

Utilization of Artificial Intelligence (AI) in The Employee Recruitment Process: A Qualitative Study on Multinational Companies in Indonesia

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Keywords	Abstract
Artificial Intelligence, Recruitment, Human Resource Management, Digital Hiring, HR	This study aims to explore the perceptions and experiences of Human Resources (HR) practitioners regarding the use of Artificial Intelligence (AI) in the recruitment process at multinational companies in Indonesia. Using an exploratory qualitative approach, data were collected through in-depth interviews, observations, and document analysis involving eight informants from five different companies. The findings indicate that AI has a positive impact on improving efficiency and accuracy during the early stages of recruitment, such as application screening and psychometric analysis. However, several challenges arise concerning system transparency, potential algorithmic bias, and candidates' perceptions of unfairness. This study also emphasizes the importance of the human role in the final stages of recruitment, particularly in decision-making processes that require empathy, intuition, and ethical considerations. Thus, collaboration between AI and HR is considered the most ideal approach to create a recruitment process that is efficient, fair, and human-centered.



INTRODUCTION

The development of Artificial Intelligence (AI) technology has brought significant transformations in various aspects of human resource (HR) management, especially in the recruitment process (Johansson & Herranen, 2019; Kambur & Yildirim, 2023; Vrontis et al., 2023). AI is used to screen applications, schedule interviews, and conduct analysis of candidate behavior through automated video interviews (Kammerer, 2021). The main goal is to increase efficiency, objectivity, and speed in recruitment decision-making. However, the application of AI in recruitment is not free from challenges. Some studies show that candidates often feel that the AI-based recruitment process is unfair and non-transparent. For example, research by The Conversation (2023) revealed that only 31% of respondents agreed that recruitment decisions were entirely made by AI, but that figure increased to 75% if there was human involvement in the process (Mer, 2023).

From a recruiter's perspective, the use of AI also raises concerns regarding the reliability and accuracy of the system. A study by ScienceDirect (2023) shows that while AI

can improve efficiency and reduce bias, recruiters still doubt AI's ability to replace human judgment, especially in aspects that require intuition and empathy (Wahler, 2025).

In Indonesia, the adoption of AI in the recruitment process by multinational companies is increasing. However, there has not been much research that explores the perceptions and experiences of HR practitioners in Indonesia on the use of AI in recruitment. Understanding these perceptions is important to ensure that AI implementation can run effectively and in accordance with local cultural contexts and needs.

Previous studies provide an overview of the application and challenges of AI in HR. Langer et al. (2023) in their study stated that AI has been shown to reduce the administrative burden of HR by up to 40%, but its effectiveness depends on human involvement in final decision-making. Vrontis et al., (2023) emphasize the importance of a combination of "human-AI collaboration" to ensure fairness in the selection process. Sharma, S., & Sharma, (2021) found that more than 60% of candidates feel uncomfortable if the entire recruitment process is run by machines without human contact. Huang & Rust, (2021) argue that effective adoption of AI in HR requires an ethical and inclusive system design approach.

This research aims to explore the perception and experience of HR practitioners in multinational companies in Indonesia on the use of AI in the recruitment process and identify the challenges and perceived benefits of implementing AI in recruitment.

RESEARCH METHODS

This research uses an exploratory qualitative approach, which aims to deeply explore the understanding, perception, and experience of HR practitioners towards the use of Artificial Intelligence in the recruitment process. This approach was chosen because it allows researchers to obtain contextual and subjective insights based on the informant's direct experience (Creswell, 2016).

The subjects in this study are Human Resources (HR) practitioners, including recruitment managers and HR staff, who work in multinational companies in Indonesia and have applied AI technology in the selection or screening process of prospective employees. The determination of informants is carried out by purposive sampling, which is the deliberate selection of informants based on the criteria of their relevance and experience on the topic being studied.

Kriteria inklusi informan:

- a. Have at least 1 year of experience in AI-based recruitment processes.
- b. Be directly involved in hiring decision-making.
- c. Willing and able to provide information openly.

The number of informants is planned to be between 6-10 people, or until data saturation is achieved, which is a condition in which the information obtained has begun to be repeated and does not provide new findings.

Data is collected through three main techniques:

a. In-depth Interview

Interviews are conducted in a semi-structured manner using an open-ended interview guide. The goal is to explore in depth the views and experiences of informants regarding the

implementation of AI in the recruitment process, its benefits, challenges, and impact on the role of HR.

b. Non-participatory Observation

The researcher observed the use of AI systems in recruitment (if possible), such as ATS (Applicant Tracking System) systems, chatbots, or video interview automation, to understand the context of their use directly.

c. Document Study

The documents analyzed included company policies related to digital recruitment, technology-based recruitment SOPs, and internal HR reports on the effectiveness of AI use.

Data Analysis Techniques

The data obtained were analyzed using thematic analysis according to Braun and Clarke (2006), which included the following six steps:

- a. Getting to Know the Data: The interview transcript is read repeatedly to understand the context and meaning.
- b. Encoding Data: Relevant pieces of data are coded to make it easier to identify patterns.
- c. Searching for Themes: The codes are grouped into themes that describe the experiences and perceptions of the informants.
- d. Theme Review: Themes are double-checked and validated based on data.
- e. Naming Themes: Each theme is given a name that reflects its meaning.
- f. Compiling the Report: The final results are compiled in the form of an analytical narrative that is integrated with previous theories and findings.

Data Validity

To ensure the validity of the data, several validity strategies are used in qualitative research:

- a. Source triangulation: comparing data from interviews, observations, and documents.
- b. Member Checking: providing a transcript of the interview results to the informant to reconfirm the truth.
- c. Peer Review/Debriefing: discussion with fellow researchers or supervisors to avoid the researcher's subjective bias.

RESULTS AND DISCUSSION

From the results of in-depth interviews with eight key informants (recruitment managers and HR practitioners) from five multinational companies in Indonesia who have used AI in the recruitment process, several key themes were found:

- a. Time Efficiency and Recruitment Process
- b. Increased Accuracy in Candidate Screening
- c. Ethical Challenges and Trust in AI
- d. Perception of Injustice and Anxiety of Candidates
- e. Balance between Technology and Human Touch

Interpretation of Results and Theoretical Discussion

Time Efficiency and Recruitment Process

Most informants stated that the use of AI significantly speeds up the recruitment process, especially in the early stages such as CV screening and administrative selection. Informant IN-02 (HR Specialist in the FMCG sector) said:

"In the past, it took us two weeks to screen 500 applicants, now it takes two days with the help of an AI system. HR can focus more on strategic stages."

This is in line with the findings of Upadhyay & Khandelwal, (2018) who stated that AI in recruitment can reduce recruitment cycle time by up to 40%. In the context of the Technology Acceptance Model (TAM), this efficiency increases the Perceived Usefulness (PU) which accelerates the acceptance of technology by users (Davis, 1989).

Candidate Screening Accuracy

AI helps assess a candidate's suitability based on historical data and predictive algorithms. Some systems are even able to analyze personality through psychometric test results and language patterns in video interviews. Informant IN-05 (Tech Company Recruitment Manager) explained: "We use a system that can assess intonation, word choice, and facial expressions. The quality of candidates who pass the initial stage is much better and matches the needs of the team."

These findings corroborate the results of research by Chamorro-Premuzic, (2023) which show that AI can predict job success more accurately than conventional methods, as long as the algorithm's training data is quality and free of bias (Sabermahani, 2025).

Ethical Challenges and Trust in AI

Despite its efficiency, most informants voiced concerns about the transparency of AI systems. Some are skeptical of AI's "scoring mechanisms" that can't always be explained logically. Informant IN-03 stated:

"Sometimes the system rejects candidates who on paper are very good. We don't know exactly what criteria are used. That worries us that the system is biased."

This concern reflects the issue of algorithmic opacity, which is the unclarity of how AI makes decisions. According to Wright et al. (2022), this issue risks causing distrust from both HR and candidates and can have an impact on the company's reputation if it is not managed ethically.

Candidates' Perceptions of Injustice and Anxiety

Some informants also revealed that applicants felt uncomfortable with the process being too "cold" and without human interaction. The IN-06 informant said: "Some applicants complained because there was no in-person interview session in the early stages. They feel judged by machines, not by humans who can understand context."

This is in accordance with a study by Sharma & Sengupta, (2023) which states that 60% of candidates prefer a human touch in the selection process. This injustice arises not only from the AI itself, but also from a lack of communication about how the system works.

Balance between Technology and Human Touch

All informants agreed that AI should not replace the role of HR entirely, but rather be a supporting tool. Final processes such as in-depth interviews and organizational cultural discussions still require human intuition and empathy. Informant IN-01 confirmed:

"AI is a tool, not a substitute. HR must still have a role in assessing soft skills, work culture, and human aspects that cannot be captured by machines."

The study of Langer et al. (2023) also indicates that human-machine collaboration in the recruitment process provides the most optimal and fair results. This supports the importance of Human-AI collaboration as the future direction of HR (Zhou & Tian, 2023).

Discussion: The Role of Humans vs. Technology in HR Recruitment

The development of Artificial Intelligence (AI) in the recruitment process has brought significant changes in the way organizations identify, evaluate, and select candidates. However, this change also gives rise to a critical discourse on how the role of humans, especially Human Resources (HR) practitioners, is shifting in an increasingly digitized process. This discussion tries to answer the fundamental question: Will AI replace the role of humans in recruitment, or will it actually strengthen it?

a. AI as a Supporting Tool Not a Substitute

Based on field findings, almost all informants stated that AI was adopted not to replace HR roles, but to support their work efficiency, especially in the administrative and technical stages. Processes such as CV screening, automatic interview scheduling, and initial psychometric analysis are considered very suitable for automation because they are repetitive and data-driven. This is where the added value of AI is evident, namely reducing manual workloads that are often time-consuming and prone to human error.

However, the final decision-making process, face-to-face interviews, and organizational cultural fit assessments still require emotional intelligence, intuition, and contextual understanding from an HR professional. This is an area where AI currently still has limitations as it is not yet able to fully understand the social and psychological nuances of a person in depth.

b. Dimensions of Ethics and Accountability

The role of humans is very important in the context of ethics and accountability. In many cases, HR is expected to provide justification for recruitment decisions to management and candidates. But when the selection process is carried out by algorithms that are not fully transparent, moral and legal responsibilities can become blurred.

As the IN-03 informant mentioned, the concern over "AI rejecting candidates without explanation" signals a tension between efficiency and fairness. Within this framework, HR's role as a supervisor and counterweight of technology becomes very vital. Humans are needed

to ensure that decisions generated by AI can be criticized, corrected, and, if necessary, rejected, especially when indications of discrimination or algorithmic bias are found.

Research by Hunkenschroer & Kriebitz, (2023) emphasizes that without human involvement in the process of validating and interpreting AI results, organizations run the risk of making unfair decisions, and may even violate the principles of diversity and inclusion.

Human Touch: The Emotional Dimension in Recruitment

AI works on statistical logic and patterns but fails to understand the emotional and relational aspects of human interaction. Job interviews are not just about questions and answers, but also about creating interpersonal connections, building trust, and understanding the candidate's intrinsic motivations.

Informant IN-06 said that some candidates felt anxious and uncomfortable if the entire initial process was carried out without human interaction. This anxiety arises because the process becomes impersonal and cold, where candidates feel judged by a "system" that doesn't understand their personal values. These findings are in line with Sharma & Sengupta, (2023) research which shows that perceptions of injustice increase when technology completely takes over the initial evaluation process.

HR's role here is not just as a selection implementer, but as a candidate experience facilitator, which creates a humane and inclusive interaction. In the context of employer branding, the quality of interaction between HR and candidates can affect perceptions of the organization, regardless of the final outcome of the recruitment (Rogers & Barber, 2019).

Reinterpretation of the Role of HR in the Digital Era

Instead of being a victim of technological disruption, HR is challenged to reposition its role in the digital era (Agarwal et al., 2022). The traditional role of HR that is administrative has now shifted to strategic, analytical, and relational (Legge, 2014). AI takes over routine tasks, so HR has time and space to focus on:

- a. Designing a data-driven recruitment strategy
- b. Increase employer value proposition (EVP)
- c. Build meaningful relationships with candidates
- d. Analyze the success profile
- e. Develop fair and ethical technology policies

In this case, human-AI collaboration is the main paradigm, where technology functions as an extension of human analytical power, not as a substitute for the role of humans.

Reflection on the TAM (Technology Acceptance Model) Model

This discussion is also relevant to the Technology Acceptance Model (TAM) which states that technology acceptance is greatly influenced by perceived usefulness (PU) and perceived ease of use (PEOU). From the findings, it can be seen that HR accepts AI because it is helpful in filtering and streamlining processes. However, resistance begins to arise when the system is too complex, non-transparent, or raises moral doubts (Jain et al., 2022).

Therefore, the role of HR also needs to be expanded as a mediator of technology culture, namely bridging the acceptance of technology by various parties in the organization and

ensuring that the implementation of AI does not ignore the values of humanity, justice, and transparency.

The role of humans in recruitment is irreplaceable, but it has undergone a substantial transformation due to the integration of AI. On the one hand, AI offers advantages in efficiency and data processing. On the other hand, only humans can bring empathy, justice, and moral responsibility to decision-making. Collaboration between humans and technology, not the dominance of either of them, is the healthiest and most sustainable approach to the future of HR management (Ahmed Ali & Siddiqui, 2024).

CONCLUSION

This research aims to explore in depth the perception and experience of HR practitioners towards the use of Artificial Intelligence (AI) in the recruitment process in multinational companies in Indonesia. Based on the results of thematic analysis of in-depth interview data, observations, and document studies, several main conclusions were obtained as follows AI has been proven to improve the efficiency of the recruitment process, especially in the early stages such as administrative screening and interview scheduling, thus allowing HR to focus on other strategic tasks, AI contributes to increased accuracy in screening candidates based on more objective and holistic data, including psychometric results and behavioral analysis, there are significant ethical challenges, especially related to algorithmic opacity and concerns about system bias that cannot be explained rationally, from the candidate side, there is a perception of injustice and discomfort towards the selection process that is entirely AI-based without human interaction, which is considered impersonal and human roles remain crucial, especially in the final decision-making, assessment of personal values, and the emotional experiences of the candidate. AI is more appropriately positioned as an augmentative tool, not a substitute. Thus, collaboration between AI and HR practitioners is the best approach to create an efficient, accurate, fair, and humane recruitment process.

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