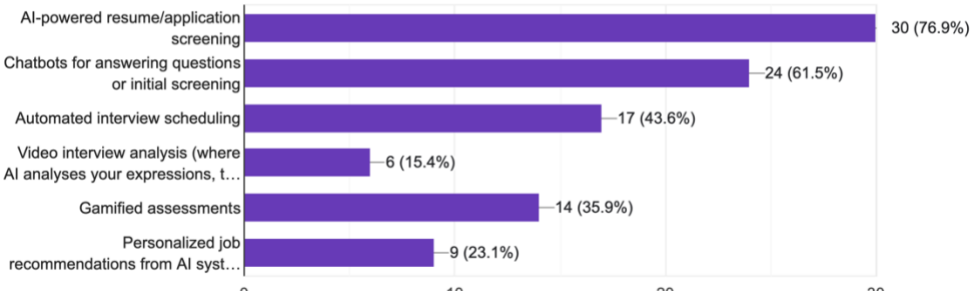
How familiar are you with AI tools used in job applications?

39 responses



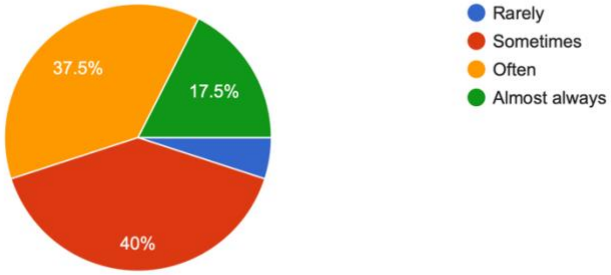
Which of the following AI tools/applications have you primarily encountered during your job applications?

39 responses



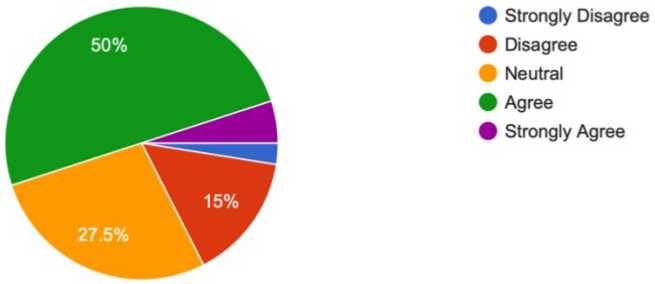
How often do you believe AI is used in the recruitment processes you've been through?

40 responses



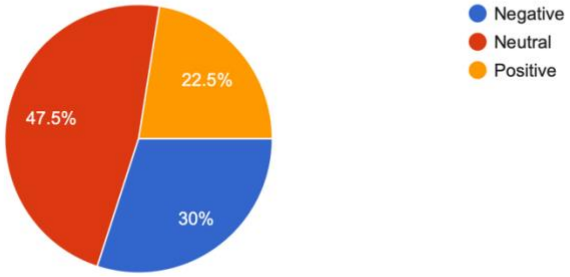
To what extent do you agree that AI-driven tools make the application process faster?

40 responses



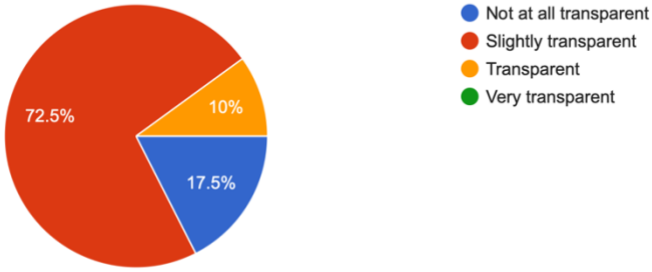
How would you describe your overall experience with AI tools in recruitment?

40 responses



Do you feel that AI-powered tools provide sufficient transparency regarding how your application is being processed or evaluated?

40 responses

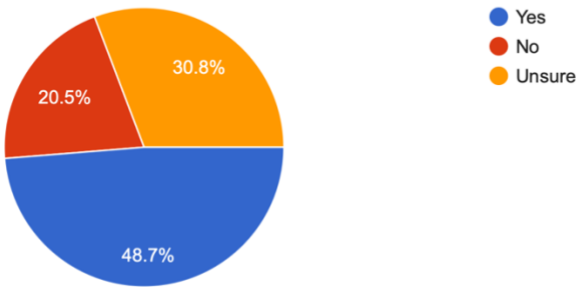


What are your primary concerns regarding data privacy when your personal information is processed by AI in recruitment?

40 responses

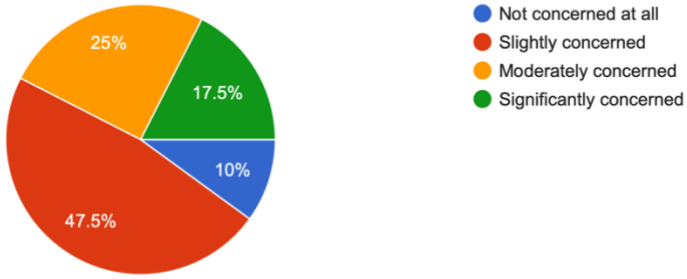
Have you ever felt that an AI tool might have unfairly screened out your application, despite your qualifications?

39 responses



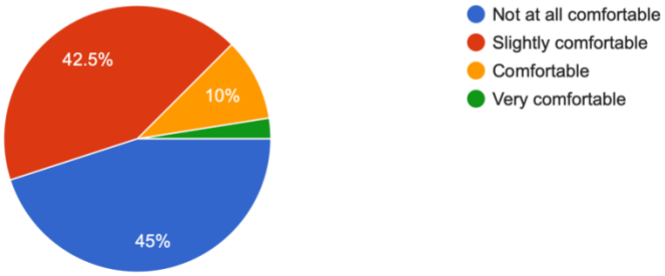
How concerned are you about the possibility of algorithmic bias (e.g., unfair treatment based on gender, ethnicity, age) in AI recruitment tools?

40 responses



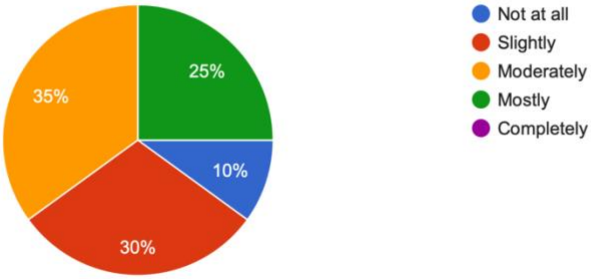
How comfortable are you with AI analysing your tone of voice, facial expressions, or body language during a video interview?

40 responses



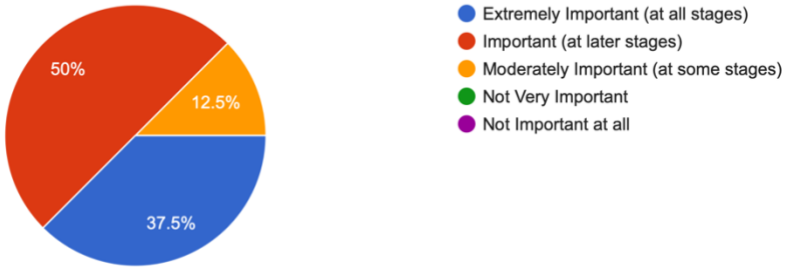
To what extent do you trust employers to use AI in recruitment ethically and responsibly?

40 responses



How important is human interaction (e.g., speaking to a recruiter, direct interview with a manager) to you at different stages of the recruitment process?

40 responses



What is the ideal balance between AI automation and human interaction in a recruitment process, from your perspective?

35 responses

AI tools can be used at the early stages but should not form a large part of the recruitment process. Human interaction is key to instill confidence in candidates.

Companies can use AI and also human interaction during recruitment

Transparency

Efficiency and empathy

AI must be used as a tool that aids the recruiters in the recruitment process by helping them with data-intensive tasks, call scheduling, candidate tracking, etc.

Human interaction should take precedence over AI automation with very little reliance on the latter.

Not replace human

Human recruiters must always form the major part of the recruitment process and AI should be used in small capacities to help speed up the process where possible e.g. sending emails, scheduling interviews, providing status update, etc.

20 - 30% use of AI and 70 - 80% human recruiters

Don't forget candidates are humans too

30-40% use of AI tools with human interaction still forming 60-70% of the recruitment process

AI can streamline early steps but human input should guide final decisions.

The AI must be used for scheduling meetings or maybe an initial screening of the resumes to suggest potential candidates. It should not be used to for the complete screening process and reject candidates based on its algorithms.

Only use AI tools where needed and prioritize human interaction during the recruitment process

AI tools can be used in any capacity as long as interaction with the recruiter is also available.

60% Human interaction and 40% AI

AI tools are helpful from a logistical perspective but humans must always be a part of the recruitment perspective

The balance cannot be 50/50. AI can be used as an initial filter after being well trained. Human oversight must always be there at all stages.

Efficiency meets human touch.

So should not completely take over a recruitment process. Human interactions are necessary and cannot be replaced by a bot.

Continuously updating the system

AI can be used to simplify the manuals and repetitive aspects of the interview process but humans must always carryout the actual interview process.

AI can be used for automation but human interaction is really important in recruitment process like interacting with the candidates, to see how they feel and react to what you say as recruiter.

Human interaction should always consist of the majority of the recruitment process with minor AI automations

at the end let the humans take decision about hiring

AI tools must be used in a limited capacity such that it enhances the recruiters capabilities for maximum impact.

AI can be used to handle repetitive tasks, while humans focus on the nuanced aspects that only they can provide.

Use it for administrative work.

AI automations help speed up the recruitment process but heavy reliance on it can cause potential candidates to be screened out. Human interaction should always be there to review candidate applications as well.

AI tools should be used as minimally as possible so as to automate emails and scheduling interviews. They should not be used for Resume screening or even a video analysis of the candidates themselves. Human oversight must always be present.

Reliance on AI tools should be minimal and humans should still be at the forefront of the recruitment process.

Final decisions to be taken by the HRs

AI automation can be leveraged for most of the recruitment process but candidates must be able to interact with the recruiters themselves at some stage.

The best way is to let AI handle easy, repetitive tasks like sorting resumes and setting up interviews, while people focus on talking with candidates and making important decisions. This way, the process is faster but still feels personal and fair.

What advice would you give to companies that are using or planning to use AI in their recruitment processes to improve the candidate experience?

34 responses

Heavy use of AI tools in the recruitment process might make candidates feel uncomfortable.

I will advice they use AI but not for all the process of the recruitment but just for the CVs

Treat candidates equally during interviews irrespective of their background

HR professionals should be moderately involved during the recruitment process

AI can use a predefined candidate criteria and apply it consistently thus reducing the impact of unconscious human bias. On the other hand, humans can navigate unique candidate situations, interpret complex/ambiguous information that AI might struggle with.

The AI tools used must be tested for their ability to screen candidates without any bias.

Priortise fairness

Recruiters should make it known to candidates that they are leveraging an AI system for the recruitment process as this helps set the candidates expectations and also builds trust.

AI can be used to make the manual tasks of the recruitment process easy such as email communications, interview scheduling, candidates status updates, etc. But human recruiters must always be present during the process.

Communicate clearly to the candidates about the AI usage

Excessive reliance on AI tools could prove discouraging to the candidates. Human interaction would reassure them that their application is being reviewed appropriately.

Ensure transparency, provide feedback

AIs should be used for logistical tasks such as interview scheduling, chatbots that can provide candidates with updates on their process or any tips for the interview process.

Make sure the AI tool is not solely responsible for ruling out candidates during the recruitment process. Human oversight must always be present.

AI tools could possibly be biased towards certain groups. Testing must be done to make sure this bias does not exist during the recruitment process

AI is good but, sometimes a candidate might get rejected wrongly

AI tools can be used for resume screening but all interviews must be conducted by humans.

Recruiters must receive training on the use of AI systems. AI output must always be reviewed by humans.

More transparency

Ensure that the candidates are informed even though they're rejected

AI can help in sorting large number of candidates based on pre-defined criterias. This can then be used by human recruiters to shortlist and interview. An AI must never be used in the interview process as that must always be carried out by humans due to our empathy, our ability to understand nuances, etc.

A manual review should be there for screening the CVs and AI should be used for automating the manual processes.

Excessive use of AI automations can make candidates uncomfortable

Let transparency be priority in the process.

AI must be used as a tool that drives efficiency and data insights while human recruiters are steer the process with empathy and human judgment.

Companies should make it clear to candidates that an AI system will be used. They must also reassure the candidates that a human will always be at the forefront of this process.

Use it for administrative work.

If an AI tool will be used during the recruitment process, in-depth testing must be completed to ensure that the tool is able to process data ethically and only uses the data that is required for the recruitment process.

AI tools must be used minimally and should not be heavily relied on. Most candidates would still prefer human interaction during the recruitment process.

AI automations should not be used to rule out candidates out of the recruitment process. They should perform logistical tasks such as interview scheduling, automated emails, status updates.

Be upfront about how AI is used and ensure fair treatment with room for candidate feedback.

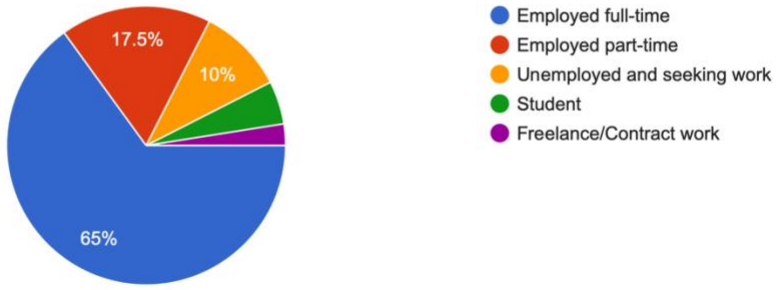
AI tools must not be act as a complete substitute for humans in the recruitment process.

Choose AI tools that personalize the candidate experience, reduce bias, and allow recruiters to spend more time building relationships and understanding candidates beyond their resumes

More transparency in the process

What is your current employment status?

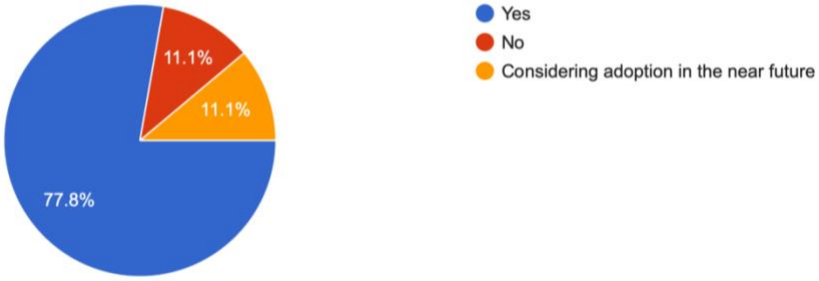
40 responses



9.2. HR Professionals Survey

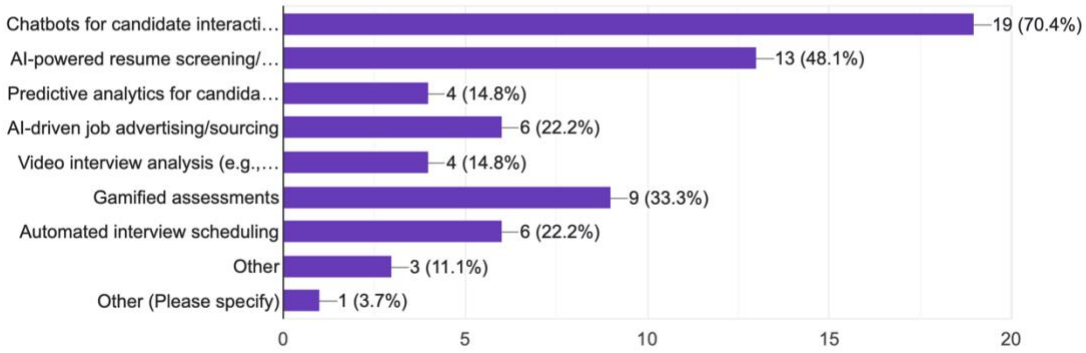
Does your organisation currently use Artificial Intelligence (AI) tools in its recruitment and selection processes?

27 responses



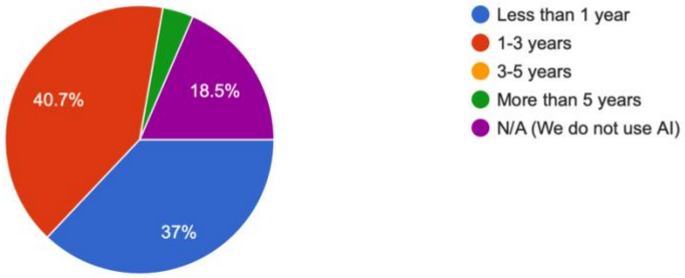
If yes, which of the following AI tools/applications does your organisation primarily use in recruitment? (Select all that apply)

27 responses



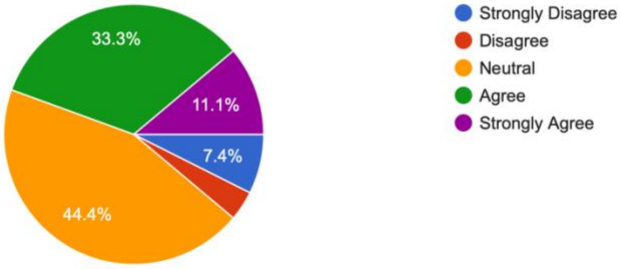
How long has your organisation been using AI in recruitment?

27 responses



To what extent do you agree that AI has improved the efficiency of your recruitment process?

27 responses



In what ways has AI most significantly contributed to improving your recruitment outcomes (e.g., quality of hire, speed, cost)?

25 responses

Speed

Speed and cost

Reduced workload

Speed of hiring

While we haven't fully implemented AI yet, we anticipate gains in administrative efficiency, candidate responsiveness, and faster shortlisting once tools are introduced.

Speed and efficiency

We do not use AI in our recruitment process

Reduced time spent on hiring

Speed and reduced cost

Accelerating time to hire

Speed of hiring

It has helped streamline initial applicant triage and reduced administrative workload for recruiters, but it hasn't yet had a transformative effect on candidate quality or time-to-hire.

I havent used AI yet

We have not used AI due to concerns about depersonalisation, transparency, and ethical implications. Our belief is that human intuition, lived experience, and nuanced evaluation remain critical to fair and effective hiring.

Speed

Reduced time to hire

Quality of hire

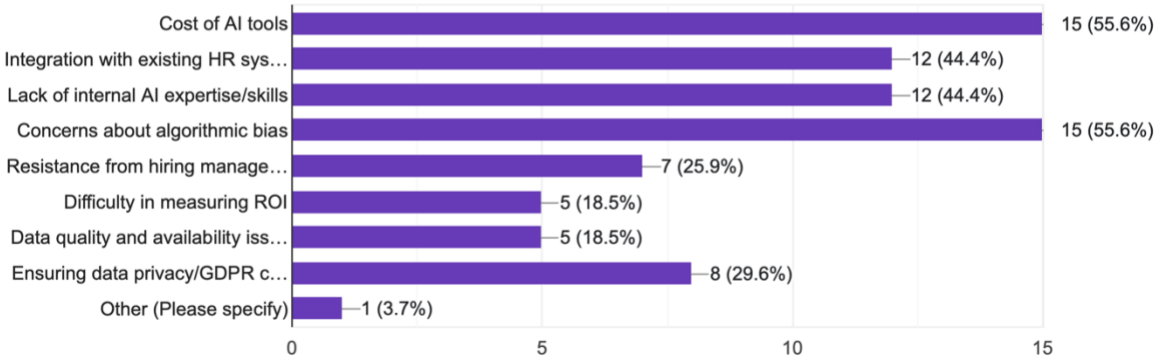
Quality of Hire, Speed, Filtering the right fitting candidates

AI has dramatically reduced time-to-hire and sourcing costs, while improving the quality of hire through more precise candidate-job matching. It's also provided deeper insights into candidate potential, thanks to analytics and behavioural data.

Time saving

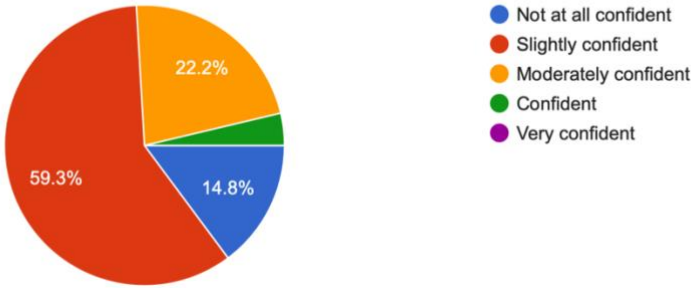
What are the biggest challenges your organisation has faced in implementing or using AI in recruitment? (Select top 3)

27 responses



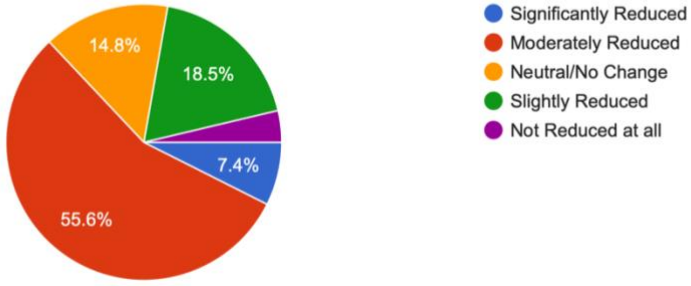
How confident are you that the AI tools used by your organisation are free from unintended algorithmic bias (e.g., favouring certain demographics, disfavouring others)?

27 responses



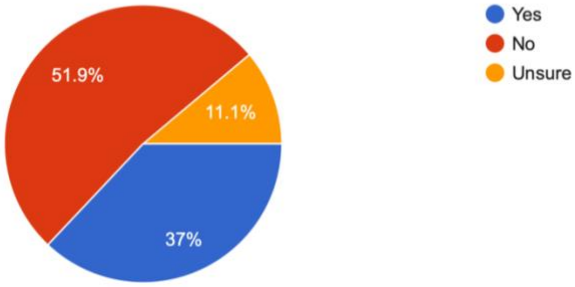
To what extent do you believe AI tools have reduced the human element or personal interaction in your recruitment process?

27 responses



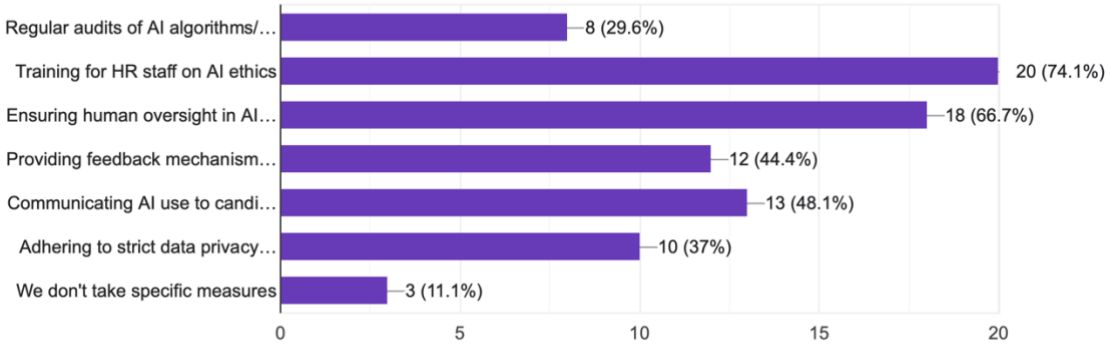
Have you observed any instances where AI tools presented a candidate that was clearly unsuitable despite appearing qualified on paper?

27 responses



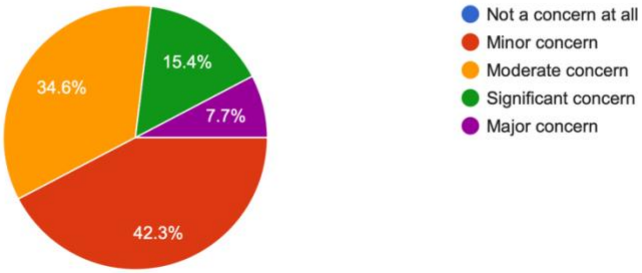
What measures does your organisation take to ensure fairness and transparency in its AI-driven recruitment processes? (Select all that apply)

27 responses



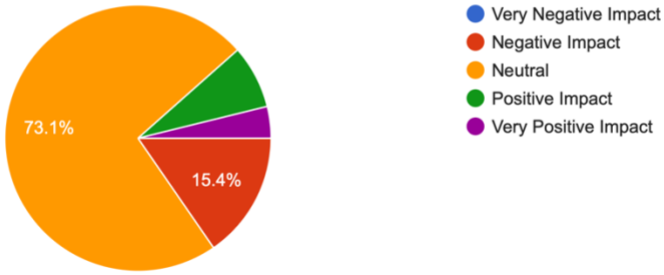
To what extent is data privacy a concern when using AI in recruitment within your organisation?

26 responses



How do you believe the use of AI impacts the overall candidate experience during your recruitment process?

26 responses



In your opinion, what is the ideal balance between AI automation and human interaction in the recruitment process?

24 responses

Before we even think about new tech, let's have a good chat amongst ourselves. What's the real challenge we're trying to fix in our hiring? Are we looking to find our brilliant people faster, bring in more diverse talent, or just lift the weight of the endless paperwork?

Let AI do the repetitive stuff to reduce the workload.

Technology should support—not replace—human decision-making

Transparency

Zero bias

The ideal is a synergistic partnership where AI handles data-intensive, repetitive tasks, freeing human recruiters to focus on qualitative assessments, relationship building, and strategic decision-making.

Ensuring fairness

AI for screening and scheduling interviews

AI for logistics and people for cultural fit

AI provides efficiency while humans stay actively engaged during the whole process.

Keeping human interaction

AI optimizes for speed and initial quality of candidate pools, while human interaction ensures the final quality of hires through thorough evaluation and cultural alignment.

Empower it with the right tools

Balance depends on role complexity

AI should assist recruiters—not replace them. While useful for administrative efficiency, empathy, instinct, and cultural understanding can't be replicated by a machine.

Ai is a tool to make human work smoother, faster and efficient. Total dependency is what makes the process haphazard. IT requires a fine balance to ensure smooth functioning.

AI for screening and scheduling, humans for interviewing and assessing soft skills.

We believe recruitment should remain predominantly human-led. AI can support logistics and screening, but it must never replace empathy, dialogue, and personal evaluation in the hiring journey.

Use Ai as a support tool and not replace the human element

Handling the heavy lifting of data and repetitive tasks.

AI should be used to streamline workflows and reduce administrative load, but key decisions—like cultural fit assessments and final candidate evaluations—should remain human-led. A hybrid model leveraging the best of both worlds is ideal.

AI should handle the high-volume, high-efficiency backend processes, while humans lead relationship-building, values alignment, and final assessments. It's about complementary intelligence—machine and human working side by side.

Achieving maximum efficiency through AI for initial screening and administrative burdens, while retaining human interaction for crucial stages like interviews, negotiations, and candidate support to ensure an empathetic and personalized experience.

Hybrid

What recommendations would you give to other organisations considering or implementing AI in their recruitment processes?

24 responses

Above all, our AI must be fair and just. We need to be vigilant about bias, like keeping a sharp eye on the weather. Let's train our AI on diverse data, check its results regularly, and maybe even have an independent eye look it over. Fairness isn't just a rule; it's part of our nature

Keep a regular check and tweak it to meet the organisation's requirement.

Prioritise ethical oversight, candidate communication, and transparent data use from day one. And never lose sight of the fact that hiring is about people, not just algorithms

Proper training needs to be administrated

Try to enhance the candidate experience

Begin with a pilot program or a specific use case (e.g., resume screening for high-volume roles) before rolling out AI across your entire recruitment process. Learn, iterate, and then scale.

Focus on transparency

Invest in training the staff to avoid bias

Maintain human oversight

Candidates often tailor their CVs to match the job description, and since AI relies heavily on keyword detection, it can be challenging to identify the most suitable candidates without conducting interviews.

Training

AI is only as good as the data it's trained on. Invest in cleaning, structuring, and enriching your recruitment data to ensure accurate and reliable AI outputs.

Take it slow and try to add a human touch wherever possible

Use Ai to streamline the process

Vet AI vendors rigorously, involve diverse stakeholders in implementation, and maintain transparency with both internal teams and candidates. Always keep a human in the loop for key decisions.

Invest in systems integration and change management early on. Select AI tools with transparency, explainability, and customisation. Most importantly, never remove the recruiter from the loop—augmented decision-making is the sweet spot.

Before implementing AI, clearly define what problems you're trying to solve (e.g., reduce time-to-hire, improve candidate quality, enhance diversity, automate repetitive tasks). Don't just implement AI for AI's sake.

Ethical oversight

Look at AI as support tool to lessen the burden of certain tasks. Few repetitive tasks can be easily automated. Leaving more room for you to focus on more important and straetgic work.

Invest in training for your recruitment team to understand how to use AI ethically and effectively.

Don't chase efficiency at the expense of fairness. Prioritise transparency, auditability, and diverse human oversight. Always remember that technology is a tool—not a conscience.

Focus on how to reduce the cost while maintaining the balance between AI automation and human

Create a more diverse team and define your goals clearly.

tart with clearly defined goals, invest in training your HR team on AI tools and ethics, and always ensure transparency with candidates. Don't underestimate the importance of human oversight—it's what keeps the process fair, empathetic, and trustworthy.

What is your role in the organisation?

26 responses