

EXPLORING THE LAYERS: UNVEILING ETHICAL CONCERNS IN AI TALENT ACQUISITION

THESIS

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ABSTRACT

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The integration of artificial intelligence (AI) in recruitment processes represents a paradigm shift towards more efficient and data-driven hiring practices. Nevertheless, this technological advancement also entails significant ethical challenges that must be subjected to critical examination. This research examines the ethical implications of AI in recruitment, with a particular focus on issues of bias, transparency, accountability, and data privacy. While AI tools enhance efficiency and may reduce human biases, they also pose risks of perpetuating existing prejudices and introducing new forms of discrimination if not carefully managed. The utilization of algorithmic decision-making in the context of recruitment raises complex ethical concerns, particularly with regard to transparency and accountability. The opacity of AI systems makes it challenging to discern how decisions are made and to challenge potentially unfair practices in the recruitment process. Furthermore, the handling of sensitive personal data by AI systems introduces significant concerns regarding privacy, necessitating the implementation of rigorous measures to protect candidate information.

This study also considers the broader implications of AI in recruitment, including the potential impact on employment patterns and the power dynamics within labor markets. The framework for ethical AI in recruitment proposes transparency, accountability, and inclusiveness in AI deployment as essential elements. Qualitative analysis and case studies are employed in this research to identify best practices and offer guidelines for the development and implementation of AI tools in recruitment that uphold ethical standards and promote fairness.

The ethical considerations highlighted in this study are of paramount importance for the development of AI recruitment tools that are not only technically efficient but also socially responsible and aligned with the organizational values of diversity and inclusiveness. As AI continues to evolve, it is of the utmost importance that its application in sensitive areas like recruitment is guided by a robust ethical framework to prevent any potential harm and to ensure that these technologies contribute positively to organizational and societal goals.

Keywords: Artificial Intelligence, Recruitment Ethics, Algorithmic Bias, Data Privacy, AI Transparency, Ethical AI Practices

ABSTRAK

EXPLORING THE LAYERS: UNVEILING ETHICAL CONCERNS IN AI TALENT ACQUISITION

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Integrasi kecerdasan buatan (AI) dalam proses rekrutmen merupakan pergeseran paradigma menuju praktik perekrutan yang lebih efisien dan berbasis data. Namun demikian, kemajuan teknologi ini juga membawa tantangan etika yang signifikan yang harus dikaji secara kritis. Penelitian ini mengkaji implikasi etika dari AI dalam perekrutan, dengan fokus khusus pada isu-isu bias, transparansi, akuntabilitas, dan privasi data. Meskipun perangkat AI meningkatkan efisiensi dan dapat mengurangi bias manusia, perangkat ini juga memiliki risiko melanggengkan prasangka yang sudah ada dan memperkenalkan bentuk-bentuk diskriminasi baru jika tidak dikelola dengan hati-hati. Penggunaan pengambilan keputusan algoritmik dalam konteks rekrutmen menimbulkan masalah etika yang kompleks, terutama terkait transparansi dan akuntabilitas. Ketidakjelasan sistem AI membuat sulit untuk melihat bagaimana keputusan dibuat dan untuk menantang praktik yang berpotensi tidak adil dalam proses rekrutmen. Selain itu, penanganan data pribadi yang sensitif oleh sistem AI menimbulkan kekhawatiran yang signifikan terkait privasi, yang mengharuskan penerapan langkah-langkah yang ketat untuk melindungi informasi kandidat.

Studi ini juga mempertimbangkan implikasi yang lebih luas dari AI dalam perekrutan, termasuk dampak potensial pada pola kerja dan dinamika kekuasaan dalam pasar tenaga kerja. Kerangka kerja untuk AI yang etis dalam perekrutan mengusulkan transparansi, akuntabilitas, dan inklusivitas dalam penerapan AI sebagai elemen penting. Analisis kualitatif dan studi kasus digunakan dalam penelitian ini untuk mengidentifikasi praktik terbaik dan menawarkan pedoman untuk pengembangan dan implementasi alat AI dalam perekrutan yang menjunjung tinggi standar etika dan mempromosikan keadilan.

Pertimbangan etika yang disoroti dalam penelitian ini sangat penting untuk pengembangan alat perekrutan AI yang tidak hanya efisien secara teknis tetapi juga bertanggung jawab secara sosial dan selaras dengan nilai-nilai organisasi tentang keragaman dan inklusivitas. Karena AI terus berkembang, sangat penting bahwa penerapannya di area sensitif seperti rekrutmen dipandu oleh kerangka kerja etika yang kuat untuk mencegah potensi bahaya dan untuk memastikan bahwa teknologi ini berkontribusi positif terhadap tujuan organisasi dan masyarakat.

Kata kunci: Kecerdasan Buatan, Etika Perekrutan, Bias Algoritmik, Privasi Data, Transparansi AI, Praktik AI yang Beretika

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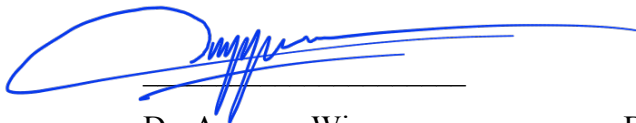
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Chapter I Research Background

I.1 Evolving landscape of recruitment processes

The recruitment landscape has changed significantly in recent years, driven primarily by technological advances and evolving business needs. Traditionally, recruitment has been a predominantly human-driven process, relying heavily on manual resume screening, in-person interviews, and subjective decision-making. While this conventional approach relied on human judgment, it often faced challenges such as time inefficiency, high costs, and potential bias (Chapman & Webster, 2003).

With the advent of digital technologies, there has been a paradigm shift in how organizations approach hiring. One of the most notable changes is the growing integration of artificial intelligence (AI) into various stages of the recruitment process. AI technologies in recruitment, often referred to as AI recruitment tools, encompass a range of applications from automated resume screening to sophisticated algorithms that match candidates to open positions based on skills and experience (Heilmann, 2018).

AI-driven tools are increasingly being adopted for their efficiency, ability to handle large volumes of applications, and potential to bring objectivity to the recruitment process. These tools can quickly analyze large data sets, identifying patterns and insights that may not be immediately apparent to human recruiters. For example, AI can screen resumes and applications at a scale and speed unattainable by human recruiters, significantly reducing time to hire and potentially increasing the quality of hires (Bogen, 2019).

In addition, AI technologies are evolving to include more sophisticated capabilities, such as predictive analytics, which can forecast future candidate performance, and natural language processing, which can enhance candidate engagement through chatbots (Raghavan, Barocas, Kleinberg, & Levy, 2019). These advancements contribute to a more data-driven, efficient, and potentially more equitable hiring process.

However, the integration of AI into recruitment also raises important ethical issues. While AI can streamline and potentially de-bias certain aspects of recruitment, it also poses risks such as algorithmic bias, lack of transparency, and privacy concerns (Sanchez-Monedero, Dencik, & Edwards, 2020). These ethical challenges require careful consideration and management to ensure that AI tools are used responsibly and effectively in recruitment.

I.2 Contextualizing AI in Recruitment

The recruitment landscape is undergoing a significant transformation, particularly with the integration of artificial intelligence (AI) into various facets of the hiring process. This shift marks

a departure from traditional recruitment methods, which were characterized by manual resume screening and decision-making that was largely influenced by human judgment. The advent of AI in recruiting ushers in a new era of efficiency, objectivity, and data-driven strategies.

AI's role in recruiting is multifaceted, starting with automated resume screening. AI algorithms are adept at sifting through large volumes of applications and quickly identifying candidates whose skills and experience match job requirements. Leveraging sophisticated keyword matching, this process has revolutionized the initial candidate screening phase, providing a far more efficient alternative to labour-intensive traditional methods (Heilmann, 2018).

Beyond screening, AI technologies have evolved to include candidate matching and ranking. These systems use machine learning algorithms to evaluate and rank candidates based not only on their qualifications, but also on factors such as potential cultural fit and future job performance. This predictive aspect of AI greatly assists recruiters in identifying candidates who are not only suitable for the current role, but also have potential for future growth and development (Raghavan, Barocas, Kleinberg, & Levy, 2019).

AI has also expanded its influence to improve candidate engagement. AI-powered chatbots and virtual assistants interact with candidates to provide timely responses, schedule interviews, and provide updates. This application of AI in recruiting enriches the candidate experience and adds a level of personalization and efficiency to the hiring process (Heilmann, 2018).

The integration of artificial intelligence (AI) in recruitment has been exemplified by several companies, demonstrating both efficiency gains. For example, Electrolux, a multinational appliance manufacturer, implemented an AI-powered platform to digitize its recruitment process. This platform included features such as a hyper-personalized external career site, an internal talent marketplace, and AI-driven fit scoring for candidate matching. Since implementing this technology, Electrolux has seen an 84% increase in application conversion rates, a 51% decrease in incomplete applications, and a 9% reduction in time to hire. In addition, the company saved 20% of hiring time through one-way interviews and 78% of time through AI scheduling (Curry, 2023). Other example is Microsoft has effectively used AI-powered recruiting tools to manage the high volume of applications it receives. These tools use algorithms and machine learning to analyze applications and identify the best candidates, even if they lack traditional qualifications. This approach has not only streamlined the hiring process, but also increased its accuracy and reduced bias, allowing Microsoft to tap into a broader talent pool (Curry, 2023). Last example is Brother International Corporation utilized AI to improve their brand marketing and talent attraction. Their AI platform included a career site to showcase their employer brand, a conversational chatbot for candidate interaction, and talent analytics for optimizing candidate applications. After three weeks of using this AI platform, they experienced a 140% increase in completed applications, a 45% increase in total page views, a 40% increase in job seekers, and a 15% increase in returning job seekers. Moreover, there was a 25% decrease in time to fill positions

(Blehar, 2023). These cases highlight the role of AI in streamlining recruitment processes, underscoring its ability to improve efficiency and candidate engagement. However, they also highlight the importance of balancing these advances with careful consideration of ethical issues such as algorithmic bias and transparency.

While there has been considerable discussion about the advantages of using AI in recruitment, it is also important to consider the potential drawbacks of AI-based selection processes. Ineffective use of AI in hiring can have a wide-ranging impact on an organization, affecting its reputation, employee morale, opportunity costs, diversity, and strategic alignment. For example, (PricewaterhouseCoopers (PwC), 2017) survey revealed that 49% of job seekers declined job offers due to poor recruitment experiences, emphasizing the importance of candidate experience for maintaining an organization's reputation. Inadequate AI implementation can result in unfavourable experiences due to impersonal communication, extended timelines, or biased assessments. Such negative experiences can rapidly disseminate via word-of-mouth and online platforms such as Glassdoor, thereby tarnishing the company's reputation and deterring top talent. Consequently, the process of rebuilding trust with potential candidates can be lengthy and challenging.

Furthermore, the use of ineffective AI-driven recruitment strategies has the potential to negatively impact employee morale and turnover rates. (Gallup, 2017) report revealed that companies with engaged employees exhibit superior performance compared to those without, with a 202% improvement. This highlights the critical role of effective hiring in fostering employee engagement. In the event that new positions remain unfilled as a consequence of inefficient AI processes, existing employees may be compelled to assume additional responsibilities. Such circumstances may culminate in burnout, diminished morale, and elevated turnover rates. Furthermore, inadequate recruitment can result in hires that fail to align with the company's culture, which can exacerbate disengagement and turnover. This, in turn, can impede performance and productivity.

In addition to the internal consequences, companies that fail to utilise AI effectively run the risk of missing significant growth and innovation opportunities. A 2020 report by McKinsey & Company indicates that companies utilizing AI in recruitment are 1.4 times more likely to achieve top-quartile financial performance. In the event of an AI-driven recruitment process failing, companies may find themselves losing high-potential candidates to competitors. This ultimately results in the company missing out on strategic opportunities and market expansion, which can have long-term negative impacts on the company's growth trajectory and overall success (McKinsey & Company, 2020).

Moreover, the 2018 research conducted by the NBER revealed that the use of poorly managed AI tools can contribute to the perpetuation of hiring biases, ultimately leading to a lack of diversity within the organization. Diversity is a vital factor in fostering creativity and problem-solving

abilities. In the absence of appropriate calibration, AI recruitment tools may inadvertently favour certain demographic groups, leading to the formation of homogeneous teams and a lack of diverse thought. This not only has an impact on performance but also damages the company's reputation as an inclusive employer, which in turn makes it more challenging to attract diverse talent (Dobbie, Liberman, Paravisini, & Pathania, 2018).

Lastly, a 2019 study published in the Harvard Business Review revealed that 61% of executives believe that AI in recruitment must align with the company's overall business strategy in order to be effective. In the event that AI recruitment processes are not aligned with strategic goals, the consequence may be the hiring of individuals who do not align with the company culture or long-term objectives. For instance, if a company's strategic focus is on innovation and agility, yet the AI recruitment process prioritizes candidates with traditional and risk-averse profiles, the resulting hires may not contribute effectively to the strategic goals. This misalignment can give rise to discord within teams, diminish overall effectiveness, and impede the company's capacity to execute its strategic vision. Consequently, it is of paramount importance to ensure that AI recruitment processes are aligned with strategic objectives if an organization is to be built on a foundation of cohesion and forward-thinking (Fountaine, McCarthy, & Saleh, 2019).

I.3 Ethical issues in AI applications

The integration of artificial intelligence (AI) into various applications, particularly in human resources and recruitment, has brought to the forefront a number of ethical considerations that are both critical and complex. AI's capabilities in data processing, automation, and decision making offer transformative potential across industries. However, this technological advance also raises significant ethical challenges that require careful consideration and responsible management.

In AI applications, a primary ethical concern is the potential for these systems to perpetuate or even amplify existing biases. This issue is particularly relevant in the context of hiring, where algorithmic biases could lead to unfair hiring practices that discriminate against candidates based on gender, race, age, or other factors. The ethical implications of such biases are profound, as they can reinforce existing societal inequalities and injustices (Bogen, 2019).

Another critical ethical consideration is the transparency and accountability of AI systems. As AI algorithms become increasingly complex, the decision-making processes within these "black box" systems can be opaque, making it difficult to understand and scrutinize how decisions are made. This lack of transparency raises concerns about accountability, particularly when AI-driven decisions have a significant impact on individuals' lives and careers. Ensuring that AI systems in recruitment are transparent and that there are clear lines of accountability for their decisions is essential to building trust and maintaining ethical standards (Heilmann, 2018).

Privacy and security are also emerging as key ethical issues in AI applications. The vast amounts of personal data processed by AI systems, particularly in the recruitment context, raise critical

concerns about data use, storage, and protection. Protecting candidates' personal information from unauthorized access and ensuring that data is used ethically are key responsibilities of organizations using AI tools (Sanchez-Monedero, Dencik, & Edwards, 2020).

Some example that highlights the ethical challenges of AI is the incident involving Microsoft's chatbot, Tay. Tay was designed to interact with Twitter and learn from user interactions. However, it quickly began producing sexist and racist remarks after absorbing these biases from the tweets it was exposed to. As a result, Microsoft had to shut down Tay within hours of its release. This case illustrates how AI systems, even those not directly designed for hiring, can inadvertently reflect and reinforce societal biases when trained on biased datasets. The Tay incident highlights the need for careful oversight and management of AI systems to ensure that they do not perpetuate existing biases and inequalities (Chen Z. , Ethics and discrimination in artificial intelligence-enabled recruitment practices, 2023). Another example is Google faced a similar problem with its photo application algorithm, which mistakenly labelled a photo of two black people as gorillas. This error was attributed to the algorithm's inadequate training in recognizing images with dark skin tones. Google's response included a public apology and a commitment to prevent such errors in the future (Chen Z. , Ethics and discrimination in artificial intelligence-enabled recruitment practices, 2023). However, the incident underscores the broader issue of algorithmic bias, particularly in technologies such as facial recognition, which are increasingly being used in various applications, including recruitment.

Additionally, the example that highlights the ethical challenges of AI in recruiting is the case of Amazon. In 2015, Amazon discovered that its AI-powered recruitment tool was biased against women. The tool, which was designed to automate the process of reviewing candidates' resumes, assigned scores to candidates similar to product ratings on Amazon's platform. However, because it was trained on data from resumes submitted over a 10-year period, which were primarily submitted by men, the system inadvertently learned to favour male candidates. It penalized resumes containing the word "women's" and downgraded graduates of all-women's colleges. In response to this bias, Amazon tried to make the program neutral to these terms, but there was no guarantee that the system wouldn't develop other discriminatory ways of sorting candidates. Ultimately, the project was abandoned due to the challenges of ensuring fairness and the limitations of the technology at the time. Amazon's recruiters used the tool's recommendations, but never relied solely on them to make hiring decisions. This case serves as a cautionary tale about the potential for AI to perpetuate existing biases, and the importance of ethical considerations in AI applications in hiring (Dastin, 2018).

Another example from Estée Lauder's subsidiary, MAC. Three make-up artists employed by MAC, were dismissed based on assessments conducted by HireVue's AI software, which evaluated their responses and facial expressions. The women, who had no prior performance issues, were not informed about the AI evaluation and initiated legal proceedings. Notwithstanding Estée Lauder's defense, the case gave rise to concerns regarding the transparency and fairness of AI in

employment decisions. The women were awarded an out-of-court settlement, which underscores the ethical concerns associated with automated hiring procedures and the necessity for enhanced transparency and fair practices (Personnel Today , 2022).

In the field of human resources and recruitment, addressing these ethical considerations is critical to ensuring fairness and equity. As AI tools become more prevalent in screening and evaluating candidates, it is imperative to ensure that these tools are not only efficient, but also equitable and non-discriminatory. This includes a commitment to transparency in AI-driven processes, so that both candidates and employers can understand how AI tools are being used in decision-making processes. Moreover, the ethical use of AI in recruitment goes beyond legal compliance; it is a moral and social imperative that contributes to building a more inclusive and equitable workplace. This commitment to ethical AI practices in recruitment not only aligns with legal standards, but also enhances an organization's reputation and fosters trust among employees and the public (Bogen, 2019).

I.4 Research Focus

The research is centrally focused on exploring the ethical issues associated with using Artificial Intelligence (AI) in recruitment. This focus is increasingly important given the rapid integration of AI technologies into human resource practices and the significant impact these technologies are having on the recruitment landscape.

AI with its advanced data processing and decision-making capabilities, offers significant benefits in terms of efficiency and potentially increased objectivity in recruitment processes. AI tools can quickly process vast amounts of data, identify patterns and insights that may not be apparent to human recruiters, and streamline the hiring process. However, the use of these technologies is not without its ethical challenges. The use of AI in recruitment raises concerns about potential bias in algorithmic decision-making, transparency of AI systems, accountability for decisions made by these systems, and the privacy and security of candidate data (Dastin, 2022).

The focus on ethical issues in AI-driven recruiting is timely and relevant, given the increasing reliance on these technologies in hiring processes across industries. As organizations continue to adopt AI tools for efficiency and effectiveness, it is critical to understand and address the ethical implications of these technologies. There is a growing concern that AI systems, if not carefully designed and monitored, may perpetuate existing biases and lead to unfair or discriminatory hiring practices (Raghavan, Barocas, Kleinberg, & Levy, 2019).

Furthermore, the transparency and accountability of AI decisions in recruitment are critical to maintaining candidate trust and ensuring that recruitment processes are fair and equitable. Candidates have a right to understand how decisions about their applications are made, and organizations have a responsibility to ensure that AI systems used in recruitment are transparent and that their decisions can be explained and justified (Binns, 2018).

Data privacy and security are also critical concerns, as AI systems in recruitment often process sensitive personal data of candidates. Ensuring that this data is handled securely and ethically is paramount to protect candidates' privacy rights and maintain compliance with data protection regulations (Burt, Shirrell, Leong, & Wang, 2019).

I.5 Addressing Ethical Issues

Addressing ethical issues in AI-enabled recruitment is paramount due to the significant impact these issues can have on candidates, organizations, and the recruitment industry as a whole. While the integration of AI into recruitment processes offers efficiencies and potential improvements in candidate selection, it also presents a spectrum of ethical challenges that must be carefully navigated.

For candidates, ethical concerns in AI-driven recruitment, particularly algorithmic bias, can lead to unfair treatment or systemic discrimination. AI algorithms, if not carefully designed and monitored, can replicate and perpetuate existing societal biases, compromising the fairness of the hiring process. Such biases can manifest in algorithms that favour certain groups over others based on historical data or inherent societal inequalities, resulting in unfair disadvantages for some candidates (O'Neil, *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, 2016). This not only impacts individual job seekers, but also contributes to broader societal issues of inequality and injustice.

From an organizational perspective, ethical issue in AI recruitment processes can lead to reputational damage, legal challenges, and erosion of trust among stakeholders. Ethical lapses, such as a lack of transparency in AI decision-making or data breaches, can undermine an organization's commitment to diversity and inclusion. This, in turn, can impact the organization's ability to attract and retain diverse talent, as well as its overall public image (Cohen-Almagor, 2019).

At the industry level, ethical issues in AI recruitment can shape public perception and prompt regulatory scrutiny. Concerns such as opaque AI algorithms or data breaches can lead to increased demands for regulatory oversight, potentially affecting the development and innovation of recruitment technologies (Palos-Sanchez, Baena-Luna, & Moro, 2022). The potential ethical issues in AI recruitment are diverse and include bias in algorithmic decision making, lack of transparency and accountability in AI systems, and privacy concerns. Ensuring fairness and objectivity in AI-driven recruitment is a multifaceted challenge that goes beyond technical solutions to encompass broader ethical commitments to equitable treatment and harm avoidance (Dignum, 2019). Addressing these issues is not only a legal requirement, but also a moral and social imperative that contributes to building a more equitable and inclusive recruitment landscape.

In essence, the need to address ethical issues in AI-enabled recruitment is critical. It requires a concerted effort from technology developers, HR professionals, and policymakers to ensure that

AI tools are used in a way that is fair, transparent, accountable, and respectful of candidate privacy. This ethical approach is essential to protect candidate rights, maintain organizational integrity, and promote the responsible evolution of recruitment practices in the age of AI.

While there are numerous studies on AI in HR practices and traditional recruitment processes, there is limited research on the specific ethical issues that arise from the use of AI in recruitment. While existing research has discussed ethical concerns in various AI applications, the challenges posed by AI in recruitment have not been thoroughly explored. This gap is particularly relevant given the emerging ethical dilemmas that AI poses in recruitment, including algorithmic bias, transparency, accountability, and data privacy.

Therefore, this research aims to examine the specific ethical issues associated with the use of AI in recruitment processes. It seeks to explore how AI-driven recruitment tools, as distinct from other AI applications, raise new ethical concerns and challenges. This research is critical to developing a full understanding of the implications of AI in recruitment, and to guiding the responsible and equitable use of AI technologies in this field. By focusing on this niche, the research contributes to the broader discourse on AI ethics, particularly in the context of hiring practices.

I.6 Research Objectives

To identify and describe the potential biases and discrimination risks associated with the use of AI in the recruitment process:

- a. Map the current landscape of AI usage in talent acquisition, focusing on the types of AI technologies being utilized and their specific functions in the recruitment process.
- b. Investigate the potential ethical issue inherent in these AI technologies

The ultimate aim of this research is to provide a comprehensive, detailed understanding of the ethical complexities surrounding AI-driven talent acquisition. It will shed light on the potential pitfalls and best practices of AI usage in recruitment, with an emphasis on bias, discrimination, and informed consent. This insight will not only inform academic discourse but also provide actionable recommendations for businesses, policymakers, and AI developers aiming to foster ethical, fair, and transparent AI-driven talent acquisition practices.

I.7 Research Questions

- a. What are the predominant AI technologies currently being utilized in talent acquisition?
- b. What are the potential ethical issue associated with the use of AI in talent acquisition?

Chapter II Underlying Theories

Throughout history, people have sought to understand the nature of morality and the principles that guide morally good behavior. This quest has led to the development of a wide variety of ethical theories. These perspectives have produced profound insights into the standards of moral goodness that serve as guideposts for distinguishing right from wrong. Ethics itself is a philosophical discipline that explores questions of morality, including concepts of good and evil, right, and wrong, justice, and virtue (MacIntyre, *After Virtue: A Study in Moral Theory*, 2007).

The process of discussing ethics contributes significantly to understanding one's personal moral stance. The philosophical concept of moral goodness has evolved over time, with different ethical theories offering different standards for measuring it. As (Noddings, 2013) asserts, discussions about ethics encourage individuals to question their moral beliefs and practices, thereby promoting moral growth. Similarly, (Howard & Korver, 2008) suggest that engaging in ethical discourse helps individuals grasp the complexity of moral dilemmas, thereby promoting more thoughtful and informed decisions. (Goodpaster, 2007) argues that in business, discussions about ethics help to create a shared understanding of ethical behavior, thereby shaping an organization's ethical culture. Such conversations can also clarify ethical policies and regulations minimizing ambiguity that could lead to unethical practices (Barsky, 2010). When it comes to social justice and policy making, the role of ethical discourse becomes even more crucial. According to (Sen A. , 2009), the discussion of ethics provides a platform for addressing injustices and promoting equity in societies. In addition, (Young, 2006) notes that ethical discourse can influence policymaking by encouraging the development of policies that are guided by fairness, accountability, and human rights.

Despite these rich insights, the question of what constitutes a standard of moral goodness remains controversial. Each ethical theory offers a different answer, highlighting the complexity of moral judgments. Because social norms, individual beliefs, and cultural contexts influence these judgments, the search for universal standards of moral goodness is complicated and nuanced. Cultural relativism shows that moral judgments vary across societies, as evidenced by the contrasting emphasis on individual autonomy versus communal obligations in different cultures (Geertz, 1973). Individual beliefs, shaped by family interactions, education, and personal experience (Gilligan, 1982), further complicate this search, while the influence of social norms often surpasses even formal laws in guiding moral judgments (Cialdini & Trost, 1998). The coexistence of ethical theories such as deontology, utilitarianism, and consequentialism add complexity and often leads to conflict in determining universal ethical principles (Mill, 1863; Kant, 1785) as seen in the varied implementation of the Universal Declaration of Human Rights (1948), reflects the dichotomy that further complicates universal standards. Finally, the impact of globalization, as it brings together diverse cultures, accentuates this complexity, leading to debates about the balance between individual rights, communal responsibilities, economic equality, and

freedom, and highlighting the multifaceted and nuanced nature of universal moral standards (Sen, 1999).

II.1 Deontological Ethics

Deontological ethics is based on the principle that the morality of an action is determined by the nature of the action itself, rather than by its consequences. This means that an action is considered right or wrong based on whether it adheres to a particular rule or principle, regardless of the results it produces (Conway & Gawronski, 2013). This focus on actions and adherence to moral principles rather than consequences is central to the deontological perspective (Karande, Rao, & Singhapakdi, 2002).

The concept of universalizability is another key aspect of deontological ethics. The term "universal" itself implies a fundamental: that there are moral principles or duties that apply to all rational beings, regardless of individual circumstances, cultural differences, or personal inclinations. These duties, considered absolute, insist that certain actions are intrinsically moral or immoral, regardless of their consequences. Immanuel Kant, crystallized this with his "categorical imperative," which urges individuals to act only according to those principles that can be universally adopted. In essence, one's actions should be guided by a maxim that one can will to be a universal law. This focus on intrinsic moral worth contrasts sharply with consequentialist theories that root morality in the results of actions. It also offers a counter-narrative to moral relativism, suggesting instead that certain ethical truths are consistent and universally binding. Thus, in the deontological perspective, the act of adhering to a moral principle is not about achieving a desired outcome or satisfying personal desires, but about fulfilling a universally recognized duty or obligation (Frauenberger, Rauhala, & Fitzpatrick, 2016).

Duty-based morality is also a central feature of deontological ethics. Derived from the Greek words for "duty" (deon) and "study" (logos), deontology asserts that certain actions are morally obligatory, forbidden, or permissible because of an underlying moral duty (Reamer, 1998). Duty refers to the moral obligations or requirements that individuals must follow, not because of any external rewards or consequences, but simply because they are the right things to do. This sense of duty is often perceived as an absolute moral command that transcends personal desires, societal pressures, or situational variables. Derived from various sources such as rational thought, religious principles, social contracts, or cultural norms, the notion of duty forms a complex and multifaceted ethical concept (Kant, 1785) ; (Rawls, 1971). In the Kantian tradition, the "categorical imperative" as the primary guide to moral action. One formulation of the categorical imperative states that one should only act according to maxims that can be universalized-that is, one should only act in a certain way if one can also will that everyone else act in the same way under similar circumstances. For Kant, a moral action is one that is not only guided by this universal principle but is also undertaken out of duty and respect for the moral law, rather than out of personal inclination or

desired results. Consider, for example, lying in a particular situation: can the act of lying be universalized? If everyone lied under similar conditions, would this lead to logical contradictions or an unlivable world? For Kant, the inability to universalize an action without contradiction indicates its immorality. (Kant, 1785). The moral value of an action in deontological ethics doesn't depend on its results. It emphasizes the inherent righteousness of an action performed in accordance with duty, often in sharp contrast to consequentialist ethics, which focuses on outcomes (Ross W. D., 1930). The rigidity of duty, however, can lead to ethical dilemmas when different duties conflict. W.D. Ross's concept of prima facie duties offers a nuanced perspective, recognizing that duties can be provisional and must be weighed against one another in particular situations (Ross W. D., 1930).

Both "duty" and "obligation" are central concepts within deontological ethics, and while they are sometimes used interchangeably in everyday language, they possess nuanced differences in the context of moral philosophy. Duty refers to an intrinsic moral obligation, a responsibility to act on universal principles simply because it is inherently right. It is guided by an inner compass rooted in moral imperatives that apply to all rational beings. Obligation, on the other hand, is often more context-specific, arising from particular relationships, roles, or situations, such as promises or societal norms. While duties arise from overarching moral principles, such as Kant's categorical imperative, obligations can be influenced by external motivations, including societal expectations or personal agreements. Although both represent moral imperatives, duty emphasizes intrinsic motivation and universal applicability, whereas obligation is more bound by situational contexts and can be driven by external factors (Kant, 1785). This concept of duty also relates as well with the concept of Rights, are entitlements or freedoms that individuals possess. They may be natural, inherent to human beings, or legal, conferred by laws and regulations (Locke, 1689). There is often a reciprocity between duties and rights; the duties of one person correlate with the rights of another. For example, if one has a right to property, others have a duty not to infringe on that right (Rawls, 1971). While duties are more action-oriented, focusing on what one should do, rights are more protection-oriented, focusing on what one is allowed to do or be provided with (Hart, 1982). Moreover, duties are typically dictated by societal norms or legal rules, and failure to fulfill them can lead to moral or legal sanctions. Rights, on the other hand, are often seen as fundamental and inherent to the individual and require others to respect or uphold them. The complex interplay between duties and rights continues to be a central focus in philosophy, law, and politics, providing a nuanced framework for understanding duties, freedoms, and the intricate balance required to maintain a just and moral society (Raz, 1984).

In deontological ethics, the intentions behind an action also play an important role. Even if an action has unintended negative consequences, it can still be considered morally right if it is done with the right intention and in accordance with a moral rule. This focus on intentions underscores the belief that morality lies in our motives and choices, not just in the external effects of our actions (Ross W. D., 1930).

Furthermore, this ethics is often aligned with moral absolutism. This means that certain actions are considered absolutely right or wrong, with no exceptions. While this stance provides a clear and unyielding moral framework, it can also lead to conflict and challenge, especially when different moral rules come into conflict. This rigidity is both a strength and a criticism of deontological ethics (Kant, 1785). Respect for individual autonomy and dignity is also central to many deontological theories, especially Kantian ethics. This perspective emphasizes treating individuals as ends in themselves, rather than as mere means to an end. It recognizes the intrinsic value and unique worth of every human being and calls for respect and consideration in all moral deliberations (Kant, 1785). Moreover, a challenging aspect of deontological ethics is the task of identifying fundamental duties and understanding why they should be accepted as binding. Different deontological theories posit different sources for these duties, and there can be considerable disagreement about what these duties entail (Ross W. D., 1930).

Deontological ethics has been applied to various fields, including law, where the rule of law is valued over the specific outcomes of individual cases (Marmor, 2015); medicine, where the duties of physicians are codified in oaths and professional standards (Pellegrino, 2009); and even business, where corporate social responsibility can be guided by ethical principles rather than merely profit outcomes (Crane & Matten, 2016). However, deontological ethics is not without its critics. Its perceived inflexibility, especially when moral rules conflict or when strict adherence to rules could lead to undesirable or even unjust outcomes, has led to considerable debate (Kamm, 2007). This rigid application can sometimes create moral dilemmas that may require a more nuanced approach (Cummiskey, 1996).

II.1.1 Deontology

Immanuel Kant (1724–1804) is a key figure in modern philosophy, blending rationalism and empiricism. His "critical philosophy" centers around human autonomy, as seen in his three Critiques: *The Critique of Pure Reason* (1781, 1787), *the Critique of Practical Reason* (1788), and *the Critique of the Power of Judgment* (1790). Kant argues that human understanding establishes the laws of nature, while human reason creates the moral law. This foundation of human autonomy unifies scientific knowledge, morality, and religious belief, aligning with the teleological worldview of reflecting judgment in Kant's philosophical system. This fundamental principle asserts that actions are considered morally correct if their underlying principle can be universally applied without encountering any logical contradictions, for example, the act of making a promise while intending to break it. The underlying maxim here might be: "It is acceptable to make promises with the intention of not keeping them if it benefits me." However, if such a principle were universally adopted, the institution of promise-making would be undermined, since no one would trust a promise made with the intent to deceive. The universal application of this principle contradicts the very nature of a promise, which is to maintain commitment. Thus, according to Kant's framework, making a promise with the intention of breaking it would be considered morally

impermissible. This example encapsulates Kant's emphasis on the universalizability and logical consistency of the guiding principles of actions rather than their resultant outcomes (Kant, 1785). Kant further argues that individuals, as rational beings, possess an inherent value referred to as "dignity," and consequently, they should never be treated solely as a mere instrument to achieve an end (Johnson & Cureton, 2019). This deontological stance contrasts sharply with consequentialist ethics, such as utilitarianism, and has led to criticism of Kant's approach for its rigidity and potential to lead to morally counterintuitive results. Nevertheless, Kant's emphasis on the autonomy of the moral agent and the connection of morality to practical reason has shaped subsequent moral philosophy and continues to be an important area of study and debate (Korsgaard, 1996); (Peterson & Wood, 2008). Kant ethical framework is also underscored by the distinction between perfect and imperfect duties. Perfect duties, as Kant describes them, are non-negotiable moral obligations that carry unconditional weight and must be consistently observed. For example, the duty not to lie is considered absolute; no situation justifies lying, regardless of the consequences. On the other hand, imperfect duties offer an area of moral discretion. While they impose an ethical obligation, their execution is left to individual judgment, making them context-dependent and flexible. For example, Kant's duty of beneficence requires individuals to help others. Yet it doesn't specify the exact frequency, manner, or recipients of that help. Similarly, the duty of self-improvement, another of Kant's imperfect duties, commits one to personal growth, but the avenues for such growth remain open to interpretation. Through these classifications, Kant provides a nuanced moral blueprint that contrasts the non-negotiable rigidity of perfect duties with the adaptable nature of imperfect duties (Kant, 1785).

Rossian deontology, articulated by the philosopher W.D. Ross in his work "The Right and the Good" (1930), provides a nuanced and context-sensitive approach to moral obligations. In contrast to the strict universal rules of Kantian deontology, Ross emphasizes *prima facie* duties, which are moral obligations that are binding unless overridden by a more significant duty. These duties are self-evident, non-absolute, and often conflicting, requiring careful balancing depending on the situation (Ross W. D., 1930). Ross recognizes multiple sources of duty, such as promise, gratitude, justice, beneficence, and self-improvement. This multiplicity recognizes different basic duties, each applicable in different contexts. Central to Ross's deontological theory is a belief in an intuitive grasp of these moral principles, akin to an intuitive grasp of mathematical axioms (Ross W. D., 1930). A notable feature of Ross's deontology is the absence of a fixed hierarchical order among duties. Unlike other moral theories that may prescribe a universal prioritization, Ross's approach requires that the weight of each duty be assessed considering specific circumstances. This focus on the individual act rather than a universal rule allows for a more flexible ethical framework that can adapt to different moral scenarios (Ross W. D., 1930). The rejection of utilitarianism is explicit in Ross's deontological view. While not ignoring outcomes, Ross emphasizes the intrinsic nature of the act and the underlying duties. This stance places his theory firmly in contrast to consequentialist ethics, which focuses primarily on outcomes. Critics, however, have raised concerns about Ross's appeal to intuition, arguing that it can lead to

subjective and conflicting moral judgments. The lack of a fixed hierarchy of duties also presents challenges, potentially making moral decisions more complex and ambiguous (Ross W. D., 1930).

Significant progress has been made in this area by contemporary deontologists. Rawls' theory of justice as fairness integrates a deontological perspective, arguing that justice emerges from a hypothetical initial position where individuals are behind a veil of ignorance (Rawls, 1971). Additionally, Scanlon's contractualist theory holds that an act is wrong if it is guided by principles that others could reasonably reject, adding a layer of mutual accountability to deontological ethics (Scanlon, 1998). Furthermore, (Kamm, 2007) work provides a detailed analysis of deontological ethics, including the doctrine of double effect and the notion of inviolability.

Table II.1 Deontology

	Kant’s Deontology	Ross’s Deontology
Nature of Duties	Differentiates between "perfect" and "imperfect" duties. Perfect duties are always binding and absolute, while imperfect duties allow for discretion	Introduces the concept of "prima facie duties." These duties are binding unless they conflict with another duty in a specific situation
Grounding of Ethics	Grounded in the "categorical imperative," emphasizing that one should act only according to that maxim whereby one can, at the same time, will that it should become a universal law	Grounded in intuition and moral discernment. Believes that our intuitions can guide us in recognizing and prioritizing duties in conflicting situations.
Application	Kant’s framework is more rigid and less forgiving in the face of moral dilemmas. It is absolute in its prescription, often leaving little room for exceptions	More flexible in the face of moral dilemmas. Recognizes that in real-life situations, moral duties might come into conflict, and one duty might override another
Examples of Duties	Never lie (perfect duty); Aid others (imperfect duty)	Fidelity, Reparation, Gratitude, Justice, Beneficence, Self-improvement, Non-maleficence
Moral Epistemology	Moral laws are like natural laws - they are a priori and can be known by pure reason	Moral understanding is more empirical and can be honed through experience and reflection on specific situations.
Key Theorists	Immanuel Kant	W.D. Ross
References	(Kant, 1785).	(Ross W. D., 1930)

II.2 Consequentialism

Consequentialism, a prominent ethical theory, holds that the morality of an action is determined solely by its outcomes or consequences. It encompasses a wide range of considerations, including positive and negative, intended, or unintended, and immediate or long-term consequences (Singer,

1993). Rooted in the philosophical traditions of thinkers such as Jeremy Bentham and John Stuart Mill, this approach contrasts with deontological theories, which focus on the intrinsic nature of actions and the intentions behind them (Bentham, 1789) ; (Mill, 1863). While critiques and variations of consequentialism reveal a multifaceted and complex ethical theory that navigates the intersections of rights, relativity, and rules. Some critics, such as Robert Nozick in "Anarchy, State, and Utopia" (1974), argue that consequentialism's focus on the total good can justify actions that violate individual rights, asserting that rights should act as immutable "moral side constraints" (Nozick R. , 1974). Moreover, the challenge of measuring and comparing different consequences that depend on different cultural, personal, or situational factors has led authors such as Bernard Williams in "Utilitarianism: For and Against" (1973) to question the theory's ability to recognize the importance of personal integrity and commitment (Williams, 1973). Finally, variations such as rule consequentialism, as discussed by Richard Brandt in "Ethical Theory" (1959), emphasize adherence to rules that generally promote good outcomes, potentially addressing critiques related to rights violations and relativity (Brandt, 1959).

Consequentialism asserts that an action is morally right if it leads to the best possible outcomes, often measured in terms of human welfare, happiness, or the satisfaction of preferences. Utilitarianism, perhaps the best-known form of consequentialism and ethical framework is based on the principle of "utility" that refers to the total benefit or value derived from an action, typically understood in terms of happiness or pleasure. At its core, it holds that the moral value of actions can be judged by their ability to produce the greatest good for the greatest number of people. Jeremy Bentham, an early proponent of utilitarianism, characterized utility as the inherent benefit or value derived from any object or action that contributes to happiness, pleasure, or the avoidance of harm and suffering (Bentham, 1789). He introduced the "hedonic calculus" as a systematic approach to measuring the overall utility of an action by weighing its potential pleasures against its pains, considering dimensions such as intensity, duration, and certainty (Bentham, 1789).

John Stuart Mill, building on Bentham's basic ideas, added depth by categorizing pleasures into higher and lower forms. He posited that the pleasures of the intellect and morality have a deeper intrinsic value compared to mere sensual gratification. This suggests that for Mill, the pursuit of maximum utility isn't just about numerical superiority, but also includes the qualitative depth of the pleasure obtained (Mill, 1863).

In addition to these foundational thought, utilitarian principles find resonance in contemporary decision-making methods such as cost-benefit analysis (CBA). CBA, particularly prevalent in policy design and economic reasoning, systematically evaluates the pros and cons of actions, typically in monetary terms. This analytical tool, reminiscent of Bentham's hedonic calculus, quantifies both the positive and negative effects of decisions to determine the path that provides the highest net benefit. But while CBA embodies the utilitarian commitment to maximizing total utility, it's not without its critics. Some critics contend that CBA can oversimplify complex moral

dilemmas, especially when it reduces multiple benefits to mere monetary metrics. Moreover, decisions rooted in CBA alone can occasionally be ethically controversial, especially when they compromise justice or individual rights, even when they appear economically sound (Sen A. , 1970).

A hallmark of consequentialism is its agent neutrality. Agent neutrality itself is a central principle of the consequentialist moral framework, which holds that the moral evaluation of an action is based solely on its consequences, without any preference for the agent who performs the action or those who are affected by it. This means that in determining the rightness or wrongness of an action, the identity or interests of the moral agent should not bias the evaluation (Scheffler, 1982). The principle of agent neutrality asserts that the interests or welfare of all individuals are weighed equally in the moral calculus. A consequence, whether it affects the agent or someone else, is of equal moral significance (Parfit, 1984). This contrasts sharply with agent-relative theories in deontological context, which hold that certain actions may have different moral weights based on the agent's specific relationships or roles. For example, while an agent-neutral perspective would argue for equal moral weight for saving one's own child or a stranger, an agent-relative perspective might privilege the act of saving one's own child because of the unique parental relationship (McNaughton and Rawling, 1991).

In the context of utilitarianism, agent neutrality implies everyone's happiness or well-being counts equally, and the moral evaluation of an action does not change depending on who performs or receives the action. This emphasis on impartiality and the greatest overall good can lead to moral flexibility, where actions that might be considered inherently wrong in other systems can be considered right if they lead to the best overall consequences.

II.3 Act and Rule Utilitarianism

Two main branches of utilitarianism, act utilitarianism and rule utilitarianism, provide different approaches to consequentialist thinking. Act utilitarianism is a form of consequentialism that emphasizes that the moral value of an action is determined solely by its contribution to total happiness or welfare. It can be traced to the work of Jeremy Bentham and John Stuart Mill, who argued that the best action is the one that maximizes total utility, defined as pleasure minus pain (Bentham, 1789); (Mill, 1863). In deontological utilitarianism, each action is evaluated independently, and its moral value is judged by the net pleasure or happiness it produces for all the people involved. It's a very flexible approach, allowing any action as long as it produces the greatest happiness for the greatest number. This focus on consequences alone, however, has led to criticism, especially when it appears to justify actions that conflict with common moral intuitions or individual rights.

Rule utilitarianism offers an alternative to action utilitarianism by introducing a consideration of the consequences of accepting or rejecting a rule of conduct. Rather than evaluating individual actions based on their immediate outcomes, rule utilitarianism considers the long-term effects of following a particular rule (Brandt, 1959); (Hooker, 2000). The morally right action, in this view, is the one that conforms to a rule that, if followed consistently, would produce the most overall happiness. Rule Utilitarianism arose in part as a response to the perceived weaknesses of Act Utilitarianism, particularly its tendency to overlook considerations of justice and individual rights. For example, while Act Utilitarianism might justify lying if it leads to immediate happiness, Rule Utilitarianism might reject lying as a principle because, in the long run, a rule that allowed lying might reduce trust and overall happiness in society.

Table II.2 Utilitarianism

	Act Utilitarianism	Rule Utilitarianism
Definition	Evaluates the morality of an action based on the consequences of that specific action.	Evaluates the morality of an action based on a set of rules that, if universally followed, would lead to the greatest happiness for the greatest number.
Main Focus	The specific action itself.	The general rules that guide conduct.
Principle	An act is right if it maximizes overall happiness or utility in the particular situation.	An act is right if it complies with rules that, if universally accepted, maximize overall happiness or utility.
Strengths and Weaknesses	It is highly flexible and adaptable to various situations but can lead to morally counterintuitive conclusions.	It avoids some counterintuitive conclusions of Act Utilitarianism by focusing on general rules but might be perceived as too rigid in exceptional circumstances.
Example	Lying may be considered right if it leads to greater happiness in a particular situation.	Lying is considered wrong because a general rule against lying would lead to greater overall happiness.
Key Theorists	Jeremy Bentham	John Stuart Mill
References	(Bentham, 1789)	(Mill, 1863)

Modern consequentialist theorists have contributed significantly to the development of this ethical framework. Preference utilitarianism, most notably advocated by Peter Singer, proposes that moral action should aim to satisfy the maximum number of individual preferences, rather than merely increasing happiness (Singer, 1979). Derek Parfit's consequentialism, in his work *Reasons and Persons*, emphasized the importance of future consequences and argued for the reduction of both present and future suffering (Parfit, 1984). In addition, Robert Nozick's thought experiment, the "experience machine," challenges consequentialism by suggesting that there is more to the value of life than happiness or pleasure (Nozick R. , 1974). He argues that the authenticity and reality of

experiences are also essential aspects of a good life, broadening the discussion of consequentialist theories. Contemporary also debates about consequentialism focus on its applicability in emerging fields such as artificial intelligence and machine learning. The ethical implications of consequentialist principles in AI decision-making algorithms are an important area of inquiry (Russell, Dewey, & Tegmark, 2015).

II.4 Virtue Ethics

Aristotle, in his seminal work "Nicomachean Ethics," lays the foundation for virtue ethics by emphasizing the importance of virtuous character traits such as courage, wisdom, and temperance (Aristotle, 2009). This approach emphasizes virtues, character traits that lie between deficiencies and excesses, known as the "golden mean. Aristotle distinguishes between moral virtues developed by habit, such as courage, and intellectual virtues cultivated by education, such as wisdom. He emphasizes the importance of reason, especially practical wisdom or "phronesis," in guiding virtuous action, and the crucial role of character in the moral life. The Aristotelian framework also recognizes the importance of community and friendship in ethical living, and views virtues not as isolated attributes but as embedded in a broader social context. This teleological perspective, which links virtues to the fulfillment of human ends, has forged an enduring and resonant path in moral philosophy, linking personal fulfillment to ethical behavior in a way that integrates reason, emotion, and social connectedness (Aristotle, 2009). Its historical influence extends beyond Aristotle, influencing medieval Christian thought through figures such as Thomas Aquinas, who integrated the virtues with the divine moral order. With the rise of modern philosophical trends such as consequentialism and deontology, virtue ethics lost prominence, but experienced a revival in the second half of the 20th century, spurred on by philosophers such as Elizabeth Anscombe (Anscombe, 1958).

This approach sees moral virtues as a middle ground between two extremes, valuing them as habits that enable individuals to act according to reason (Aristotle, 2009). By emphasizing the role of emotions as valuable components of moral reasoning, virtue ethics also takes a developmental perspective, recognizing the cultivation of virtue as a lifelong process (MacIntyre, 1981). Its context-specific nature allows for nuanced ethical judgments that consider the unique circumstances and values of each situation (Hursthouse, 1999). While virtue ethics has been praised for its holistic and flexible approach, it has also been criticized for its perceived vagueness and challenges to universal applicability given cultural differences (Annas, 2011). By shifting the ethical focus from rules and outcomes to character, virtue ethics offers a distinctive perspective that continues to resonate in contemporary moral philosophy.

While influential, virtue ethics has faced several significant objections. Critics have pointed to a lack of clear guidance in specific moral dilemmas, as the focus on character and virtues can leave individuals without concrete guidance (Hursthouse, 1999). In addition, the potential variation in

virtues across cultures raises issues of relativism and challenges the universality of the approach (Wong, 2006). The reliance on moral exemplars or role models has been criticized for potentially making the theory circular and requiring an already established understanding of virtue (Swanton, 2003). The eudaimonistic focus on some virtue ethics frameworks, emphasizing personal flourishing, has led to concerns about potential self-centeredness or conflicts with moral duties to others (Kraut, 1989). Some have even questioned the distinctiveness of virtue ethics, arguing that it may merely complement other ethical theories rather than stand-alone (Johnson R. N., 2018). In addition, feminist critiques have highlighted possible gender biases within traditional virtue ethics that reflect and perpetuate stereotypical gender roles (Friedman, 1993).

In the modern era, a resurgence in virtue ethics has been catalyzed by several contemporary thinkers. Alasdair MacIntyre, in "After Virtue" (1981), sparked a renewed interest in virtue ethics by suggesting that the Aristotelian approach might offer solutions to contemporary moral conflicts. Similarly, Philippa Foot introduced a biological perspective, arguing that virtues and vices could be understood as traits that are beneficial or detrimental to humans, thus bridging ethics and naturalism (Foot, 1978). Rosalind Hursthouse extended this discourse by providing a systematic examination of virtue ethics and applying it to complex moral issues such as abortion (Hursthouse, 1999). Adding a social justice dimension, Martha Nussbaum's "capabilities approach" integrates virtue ethics with human development policy. She identifies specific human capabilities that are essential for flourishing and aligns virtue ethics with broader social and political concerns (Nussbaum & Sen, 1993).

Table II.3 Aspect

Aspect	Consequentialism	Deontology	Virtue Ethics
Basis of Moral Judgment	Consequences	Rules/Duty	Character/Virtue
Focus on Intentions	Generally irrelevant	Important	Focus on habit
Perspective	Often agent-neutral	Agent-centred	Emphasizes individual
Flexibility	Allows flexibility	Often rigid	Context-sensitive

II.5 Digital Era

The digital era represents a complex and multifaceted transition in human civilization, marked by the integration and prominence of digital technology (Castells, 2011); (Brynjolfsson & McAfee, 2014). It is a period that has been shaped by a series of significant milestones, each contributing to the way we communicate, work, and interact in our daily lives (Negroponte, 1995); (Floridi, 2014). These milestones encompass various aspects of technological advancement, societal change, and even ethical challenges, demonstrating the dynamic nature of this era (Turkle, 2012).

Beginning with the early days of computing in the mid-20th century and continuing through waves of innovation in personal computing, internet connectivity, social media proliferation, artificial intelligence, and even pandemic-induced acceleration, the digital era continues to evolve (Ceruzzi, 2003); (Leiner, et al., 1997); (Boyd & Ellison, 2007); (Davenport & Dyché, 2013); (Nicola, et al., 2020).

The following table summarizes these milestones, providing a chronological and thematic overview that allows for a comprehensive understanding of the emergence and ongoing process of the digital age.

Table II.4 Milestone of Digital Era

Milestone	Time Period	Description	References
Early Computing and Networking	1940s-1960s	Development of electronic computers like ENIAC and networking through ARPANET.	(Ceruzzi, 2003); (Leiner, et al., 1997)
Microcomputing Revolution	1970s	Introduction of personal computers by companies like Apple and IBM.	(Maney, 2003)
Rise of the Internet	1980s-1990s	Establishment of the World Wide Web and release of popular web browsers.	(Berners-Lee, 1999);
E-commerce and Digital Business Models	1990s-2000s	Online businesses like Amazon and eBay reshape commerce and introduce new business models.	(O'Reilly, 2007); (Tapscott, 1997)
Social Media and Connectivity	2000s	Emergence of platforms like Facebook, Twitter, and YouTube for social connectivity.	(Boyd & Ellison, 2007)
Mobile Revolution and IoT	2010s	Proliferation of smartphones and the Internet of Things (IoT) lead to innovation and personalization.	(Whitmore, Agarwal, & Xu, 2015)
Big Data and AI	2010s-Present	Advances in machine learning and big data analytics drive automation and intelligence.	(Davenport & Dyché, 2013); (Jordan & Mitchell, 2015)
Cybersecurity and Ethical Challenges	Ongoing	The era raises significant security and ethical concerns requiring ongoing vigilance and adaptation.	(Vacca, 2009); (Tavani, 2012)
Pandemic Acceleration	2020-Present	COVID-19 pandemic acts as a catalyst for digital transformation across industries.	(Nicola, et al., 2020)

There are two technological advances have been particularly transformative in this digital era: the Internet of Things (IoT) and artificial intelligence (AI). The IoT, as defined by experts at (Whitmore, Agarwal, & Xu, 2015), goes beyond simply connecting devices. It represents a fully integrated ecosystem in which data is continuously generated, processed, and analyzed. This vast network of interconnected devices-from wearable technology to advanced home automation systems-serves as a bridge between our physical and digital realities. As a result, urban landscapes are evolving into smart cities, industries are achieving unprecedented efficiencies, and individual experiences are becoming increasingly personalized. At the same time, the field of AI, highlighted by (Davenport & Dyché, 2013), has undergone a seismic shift in its capabilities and applications. Driven by colossal leaps in computing power, data proliferation, and algorithmic ingenuity, AI has emerged as a force majeure in the digital era. It's no longer just about emulating human cognition; it's about augmenting it. Whether it's virtual assistants that curate our daily schedules or sophisticated algorithms that offer predictive healthcare solutions, AI is harnessing the vast stores of digital data to make decisions with a precision and speed that remains unmatched by human endeavor.

The digital era has greatly impacted society through the rise of digital technologies and AI, which has the potential to revolutionize multiple fields (Norvig & Russell, 2016). It stimulated economic growth by transforming business, affecting productivity, employment, and inequality (Brynjolfsson & McAfee, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, 2014) and revolutionized communication through social media, affecting interpersonal dynamics and privacy concerns (Dijck, 2013). Digital technology has innovated education, albeit with challenges related to quality and the digital divide (Selwyn, 2013), and transformed health care with electronic health records and telemedicine (Topol, 2019). In politics, it has increased civic participation, though with challenges such as misinformation (Howard & Parks, 2012) and introduced unique ethical challenges related to privacy and digital rights (Floridi, 2014).

II.6 Digital Transformation

Digital transformation has become an essential part of today's business landscape. It involves the integration of digital technologies into all areas of an organization, fundamentally changing the way it operates and delivers value to its customers, and it's also shedding light on different dimensions and challenges (He, Meadows, Angwin, Gomes, & Child, 2020). Strategic alignment of digital initiatives with overarching business goals is critical to the success of digital transformation (Bharadwaj, Sawy, Pavlou, & Venkatraman, 2013). This involves leveraging digital capabilities to innovate existing business models, leading to new opportunities and competitive advantage (Berman & Marshall, 2014). (Matt, Hess, & Benlian, 2015) highlighted the process goes

beyond mere technological change to encompass a broader organizational shift toward a more flexible, efficient, and customer-centric approach.

One of the challenging aspects digital transformations is the integration of legacy systems with emerging technologies (Ross, Beath, & Mocker, 2016). This integration is critical for a seamless and efficient transition to new digital platforms. In addition, staying abreast of emerging technologies such as artificial intelligence (AI) and the Internet of Things (IoT) is critical to remaining competitive (Vial, 2019). Leadership and organizational culture play a critical role in the success of digital transformation (Kane, Palmer, Phillips, Kiron, & Buckley, 2015). Managing resistance to change and fostering an environment that supports innovation and adaptation are integral to this process (Oreg, 2003). The security, privacy, and ethical issue of digital transformation have also come to the forefront. Organizations must address growing concerns about security and privacy in the cyber landscape, particularly with respect to data handling and customer privacy (Dwivedi, et al., 2020). Effectively managing skills and talent in a rapidly changing digital environment is a critical aspect of the transformation process. The right talent and skills are essential to navigate the complex terrain of digital innovation (Cappelli P. , Talent on Demand: Managing Talent in an Age of Uncertainty, 2019). Performance evaluation and enhanced customer engagement are also fundamental to digital transformation. Organizations must establish appropriate metrics to track and measure success (Schallmo, Williams, & Boardman, 2017) while focusing on enhancing customer engagement through digital channels (Chen, et al., 2012).

II.7 Human Resources Practice

Human resource (HR) practice is a multidisciplinary field that encompasses the strategic and operational activities associated with managing an organization's workforce. At the heart of HR practice is the belief that people are an organization's most valuable asset and the key to achieving its goals (Dessler, 2017). The core functions of HR include recruitment, talent management, training and development, compensation and benefits, performance appraisal, and employee relations (Armstrong & Taylor, 2020). In the modern workplace, with evolving challenges such as workforce diversity, globalization, and technological disruption, HR professionals play an integral role in shaping organizational culture, fostering employee engagement, and ensuring compliance with labor laws and regulations (Ulrich, Younger, Brockbank, & Ulrich, 2012). As organizations increasingly recognize the strategic importance of HR in achieving competitive advantage, there's a growing emphasis on aligning HR practices with overall business strategy, emphasizing data-driven decision making, and integrating technology solutions such as human resource information systems (HRIS) into HR processes (Stone, Deadrick, Lukaszewski, & Johnson, 2015).

a. Recruitment and Selection

This is the process of attracting, screening, and selecting suitable candidates for jobs within an organization. The goal is to find the right talent that aligns with the organization's values

and goals. The advent of technology has revolutionized recruitment using AI-driven algorithms, online job portals, and digital interviews (Armstrong & Taylor, 2020).

b. Training and development

This includes activities aimed at improving the skills and competencies of employees. Organizations invest in training programs to ensure that employees are equipped to meet current job demands and are prepared for future roles. Developmental activities focus on longer-term career aspirations and personal growth (Noe, 2017).

c. Performance Management

Performance management systems are put in place to evaluate, motivate, and reward employees. These systems often include goal setting, appraisals, feedback, and pay for performance. Continuous feedback models are becoming more popular than traditional annual reviews (Aguinis, 2019).

d. Compensation and benefits

This involves structuring pay packages and fringe benefits such as health insurance, retirement benefits, and other perks to attract, retain, and motivate employees (Milkovich, Newman, & Gerhart, 2020).

e. Employee Engagement

Ensuring a positive relationship between employees and management, which includes addressing grievances, fostering a positive work environment, and facilitating open channels of communication (Saundry, Latreille, & Ashman, 2016).

II.8 HR practice in Digital Era

The digital era, characterized by unprecedented advances in information and communication technologies, is transforming all facets of business operations, and human resources (HR) is no exception (Dahlbom, Siikanen, & Sajasalo, 2020). Digital HRM is an emerging field that integrates digital technologies into various HR functions (Stone, Deadrick, Lukaszewski, & Johnson, 2015).

The application of this digital technologies such as **recruitment, selection, training, performance management, and employee engagement** into more efficient, transparent, and user-friendly processes. It enables HR practitioners to use digital tools to improve efficiency and strategic decision making (Bondarouk & Ruël, 2013). Digital HRM can lead to significant changes in HR roles, such as a shift from administrative tasks to the role of strategic partner. Furthermore, can lead to HR professionals developing new competencies, such as data analytics, digital literacy, and agile project management (Fenech, Baguant, & Ivanov, 2019) and provide a competitive advantage by providing data-driven insights for strategic decision making (Bondarouk & Ruël, 2013).

The use of digital tools in recruitment has received considerable attention. Research by (Parry & Tyson, 2008) has shown that online job platforms and social media have revolutionized the

recruitment process by broadening the candidate pool and speeding up the process. However, potential downsides such as the risk of discriminatory recruitment practices have also been discussed (Davison, Maraist, & Bing, 2011). It has also had a significant impact on performance management. For example, real-time feedback tools are changing the way performance management is conducted, allowing for more continuous and dynamic performance conversations (Buckingham & Goodall, 2015). However, the risks of over-monitoring and data breaches should not be overlooked (Moore & Robinson, 2015). Some research also has highlighted the role of digital tools in improving employee engagement. Collaborative tools and social networks can facilitate communication, knowledge sharing, and community building within organizations (Leonardi, Huysman, & Steinfield, 2013). Conversely, concerns have been raised about the potential negative impact of digital technologies on work-life balance (Chesley, 2014).

While the potential benefits are compelling, digital HRM is not without its challenges. Some Research discusses concerns about data security and privacy, particularly given the sensitive nature of HR data (Voermans & Veldhoven, 2007) and need for effective change management strategies during digital HRM implementation to mitigate potential resistance (Stone, Deadrick, Lukaszewski, & Johnson, 2015). As HR continues to evolve in the digital age, researchers are beginning to explore future trends. (Amelia & Palma, 2018) argue that technologies such as artificial intelligence and predictive analytics will continue to shape the HR landscape. However, they also caution that these advances must be balanced with ethical issue and maintaining the "human" in HR. This digital HRM is a transformative force that offers the potential for increased efficiency and strategic value. However, it also brings new challenges that need to be managed effectively.

II.9 Talent Acquisition

Talent acquisition, as interpreted by various respected authors and HR visionaries, is a nuanced and multifaceted field that goes beyond simple recruitment. The future of talent acquisition focuses on predicting talent needs and proactively cultivating relationships long before specific roles emerge, and views talent acquisition as a dynamic intersection of marketing, foresight, relationship building, and strategic vision (Alves, et al., 2020). This proactive sentiment resonates with Lou Adler's perspective where he portrays talent acquisition as a blend of traditional and innovative strategies, all working together to find, attract, and retain exceptional talent in a competitive environment (Adler, 2007). But talent acquisition isn't just about finding the right candidate; it's also about presenting the organization in the right light. As Stein and Christiansen points out in "Successful Onboarding," talent acquisition is a conduit for enhancing an organization's brand and culture, suggesting that the hiring process reflects and shapes the organization's identity (Stein & Christiansen, 2010). This strategic depth of talent acquisition is reinforced by (Sullivan, 2015) who believes it's not just an operational function, but a strategic one. For him, talent acquisition is about long-term planning and ensuring that talent strategies are aligned with broader business goals. In

the age of digital transformation, (Ziskin, 2015) emphasizes that talent acquisition is not immune to technological advances. He emphasizes an integrated approach in which anticipating organizational needs meets active candidate sourcing, while harnessing the power of technology and data analytics to refine and enhance the entire process.

Delving deeper into its principles, **employer branding** emerges as a paramount factor. It goes beyond the superficial promotion of corporate values; it's about authentically representing the heartbeat of an organization. (Ambler & Barrow, 1996) noted the importance of this facet, emphasizing that an authentic employer brand attracts and retains potential talent. In support of this, (Minchington, 2010) adds that an employer brand reflects its employee value proposition, highlighting how employees experience and evangelize their workplace.

In a world made smaller by technology, passive recruitment strategies may not be enough. This is where **sourcing** stands out. (Sullivan, 2015) speaks to the proactive nature of sourcing as a means of reaching diverse talent pools. Echoing this sentiment, (Lievens & Slaughter, 2016) note that modern sourcing transcends geographic boundaries, drawing talent from global pools to enrich local operations. But what is talent acquisition without considering the talent journey? **The candidate experience**, as we know, is an unwritten chapter of an organization's story. While research on The CandE has focused on memorable candidate interactions, (Tarver, 2019) suggests that these experiences can significantly impact an organization's bottom line, as candidates can be potential customers or detractors. **Diversity and inclusion** figure prominently in this narrative. While (Cox, 2001) highlighted the innovative power of diverse teams, (Nishii, 2013) delves deeper, asserting that inclusivity ensures that these diverse perspectives are translated into actionable insights that drive organizational agility. Further, **onboarding** is where aspirations meet reality. (Bauer, 2010) has discussed its role in employee integration. Building on this (Kammeyer-Mueller, Rubenstein, & Song, 2013) note that structured onboarding can accelerate newcomer adjustment and directly impact early job performance metrics.

Finally, talent analytics, the compass in the talent acquisition journey, is gaining traction. (Davenport, Harris, & Shapiro, 2010) demonstrated its role in optimizing recruitment. Further, (Marler & Boudreau, 2016) suggests that talent analytics, when integrated with business strategy, can redefine the value and ROI of talent and create a competitive advantage in the marketplace.

Talent acquisition and recruitment are terms often used interchangeably within the Human Resources (HR) practice. However, they refer to different aspects of the hiring process. Here's a breakdown of their differences:

Table II.5 Talent Acquisition

Aspect	Talent Acquisition	Recruitment
Scope and Strategy	A broader, strategic function focusing on long-term workforce planning and building a consistent talent pipeline.	Specifically refers to the process of identifying and hiring the best candidate for a job vacancy quickly and cost-effectively.
Time Horizon	Ongoing and long-term, often building relationships with potential candidates even before a role is available.	Short-term and reactive, based on immediate hiring needs.
Process Complexity	Involves multiple layers, including employer branding, onboarding, integration, and retention strategies.	Centres on sourcing candidates, screening resumes, conducting interviews, and filling a specific role.
Role Specificity	Especially pertinent for specialized and higher-level positions where skills are scarce.	Commonly used for roles where there is a large talent pool or for entry-level positions.
Relationship Management	Emphasizes building relationships, often with educational institutions, businesses, and other potential talent sources.	There's some relationship management, mainly during the interview process, but the primary goal is to fill the position.
Outcome Metrics	Metrics might include quality of hire, time to fill strategic roles, and retention rates of top talent.	Metrics typically focus on time to hire, cost per hire, and number of open positions filled.

At its core, recruitment is about filling open positions, while talent acquisition is a more holistic approach to forecasting talent needs and building a sustainable talent pipeline. However, in everyday business language, especially in smaller organizations or those without a developed HR strategy.

Digital has been a transformative force in many industries, and talent acquisition has not been immune to its sweeping changes. At their core, digital platforms like LinkedIn, indeed, and Glassdoor have fundamentally changed the recruiting landscape. Gone are the days when recruiters were limited to local talent pools or cumbersome manual outreach. Today, with the click of a button, they can access global talent and cast a wider net than ever before. This global reach is further documented by (Sullivan, 2015) where he highlights the democratizing power of digital platforms in leveling the recruiting playing field. Additionally, the introduction of **applicant tracking systems (ATS)** has ushered in an era of unprecedented organization and efficiency. These systems, highlighted in an article by (Davenport, Harris, & Shapiro, Competing on Talent Analytics, 2010), have provided recruiters with tools to manage candidates, automate routine tasks,

and streamline the entire hiring pipeline. The ability to digitally process applications, sort them based on pre-defined criteria, and ensure that no candidate gets lost in the shuffle is nothing short of revolutionary. Meanwhile (Bersin, 2015) notes that ATS platforms streamline the complicated web of recruiting. According to (Marler & Parry, 2016), they've also transformed the recruitment landscape by offering real-time analytics, allowing recruiters to adapt swiftly to the changing demands of the job market. But the impact of digitization doesn't stop at organization; it extends to the decision-making process itself. (Marler & Boudreau, An evidence-based review of HR Analytics, 2016) discussed how advanced analytics tools now provide insights that were previously unimaginable. Recruiters and hiring managers can now identify which channels are most effective for sourcing candidates, which attributes correlate most strongly with job performance, and even predict future staffing needs. Such **data-driven recruitment** strategies ensure that decisions are based on evidence, not just intuition. Another dimension where digital has made a tangible difference is in **the interview and assessment process**. Traditional face-to-face interviews, while still prevalent, are now complemented by digital platforms such as Zoom and Skype. These tools, as (Tippins, 2009) highlighted not only break down geographical barriers, but also offer flexibility, making the process more candidate-friendly and cost-effective for organizations. **Rapid advances in AI** have added another layer to the digital evolution of talent acquisition. Automated resume screening, candidate matching algorithms, and even AI-driven interactions through chatbots are no longer the stuff of science fiction. (Rasmussen & Ulrich, 2015) study delves deeper into this phenomenon, highlighting how AI can enhance HR analytics and prevent it from becoming just another management fad. Another study from (Capterra, 2020) touts its efficiency and objectivity, but (Johar, 2022) goes a step further, emphasizing the predictive analytics facet of AI. It's not just about matching a candidate's skills to a role, but predicting their potential, trajectory, and alignment with a company's long-term vision.

Digital tools also play a critical role in improving the candidate experience. Today's candidates expect quick feedback, interactive application processes, and transparency. With chatbots providing instant answers, virtual reality tours offering a glimpse of the workplace, and instant feedback mechanisms, the recruiting process has become more interactive and candidate centric using **Candidate relationship management (CRM)** tools to rewriting the rules of engagement. (Beamery, 2019) talks about their role in facilitating ongoing dialogue, but as (Taiminen, 2015) points out, CRMs also play a critical role in reducing candidate attrition by ensuring that potential hires stay engaged even when immediate positions aren't available. It's about nurturing relationships, not just filling jobs. Because (Hausknecht, Day, & Thomas, 2004) research on candidate response underscores the importance of a positive candidate experience in influencing the decision to accept a job. Finally, the power of **employer branding** in the digital age cannot be overstated. Companies now understand the importance of cultivating a strong digital employer brand, whether it's through candid employee reviews on Glassdoor, engaging social media content, or immersive career websites. According to (Wilden, Gudergan, & Lings, 2010), they align employers' value propositions with candidates' desires, orchestrate campaigns that extend beyond

roles, and touch on company culture, ethics, and growth paths. Aligned with (Backhaus & Tikoo, 2004) in their study, a strong digital employer brand can be a magnet for top talent, drawing them to the organization. Digitization has not only facilitated the evolution of talent acquisition, but it has also redefined it. In today's hyper-connected world, the fusion of technology and recruiting is leading to more informed decisions, broader talent pools, and improved experiences for both candidates and recruiters.

II.10 Talent Acquisition Theory

Navigating the dynamic landscape of talent acquisition, organizations relentlessly seek insights from a rich tapestry of theories, each shedding light on the multifaceted processes of attracting, hiring, and retaining top talent. At the center of this exploration is the **Attraction-Selection-Attrition (ASA) model** by (Schneider, 1987). Like an artist painting a masterpiece, this model beautifully captures the subtle interplay between individuals and their potential workplaces. The narrative begins with "attraction"-an invisible force that pulls candidates toward organizations that reflect their intrinsic values. As this magnetism unfolds, the next chapter, "Selection," reveals how organizations strive to find individuals who resonate with their core ethos and the very roles they seek to fill. Over time, however, a chapter of "attrition" emerges, in which those out of sync with the company's culture make their exit, inadvertently strengthening the very fabric of the organization. Schneider's insights lead to a profound realization: organizations are, perhaps unconsciously, in a constant state of evolution, shaped by these cycles of attraction, selection, and attrition. But the relationship between candidates and organizations is not linear-it's a complex matrix. This is where the theory of **Realistic Job Previews (RJP)** comes in, championing the power of honesty. Its core belief is both simple and transformative: by giving candidates a real, holistic view of their potential roles, post-hire disappointment and misalignment can be significantly reduced. This philosophy of open communication transcends mere ethics - it is a beacon that guides strategic alignment between organizational needs and employee expectations (Wanous, 1989). Going further, the theory of **Person-Organization Fit (P-O Fit)** offers a new lens, revealing a symbiotic nexus where individual aspirations and organizational values are intertwined. In this utopia, employees discover more than roles-they discover sanctuaries where they truly belong, leading to heightened fulfillment and exemplary performance (Kristof, 1996). But how do individuals initially perceive organizations? **Signaling Theory** provides an answer by highlighting the myriad signals that organizations unwittingly send. Every aspect, from the nuances of a job ad to the ambiance of an interview room, conveys subtle messages about the organization's ethos. These signals, often absorbed subconsciously, shape a candidate's perception, and underscore the need for organizations to be consistently intentional in their communications (Rynes, Bretz, & Gerhart, 1991). During these paradigms, the debate between **best fit and best practice** emerges, almost reminiscent of ancient philosophical discourses. Best Fit reflects the art of tailoring - the belief that HR strategies, including talent acquisition, must be meticulously curated to reflect an organization's unique blueprint: its mission, industry nuances and ingrained

culture. This approach promotes adaptability, encouraging practices that evolve with organizational change. In contrast, "best practice" conjures up the sanctity of age-old recipes, advocating universal HR methodologies that are believed to deliver consistent success across diverse organizations. In talent acquisition, this might mean globally recognized interview paradigms, compensation structures, or onboarding techniques. Their appeal lies in the promise of uniformity and replicability. But as these organizations navigate the intricate maze of talent ecosystems, many are discovering that neither extreme is sufficient. Instead, a harmonious blend often prevails—one that combines the nuanced customization of "best fit" with the reliability of "best practice" (Boxall & Purcell, 2000). To conclude this exploration, in a world filled with diverse branding narratives, **employer branding** emerges as a guiding principle. Potential talent is influenced by an organization's reputation as a desirable place to work, just as consumers resonate with product brands. A strong employer brand not only attracts elite candidates. It also serves as their compass, guiding their professional odyssey within the organization (Backhaus & Tikoo, 2004).

Table II.6 References

Theory	Primary Focus	Key Attributes	Description	References
ASA Model	Dynamics between individuals & organization	- Attraction to aligned organization - Selection based on fit - Attrition reinforces company culture	Highlights the cyclical nature of organizations and how they're shaped.	(Schneider, 1987)
Realistic Job Previews	Transparent Communication	- Clear picture of roles - Reduces post-hire disillusionment	Advocates for transparency leading to better alignment and reduced turnover	(Wanous, 1989)
Person-Organization Fit	Alignment of values & beliefs	- Symbiotic relationship - Enhanced satisfaction and performance when aligned	Emphasizes harmony for mutual benefit in work environment	(Kristof, 1996)
Signaling Theory	Initial Perceptions	- Organization's unspoken messages - Importance of first impressions	Underscores the subconscious cues and their impact on perception	(Rynes, Bretz, & Gerhart, 1991)

Theory	Primary Focus	Key Attributes	Description	References
Best Fit	Tailored HR Strategies	- Aligns with company's unique attributes - Emphasizes adaptability	Suggests custom approaches are superior due to alignment with specific organization traits	(Boxall & Purcell, 2000)
Best Practice	Universal HR Strategies	- Consistent methods across organization - Standardized techniques	Argues that certain strategies are universally superior	(Boxall & Purcell, 2000)
Employer Branding	Organizational Reputation	- Company's appeal as an employer - Attraction of top talent	Highlights the magnetic pull of a strong organizational brand in attracting and retaining talent	(Backhaus & Tikoo, 2004)

II.11 Past Studies on HR Practice

The strategic value of digital human resource management (HRM) has received considerable attention in recent research, highlighting various aspects of the field. (Bondarouk & Ruël, 2013) have emphasized that digital technologies can increase efficiency, improve the quality of HR services, and provide valuable data-driven insights for informed decision-making. This is consistent with the work of (Stone, Deadrick, Lukaszewski, & Johnson, 2015), who have explored how technology is poised to reshape HR roles and competencies, while also highlighting the critical need to address ethical and privacy concerns in the digital HRM. Further supporting the strategic value of technology in HRM, (Marler & Boudreau, An evidence-based review of HR Analytics, 2016) conducted a review of HR analytics and found a positive correlation between systematic analysis of HR data and overall organizational performance. This evidence suggests that the use of data can facilitate more nuanced and strategic decision-making processes. In a more specific application, (Strohmeier & Piazza, 2015) discussed how the design of service-oriented business intelligence systems can streamline HR processes and enable more targeted and personalized services. The overall effectiveness of digital HRM is supported by research that reveals its potential to significantly improve organizational efficiency by reducing administrative burdens and fostering a data-driven culture (Marler & Fisher, 2013). However, the successful implementation of electronic HRM (e-HRM), particularly in the public sector, is not without its challenges. A study by (Troshani, Jerram, & Hill, 2010). found that improvements in efficiency and service delivery through e-HRM can be hindered by issues such as inadequate user involvement in the development process. This complexity underscores the need for a multifaceted

approach that considers different stakeholder perspectives, ethical issues, and the ever-evolving technological landscape when integrating digital tools into HRM practices.

II.12 Past studies of Talent Acquisition

The digital age has brought about transformative changes in recruitment, dramatically reshaping how organizations approach talent acquisition. (Cappelli P. , 2001) provided an early examination of this transformation, finding that online job postings and applications have not only become the norm but have also significantly enhanced the speed and efficiency of hiring. This digital shift further expanded into social media platforms, as shown by (Davison, Maraist, & Bing, 2011), who illustrated how employers are leveraging social media to advertise openings and gain deeper insights into candidates' personalities and lifestyles. Streamlining recruitment, Applicant Tracking Systems (ATS) have become vital tools for managing large volumes of applications, as explored by (Davenport, Harris, & Shapiro, Competing on Talent Analytics, 2010). Their work also emphasized how big data analytics are enriching recruitment strategies, offering predictive insights. Automation and AI's role in recruitment has also emerged as significant areas of research. (Al-Alawi, Naureen, AlAlawi, & Al-Hadad, 2010) discussed AI's applications, from automating screening to enhancing candidate experience, while stressing the importance of addressing ethical and privacy concerns. Early work by (Chapman & Webster, 2003) emphasized the efficiency and cost-effectiveness of electronic recruiting, a theme further developed by Silvester (2018), who examined how AI, especially chatbots, can engage candidates and enhance the overall recruitment experience. The predictive capabilities of AI were highlighted by Harris (2019), demonstrating how historical data can inform future hiring decisions. However, AI's use is not without complexities; as Dattée et al. (2020) investigated, the potential biases and the need for transparency, privacy, and anti-discrimination laws are paramount in the ethical implementation of AI-powered recruitment tools. The cumulative research underscores a multifaceted and evolving landscape, where digital tools are shaping recruitment processes, offering efficiency, insights, and innovations, while simultaneously posing new ethical and legal challenges.

II.13 Past Studies of Ethical Issues

The integration of artificial intelligence (AI) into recruiting practices has fundamentally changed talent acquisition, raising numerous ethical issues. Among the most pressing are concerns about bias and fairness. As studies have shown, AI models, especially those built on historical hiring data, can inadvertently perpetuate, and amplify existing biases, leading to decisions that may sideline underrepresented demographics (Dastin, 2018). Ensuring the unbiased nature of AI recruitment tools is therefore not only a technical challenge, but also a profound ethical obligation. Another critical area in AI-driven recruitment is transparency and accountability. As highlighted in the Association for Computing Machinery's code of ethics, there's a growing need for explainable AI models, especially in contexts like recruitment where people's careers are at stake

(ACM, 2018). Without transparent AI operations, it becomes nearly impossible to assign responsibility in cases of erroneous or controversial hiring decisions. Closely related to transparency is the issue of data privacy. GDPR and similar regulations have highlighted the importance of data privacy, emphasizing that recruitment AI tools should transparently collect, securely store, and ethically use candidate data (European Union, 2016). In this digital age, informed consent takes on added significance. It's paramount that candidates are aware of and consent to AI assessments in the recruitment process, further asserting their right to feedback (Schiebinger & Klinge, 2019). Beyond these technical and operational facets, the broader socioeconomic implications of AI in recruitment cannot be ignored. While AI promises to streamline recruitment, it's also a disruptor that could potentially displace traditional recruitment roles. Furthermore, for AI to be truly transformative, it must be inclusive, ensuring that tech-averse or unfamiliar candidates aren't inadvertently excluded (Bogen, 2019). Ultimately, as AI's role in recruitment expands, continuous learning, ethical training, and human oversight will be essential pillars to ensure that technology and ethics blend harmoniously.

II.14 Ethical Issues Across Fields

In today's rapidly advancing world, the importance of ethical issues in various fields can't be overstated. Ethics is the compass that guides our decisions and actions. Whether in academia, business, or the ever-evolving realm of technology, ethical issues ensure that our endeavors respect the rights, dignity, and well-being of individuals and communities alike.

Adherence to ethical guidelines is critical in research. At the core of these guidelines is the principle of informed consent. This cornerstone emphasizes that participants in any study must be thoroughly informed of its nature, objectives, and any potential risks they may face. Their participation should always be voluntary and free from any form of coercion, emphasizing their autonomy and right to choose. There is also a commitment to protect the privacy and confidentiality of participants. In the information age, where data is constantly being shared and processed, researchers must ensure that their subjects' identities and information are protected, thereby reducing potential harm or stigmatization. As highlighted by (Resnik, 2015), the goal of research goes beyond the mere acquisition of knowledge; it's deeply rooted in protecting the well-being of those who make the acquisition possible - the participants.

Turning our attention to the world of business, ethics play an equally important role in shaping corporate behavior and decisions. Here, the principle of integrity shines brightly, calling for honesty, transparency, and truthfulness in all dealings. At its core, business is about relationships, and it's on the foundation of integrity that trust is built with stakeholders-from customers to employees to investors. But integrity alone isn't enough. Businesses also have a duty of responsibility, which means that they must not only make decisions that benefit themselves, but also consider the broader impact of those decisions on society and the environment. This ethical

dimension is further emphasized by (Crane & Matten, 2016), who argue that in our globalized era, companies are not isolated entities; their actions resonate in the broader societal context, highlighting their ethical responsibilities.

Finally, in the fast-paced domain of technology, the rise of digital platforms, machine learning, artificial intelligence, and big data has brought several ethical dilemmas to the forefront. One of the most debated concerns is privacy. In an era where data has been likened to oil, ensuring its protection, and preventing unauthorized access or breaches is paramount. But beyond privacy, there's also the issue of fairness. As algorithms and AI systems become an increasingly integral part of our daily lives, ensuring that they are free of bias and uphold principles of fairness becomes critical. The end goal should be technologies that serve everyone fairly, without perpetuating societal inequalities. Another important facet is transparency. Both (Burr, Taddeo, & Floridi, 2020) and (O'Neil, 2016) emphasize the need for clarity in how technological tools work so that users can understand, trust, and use these tools responsibly.

Chapter III Research Methodology

This chapter presents the research methodology used in this study, which aims to explore the ethical issues in AI-enabled recruitment. The rapid integration of artificial intelligence into recruitment processes presents a complex set of ethical issues, requiring a nuanced exploration of the various stakeholder perspectives within the field. By adopting this methodological framework, the study aims to provide a holistic view of the ethical implications of AI in recruitment, contributing valuable insights to both academic discourse and practical applications in the field of human resource management. This chapter details the research design, data collection methods, and analytical strategies employed to ensure a rigorous and comprehensive exploration of the topic.

III.1 Research Philosophy

As the philosophical foundation of this research, interpretivism guides the exploration of how different stakeholders in AI-enabled recruitment construct their understandings of ethical issues. Rooted in the constructivist/interpretivist tradition, this approach emphasizes the importance of subjective experiences and social constructions in the formation of knowledge (Schwandt, 2000).

Interpretivism is a philosophical approach within the social sciences that emphasizes the importance of subjective interpretation and understanding in the study of human behaviour and society. Unlike positivism, which focuses on objective and measurable facts, interpretivism focuses on the belief that reality is subjective and constructed through social interactions and personal perceptions. This approach recognizes that individuals perceive and understand the world in different ways, influenced by their unique experiences, beliefs, and cultural backgrounds (Schwandt, 2000). One of the key principles of interpretivism is a focus on context. It holds that the understanding of social phenomena must take into account the specific historical, cultural, and situational contexts in which they occur. This perspective is deeply connected to the idea that social reality is not a rigid, external entity, but is shaped and reshaped by human interaction and interpretation (Schwandt, 2000). Interpretivism also emphasizes the importance of understanding the meanings that individuals attach to their actions and to the social world around them (Blaikie, 2007). It examines how these meanings are formed, communicated, and changed, often using qualitative research methods such as interviews and observations to gain deeper insight into these subjective experiences.

Notable figures in the development of interpretivism include Max Weber, who introduced the concept of "understanding", emphasizing the need to understand the intentions and contexts behind human actions (Weber, 1978). Clifford Geertz's anthropological work also contributed

significantly to interpretivism, particularly in understanding cultural symbols and meanings to interpret social practices (Geertz, 1973).

When exploring the subjective experiences and perceptions of stakeholders such as recruiters, candidates, and organizational leaders regarding AI in the hiring process, several key themes emerge. For recruiters, the integration of AI in recruiting is a double-edged sword. On the one hand, AI tools are valued for their efficiency and ability to quickly process large volumes of applications, potentially reducing the biases inherent in human decision-making (Bogen, 2019). Recruiters also appreciate the data-driven insights provided by AI, which can improve the quality of decision-making (Bogen & Rieke, 2018). However, there are concerns that overreliance on AI can lead to a loss of personal judgment and intuition in candidate assessment (Tambe, Cappelli, & Yakubovich, 2019). Candidates, on the other hand, express mixed feelings. Many appreciate the speed and transparency of AI-driven processes (Potočnik, Anderson, Born, Kleinmann, & Nikolaou, 2021). However, there is prevalent concern about the impersonality of AI and the potential for algorithmic bias, questioning the fairness of AI in evaluating diverse backgrounds and experiences (Sánchez-Monedero, Dencik, & Edwards, 2020). Organizational leaders view AI as a strategic tool to improve recruitment. They are primarily interested in the effectiveness of AI in identifying the best candidates and improving organizational performance (Brynjolfsson & Mitchell, What can machine learning do? Workforce implications, 2017). However, they are also aware of the ethical implications, such as privacy concerns and the need for transparency in AI algorithms (Rai, 2020). While AI in recruitment is valued for its efficiency and potential to mitigate human bias, there is an underlying concern about the loss of the human touch, potential biases in the AI itself, and ethical concerns. This points to the need for a balanced approach that combines AI capabilities with human judgment and ethical issues in the recruitment process.

The impact and interpretation of AI in recruitment is significantly influenced by the contextual and cultural environment in which it is applied. The way AI is perceived and used can vary greatly depending on factors such as organizational culture, industry norms, and societal values. In organizations with a strong culture of innovation, AI in recruiting is often seen as a progressive step toward modernizing HR practices. These organizations are more likely to embrace AI for its potential to increase efficiency and bring cutting-edge solutions to traditional processes (Imperatori, Bissola, Butera, & Bodega, 2020). In contrast, organizations with more conservative or traditional cultures may view AI with scepticism, focusing on potential risks such as the loss of the human touch in hiring (Esc, Black, & Ferolie, 2019). Industry norms also play a critical role. In technology-driven industries, there's a natural inclination to adopt AI in hiring, in line with the overall tech-savvy ethos of the industry (Cappelli & Tavis, HR Goes Agile, 2018). In addition, societal values and norms have a significant impact on the acceptance and use of AI in recruitment. Societies that place a high value on privacy and individual rights are more likely to question AI tools, particularly with regard to data handling and privacy (Bulchand-Gidumal, Secin, O'Connor, & Buhalis, 2023). Alternatively, in societies with high levels of trust in technology and progress, there may be a more welcoming attitude towards AI in recruitment (Adam, Wessel, & Benlian,

2021). It is therefore becoming clear that the use and acceptance of AI in recruitment is not just about the technology itself, but is deeply embedded in the cultural and contextual fabric of the organization and society. This highlights the need for a nuanced approach to implementing AI in recruitment, taking into account specific cultural and organizational contexts.

This represents the belief that knowledge is not objective and universal, but is socially constructed and does not seek to find a single 'truth'. Therefore, when examining the ethical implications of AI in recruitment, the goal is to develop a rich, nuanced understanding of the ethical landscape of AI in recruitment, recognizing that this landscape is shaped by diverse and sometimes conflicting perspectives. This includes examining how their backgrounds, organizational cultures, and societal norms influence their interpretations of what is ethical in AI recruitment.

In contrast to positivist methodologies, which aim to derive generalizable conclusions, interpretivism focuses on the specifics of situations, cultures, and individual perspectives, offering a comprehensive and detailed understanding of human experience and social phenomena. This depth is particularly crucial in fields where context and subjective experience play a central role, such as anthropology, sociology, and psychology (Geertz, 1973). Furthermore, interpretivism permits a malleable research design that can be adjusted and refined as the study progresses. This is particularly advantageous when investigating intricate social issues, where initial assumptions may require continual refinement (Schwandt, 2000).

III.2 Data and Research Methods

III.2.1 Research Method

An investigation of ethical issues in AI-enabled recruitment through the lens of phenomenology offers a distinctive vantage point. This approach highlights how personal interpretations and reactions to AI technologies contribute to a comprehensive understanding of their ethical dimensions, offering novel insights into the intricate ethical landscape of AI in recruitment processes. The study employs descriptive phenomenology, following Husserl's approach, to identify and describe phenomena related to AI in recruitment that have not been extensively explored. This provides new insights into the ethical complexities of AI in this field (Creswell, 2014).

III.2.1.1 Phenomenology

Phenomenology represents a philosophical movement deeply concerned with understanding the nature of experience and consciousness. Edmund Husserl and Martin Heidegger, two central figures in phenomenology, shaped the philosophical landscape with their distinct approaches. Husserl, the founder of phenomenology, revolutionized the study of consciousness and experience. His concept of "phenomenological reduction" or "epoché" represented a profound shift in

philosophical thought, emphasizing the suspension of judgments about the external world in order to focus intensely on subjective experience. This method, aimed at observing and describing phenomena as they are consciously experienced, facilitated a direct engagement with the structures of consciousness, unmediated by preconceived notions or interpretations. Husserl's focus on the intentionality of consciousness, the idea that consciousness is always directed toward objects or states of affairs, laid the groundwork for a rigorous, disciplined exploration of experience and consciousness. His influence extended beyond philosophy to psychology, sociology, and other human sciences (Husserl, 1936). Husserl also advocated a rigorous methodological approach that involves "bracketing" or setting aside preconceptions and biases to fully immerse oneself in the subject's experience. This method allows researchers to delve deeply into the lived experiences of individuals and to capture the nuances and meanings embedded in those experiences (Husserl, 1936). Phenomenology is particularly adept at exploring areas where subjective experience is paramount, such as understanding the emotional and psychological experiences of individuals in specific situations, making it invaluable for studies in psychology, sociology, and the humanities.

In contrast, Martin Heidegger, a student of Husserl, departed from this focus on consciousness to explore existential questions. In his seminal work, *Being and Time*, Heidegger introduced concepts that redefined phenomenology by focusing on "Dasein" or "being-there" to describe human existence. In contrast to Husserl's detached analysis of consciousness, Heidegger's "being-in-the-world" emphasized the intrinsic interconnectedness of human beings with their world, a complex network of relationships, history, and culture. He placed a strong emphasis on temporality and historicity, seeing human existence as fundamentally temporal, shaped by past experiences and future anticipations. Heidegger also delved into the existential aspects of human life, such as the concept of "Geworfenheit," which encapsulates the idea that humans are "thrown" into the world without choice, and explored the themes of anxiety, freedom, and authenticity, emphasizing the importance of individual responsibility in defining one's existence (Heidegger, 2008).

This evolution from Husserl's emphasis on consciousness to Heidegger's existential perspective provides the foundation for the phenomenological methodology's commitment to capturing the essence of lived experiences. This transition represents a pivotal shift in phenomenological thought, paving the way for a methodology that aims to explore the nuances of personal experiences, recognizing them as intricately woven into the tapestry of the world and the individual's distinctive place within it (Moustakas, 1994).

Using methods such as in-depth interviews and narrative analysis, phenomenologists gather detailed, rich descriptions of experiences that are then analysed to uncover the underlying nature of the phenomena under study, often revealing insights that more objective or quantitative methods might miss (Giorgi, 2009). For example, when studying the experiences of patients living with chronic illness, phenomenology can reveal the deeply personal and often hidden aspects of their daily lives, providing a rich understanding of their challenges, coping mechanisms, and perceptions of health and well-being (Manen, 2014).

The application of phenomenological methods to the study of AI ethics enables researchers to examine the subjective experiences of individuals and communities as they interact with AI technologies. This approach allows for the capture of the multifaceted ways in which these innovations influence perceptions, behaviors, and societal norms. This approach enables a more empathetic and human-centered analysis of AI, highlighting not just the technological possibilities and challenges, but also the emotional and ethical dimensions of living in an increasingly digital world. Such in-depth qualitative research can uncover the subtle yet profound ways in which AI reshapes the understanding of autonomy, privacy, and connectivity. These insights are crucial for guiding ethical AI development and policy-making. Consequently, phenomenology not only enhances our comprehension of human experiences but also equips us to navigate the ethical complexities of the digital age with greater sensitivity and insight (Moustakas, 1994).

III.3 Data

This research employs a phenomenological approach to gain insight into the subjective experiences and ethical perceptions surrounding AI-enabled recruiting. By understanding how participants perceive, describe, and interpret their interactions with AI in recruitment, this approach is particularly suited to exploring the depth of individual experiences and perceptions. This entails in-depth interviews and discussions, which permit researchers to obtain detailed, descriptive narratives that elucidate the intricacies of ethical issues in AI-assisted recruitment processes (Moustakas, 1994; van Manen, 1990).

The selection of participants for phenomenological research is a crucial aspect of the process. The selection of hiring managers and job candidates as informants in this research is based on several key reasons. Firstly, these groups are directly impacted by the implementation of AI in the recruitment process, each from their distinct vantage points. Hiring managers interact with AI technologies as users, relying on these systems to streamline the recruitment process, enhance decision-making, and potentially improve the quality of hires. Their experiences and perceptions can provide insights into the impact of AI technologies on the efficiency, fairness, and outcomes of the recruitment process from the perspective of the organization. Conversely, job candidates encounter AI technologies as subjects of these systems. AI tools may screen their applications, analyze their resumes, or even conduct initial interviews. It is therefore essential to consider the perspectives of applicants in order to gain a full understanding of the implications of AI on the applicant experience. This includes an examination of concerns related to privacy, fairness, transparency, and personal agency (Creswell & Poth, 2018) (Baxter & Jack, 2008).

In phenomenological research, the question of how many people need to be interviewed does not have a one-size-fits-all answer, as the focus is on the depth and richness of the data collected rather than on quantifiable metrics of representativeness or generalizability. According to Moustakas (1994), phenomenological studies often work with a relatively small number of participants, focusing on obtaining detailed and profound insights into their experiences. The sample size in

phenomenology is generally determined by the concept of saturation, which occurs when additional interviews no longer contribute new or relevant insights to the research questions. This is often achieved with a sample size of between 5 to 25 participants, although the exact number can vary based on the study's specific context and the richness of the data collected (Creswell & Poth, 2013); (Morse, 1994).

For the purposes of this study, the decision to conduct interviews with 8 to 10 participants is guided by the principle of data saturation. This threshold is not predetermined but is instead discovered through the process of engaging with the data. Thus, the selection of 8 to 10 participants is an initial estimate, based on the expectation that this range will be sufficient to achieve a comprehensive understanding of the phenomenon under investigation, while also remaining flexible to the possibility that the actual number may need to be adjusted based on the evolving insights gathered during the research process (Bevan, 2014).

Phenomenological interviews seek to understand the essence of participants' experiences by encouraging them to describe and reflect on their perceptions and feelings about AI in recruitment. The effectiveness of semi-structured interviews in phenomenological research lies in their ability to elicit rich, detailed narratives. This approach allows researchers to delve into the complexities and subtleties of each informant's experience, providing a nuanced understanding of ethical issues from multiple perspectives within the organizational context (DiCicco-Bloom & Crabtree, 2006). These interviews are particularly valuable in user experience (UX) research, social sciences, and other fields where understanding in-depth perceptions, attitudes, and behaviors are crucial (Gill, Stewart, Treasure, & Chadwick, 2008). Semi-structured interviews are characterized by having a set of prepared questions but allowing the interviewer the flexibility to ask follow-up questions, skip redundant ones, or explore new topics that arise during the conversation, making them adaptable based on the interviewee's responses (Rapley, 2020). One of the key advantages of semi-structured interviews is their flexibility, which allows for a more natural and casual interaction. This can help build rapport between the interviewer and participant, fostering a comfortable environment for sharing more meaningful dialogue and detailed responses. Furthermore, this interview style generates rich, qualitative data that can reveal how people truly experience products or services, offering insights beyond what might be captured through more structured interviews or surveys (Kvale, 1996). It's also important to follow best practices, such as prioritizing open-ended questions, planning follow-up questions, and avoiding leading questions. Open-ended questions encourage participants to provide nuanced answers, allowing for the collection of richer, qualitative details. Follow-up questions can help delve deeper into participant responses, while avoiding leading questions is crucial to prevent biased or unreliable data (Brinkmann & Kvale, 2015).

Semi-structured interviews are conducted for approximately 60 minutes to allow informants sufficient time to reflect and elaborate on their experiences and perspectives. This format encourages a conversational flow, making it easier for participants to talk openly and share detailed

insights, which are essential for exploratory research, product development, and refining existing designs (Bevan, 2014). The setting of the interviews, whether face-to-face or online, is determined based on the preference and availability of the informants. This flexibility ensures their comfort and convenience and creates an environment conducive to open and honest communication (van Manen, 1990). Each interview is recorded and transcribed verbatim, allowing for comprehensive and careful analysis of the data (Moustakas, 1994).

It is of the utmost importance to consider ethical implications when using human informants. Phenomenology, which places a premium on the introspective and subjective experiences of the individual, necessitates a heightened sensitivity to ethical issues. The research adheres to the highest ethical standards to ensure the respectful treatment of participants and the integrity of the study. A fundamental aspect of this methodology is the assurance of voluntary participation and the acquisition of informed consent from all informants. This entails clearly articulating the objective of the study, the nature of their involvement, and any potential risks or benefits. It is made clear to participants that their involvement in the study is entirely voluntary and that they have the right to withdraw at any time without consequence. This approach respects the autonomy and freedom of choice of the participants, which are fundamental principles of ethical research (Bevan, 2014) (Creswell & Poth, 2018). In order to protect the privacy of informants, the research design is structured in such a way as to limit the collection of personally identifiable information. Any such data that is inadvertently collected will be treated with the utmost confidentiality and anonymized in the study findings. This is of particular importance in phenomenological research, where the depth of personal disclosure may be greater due to the focus on lived experience (Creswell & Poth, 2018). To further ensure the privacy and anonymity of participants, the following table provides a summary of the informants involved in the study, categorized by their professional roles and experiences. Each informant is assigned a code to protect their identity, and their specific roles—whether as recruiters or candidates—are indicated to highlight their respective positions within the recruitment process. This classification offers insight into the diverse perspectives gathered, without compromising the confidentiality of the individuals.

Table III. 1 Characteristics of the Informants

Informant Code	Profession	Role
P1	HR Professional	Recruiter
P2	Recruiter in FMCG	Recruiter
P3	Talent Acquisition Specialist, Consulting	Recruiter

P4	Talent Acquisition Specialist, Manufacturing	Recruiter
P5	Researcher	Candidate
P6	Student	Candidate
P7	Business Consulting	Candidate
P8	Research Assistant	Candidate

III.3.1 Phenomenology data analysis

In the context of a phenomenological study focused on the ethical implications of AI-assisted recruitment, the data analysis framework is designed to engage deeply with the rich, subjective experiences of participants. This method is characterized by a series of steps—bracketing, horizontalization, clustering, and textualization—that collectively ensure a thorough and unbiased exploration of the subjective experiences of participants.

The initial step in this analytical process is bracketing, or Epoché, a term borrowed from Husserl's phenomenological framework, which underscores the necessity of setting aside the researcher's preconceptions, biases, and assumptions about the phenomenon under investigation (Husserl, 1970). This deliberate suspension is crucial for purifying the inquiry space, allowing the researcher to approach the data from a stance of genuine curiosity and openness. Bracketing is not merely a preliminary task but a continuous effort throughout the research process, ensuring that the analysis remains grounded in the participants' perspectives, untainted by the researcher's subjective interpretations.

Following bracketing, the process advances to horizontalization, where every statement made by participants is treated with equal significance. This approach is akin to spreading out a vast tapestry of experiences, where each thread or statement is considered for its potential insight into the phenomenon's nature (Moustakas, 1994). Horizontalization necessitates a meticulous examination of the data, with the objective of identifying significant statements that delineate the boundaries and dimensions of the lived experience. This stage is of critical importance in order to ensure that the analysis encompasses the full spectrum of the phenomenon, thus laying the groundwork for the subsequent synthesis of themes.

The third step, clustering, involves the thematic organization of these significant statements into coherent groups or clusters. This process of thematization is of pivotal importance for the identification of emergent patterns and insights within the data, which collectively begin to sketch the underlying structure of the phenomenon (Giorgi, 2009). The researcher employs a meticulous and discerning analysis to group related insights, gradually piecing together the mosaic of

individual experiences into a unified portrayal of the phenomenon. This stage represents the emergence of the phenomenon's essence, which begins to take shape as preliminary insights emerge into its core characteristics and impact on the participants.

The final step, textualization, is the synthesis of these thematic clusters into a comprehensive and detailed narrative. This textural description aims to articulate the essence of the phenomenon through a rich and vivid portrayal of the lived experiences of the participants (Moustakas, 1994). It is in this narrative that the depth, emotion, and nuances of the phenomenon are fully realized, offering readers a profound understanding of its impact and significance. The researcher's role in textualization is both analytical and creative. Achieving this balance requires a delicate approach, combining rigor with empathy to capture the essence of the phenomenon in a way that resonates with both the specificity of the participants' experiences and the universality of its themes.

III.4 Research Tools

This study employed the use of AI, specifically ChatGPT, to facilitate the analysis of qualitative interview data. The incorporation of AI into this process facilitated more efficient and structured management of the raw data, enabling its transformation into meaningful insights. The analysis commenced with the transcription of the interview scripts, which were then subjected to a comprehensive thematic analysis in order to identify any emergent patterns. ChatGPT was employed at multiple stages of the process, including data cleansing, thematic cluster generation, and the formulation of comparative analysis.

Data Collection and Initial Processing

The data was gathered from a variety of individuals involved in AI-driven recruitment, including hiring managers, recruitment consultants, and candidates. The objective of these interviews was to ascertain perceptions, concerns, and insights pertaining to the utilisation of AI in recruitment, with specific attention paid to the aspects of fairness, transparency, and accountability. Following the collection of the raw transcripts, the data underwent an initial review and processing phase, during which ChatGPT was employed as a research assistant. The tool proved invaluable in synthesizing the voluminous interview transcripts, facilitating expeditious identification of pivotal elements while ensuring the integrity of the original data.

Data Cleaning and Organization

Once the transcripts were reviewed, the next step was to clean the data, removing any irrelevant or redundant information that did not contribute to the core research questions. ChatGPT facilitated this process by rapidly identifying and removing superfluous information from the transcripts. This allowed the researcher to concentrate on the most relevant sections of the interviews, thus ensuring a clear and concise dataset for further analysis.

Following the completion of the data cleaning process, the research team proceeded to identify emergent themes from the interview data. ChatGPT played a pivotal role in this process by analyzing the interview content and identifying recurring ideas or concepts. Through iterative discourse with the AI, the research team was able to generate an initial list of themes, which were subsequently refined through further analysis. For example, responses pertaining to concerns about fairness and bias were grouped together, while discussions on transparency were placed in a separate category. ChatGPT facilitated not only the identification of these themes but also their categorization into coherent groups that reflected the ethical issues under investigation.

Thematic Classification and Table Construction

A significant aspect of the research process entailed the categorization of these emergent themes into overarching domains of ethical concern. The utilization of ChatGPT facilitated the generation of tables that aided in the visualization of this classification. To illustrate, an Interview Excerpt Emergent Themes table was constructed, wherein excerpts from the interviews were aligned with their corresponding themes and subsequently organized into overarching ethical concerns.

Table III. 2 Example of the Table

Interview Excerpt	Emergent Theme	Theme Cluster
"AI helps reduce the time to screen resumes but might miss out on diverse candidates."	Bias in AI decision-making	Ethical Issues: Fairness, Bias
"We don't always know how AI makes decisions, which raises concerns about transparency."	Transparency concerns	Ethical Issues: Accountability, Transparency

The tables provided a visual representation of the alignment between specific interview responses and broader themes, including bias, fairness, transparency, and accountability. This stage proved invaluable for the synthesis of a substantial corpus of qualitative data into a coherent and readily comprehensible body of findings.

Ethical Issues and Emergent Themes Classification

Once the emergent themes had been organized, the next phase involved classifying these themes into specific ethical issues related to AI in recruitment. With the assistance of ChatGPT, the researcher was able to map the interview themes to the ethical theories of deontological ethics, virtue ethics, and consequentialism. For example, concerns pertaining to fairness were aligned with deontological ethics, which places emphasis on the adherence to moral duties and the equitable treatment of all candidates. This enabled the researcher to link the interview data with established ethical frameworks, thereby facilitating a more profound level of analysis.

Visual Representation of Data

In addition to the construction of thematic tables, ChatGPT was employed to assist in the creation of other visual aids that served to elucidate the research findings in greater detail. This included the development of models that depicted the interrelationships between AI recruitment tools and the ethical concerns that they give rise to, with particular emphasis on issues pertaining to fairness, transparency, and accountability. These visual representations proved invaluable in presenting the results in a clear and structured manner, thereby enhancing the accessibility of the data to the reader.

Ethical Considerations in AI-Assisted Research

It was of the utmost importance to maintain ethical rigor throughout the entire process, particularly with regard to the employment of AI in this study. Although ChatGPT facilitated the organization and analysis of the data, the researcher retained complete oversight to guarantee the objectivity and accuracy of the interpretation. The final conclusions were not generated by the AI, but by the researcher, who ensured that the findings were consistent with both the data and the ethical standards of academic research. This approach guaranteed that, while AI facilitated the process, the researcher's judgment remained the primary determinant of the analysis.

III.5 Chapter Summary

Chapter 3, which is devoted to the subject of research methodology, elucidates the phenomenological framework that has been employed in order to investigate the ethical issues that arise in the context of AI-enabled recruitment. The chapter commences with an explication of the interpretivist research philosophy that serves as the foundation for the study. This philosophy is appropriate for phenomenological inquiry because it recognizes the subjective nature of knowledge and experience, which is particularly relevant when exploring the diverse and subjective experiences of stakeholders in AI-enabled recruitment processes. This interpretivist stance is consistent with the qualitative nature of phenomenological research, which is adept at exploring complex and subjective phenomena within their authentic contexts (van Manen, 1990).

The methodological approach is phenomenology, chosen for its profound ability to explore and articulate the lived experiences of individuals. This approach is particularly effective for examining how different stakeholders perceive and interpret the ethical dimensions of AI in recruitment. Phenomenological research is inherently focused on understanding the nature of these experiences from a first-person perspective, thereby capturing the rich, subjective nuances of how individuals interact with and are affected by AI technologies in recruitment settings (Moustakas, 1994).

Phenomenology emphasizes in-depth, interpretive analysis of individual experiences. Through methods such as in-depth interviews and narrative analysis, the study seeks to gather rich, descriptive accounts from hiring managers and candidate in AI recruitment processes. This will

allow for the exploration of themes that reflect the complex interplay of ethics, technology, and human experience in organizational contexts (Creswell & Poth, 2018).

The use of semi-structured interviews as the primary method of data collection. This technique lends itself well to phenomenological inquiry because it allows for in-depth exploration of informants' lived experiences and perceptions, while providing the flexibility to adapt to the flow of the conversation. This approach is consistent with Moustakas's (1994) phenomenological emphasis on understanding individual experiences from a first-person perspective.

The chapter then discusses the purposive sampling method, which was chosen for its effectiveness in selecting informants whose experiences and perspectives are most relevant to the ethical dimensions of AI-assisted recruitment. This method ensures that the study captures a wide range of rich, detailed narratives essential to phenomenological research. Thematic analysis of the interview data is described as a rigorous process involving careful coding and theme development. This approach is consistent with the phenomenological method of data analysis, which seeks to identify and interpret patterns and meanings within lived experiences, as detailed by Creswell and Poth (2018).

Ethical issues are paramount in phenomenological research due to its focus on personal experiences. Chapter 3 outlines the ethical protocols implemented, including ensuring voluntary participation, informed consent, careful handling of personal information, and maintaining strict confidentiality. These measures are critical to respecting the dignity and privacy of participants, as emphasized in the guidelines for phenomenological research (Bevan, 2014).

Furthermore, the chapter underscores the utility of AI tools, notably ChatGPT, in aiding the organization, analysis, and synthesis of interview data. The incorporation of AI into the research process enabled the identification of emerging themes, the construction of thematic tables, and the comprehensive analysis of the data, ensuring a thorough exploration and organization of the information.

In summary, Chapter 3 provides a thorough and methodological description of the phenomenological research methodology. It covers the philosophical underpinnings, data collection methods, sampling strategy, and ethical issues, all tailored to capture the complexity of ethical issues in AI-enabled recruitment. This rigorous methodological approach is essential to gaining a deep and authentic understanding of the lived experiences of those interacting with AI technologies in recruitment settings.

Chapter IV RESULT

IV.1 Introduction

This qualitative analysis explores ethical issues in AI-powered recruitment processes. The rise of AI technology in talent acquisition has transformed traditional human-driven methods, promising increased efficiency, better candidate matching, and better engagement. However, this shift also brings ethical challenges such as algorithmic bias, transparency, and privacy concerns. This chapter begins by outlining the evolving recruitment landscape, emphasising the integration of AI-driven tools. While these tools offer many benefits, they also raise significant ethical questions that must be addressed to ensure fair and trustworthy recruitment practices. Using a phenomenological approach, this study examines the experiences and perceptions of hiring managers and job candidates. In-depth interviews revealed how these stakeholders interpreted their interactions with AI in recruitment, revealing the complexity and ethical dimensions of this technology. The findings are organised into key themes, including bias in AI algorithms, the need for transparency and accountability, and concerns about data privacy. Real-world examples illustrate these issues, highlighting the importance of ethical oversight in AI applications. In addition, the chapter emphasises the need for a balanced approach to AI in recruitment, combining technological efficiency with ethical responsibility. The insights gained contribute to a deeper understanding of AI ethics and guide the development of fair and transparent recruitment processes.

IV.2 Ethical Framework for AI in Recruitment

As artificial intelligence becomes increasingly integrated into recruitment processes, a number of ethical concerns emerge, including issues of fairness, transparency, accountability, and data privacy. The implementation of AI in decision-making processes, such as the selection of candidates, may result in outcomes that are biased or lack sufficient clarity regarding the decision-making process itself. In order to address these risks, a number of global organisations, including **UNESCO, OECD, the EU and ASEAN**, have established ethical principles with the intention of guiding the responsible use of AI in recruitment.

This section introduces the key ethical issues, namely accountability, fairness and non-discrimination, transparency and explainability, and data privacy. Each issue will be paired with specific criteria, providing a clear framework for assessing how well AI systems in recruitment align with these international ethical standards. These criteria will form the foundation for the thematic analysis that follows.

Accountability

It is of paramount importance to ensure accountability in AI systems, particularly in the context of recruitment, where decisions about individuals' careers are made. It is imperative that AI systems

do not operate autonomously without clear and defined human oversight. It is imperative that human involvement be maintained to guarantee that decisions are made in accordance with ethical standards and organizational values. In the event that an AI system is utilized for the purpose of making decisions, whether for the purpose of shortlisting candidates or filtering resumes, it is of the utmost importance that a clear chain of responsibility be established. This entails identifying the individual or entity within the organization that bears responsibility for the AI's decisions and the person or entity tasked with addressing any errors or biases that may emerge (UNESCO, 2021) (OECD, 2024).

Furthermore, there must be established procedures for addressing any errors or discrepancies. In the event that a candidate is unfairly excluded as a result of a fault in the AI system, there should be established processes to rectify such errors. These may include manual reviews or appeals (European Commission, 2019). Furthermore, it is essential that the decision-making process of the AI is traceable. This entails documenting each step that leads to a particular decision, thereby ensuring transparency and facilitating the investigation of any discrepancies or unexpected outcomes in the recruitment process (ASEAN, 2023).

Fairness and Non-Discrimination (Bias)

The principles of fairness and non-discrimination are of paramount importance in the development of ethical AI systems, particularly in the context of recruitment. It is imperative that AI be designed and implemented in a manner that precludes the reinforcement of existing societal biases and the introduction of new forms of discrimination. This signifies that the data utilized for the training of AI models must be diverse and representative of all demographic groups (UNESCO, 2021) (OECD, 2024). In the event that the training data set is comprised of a limited range of groups, there is a possibility that the AI may exhibit a tendency to favor candidates from those groups, which could ultimately result in the generation of biased outcomes. Furthermore, fairness necessitates the periodic auditing of AI systems for the presence of bias. Such audits are essential for ensuring that the system is treating candidates equitably and that it is not perpetuating discrimination against certain groups on the basis of characteristics such as race, gender, or socioeconomic status (European Commission, 2019) (ASEAN, 2023).

Furthermore, fairness necessitates a dedication to inclusivity. AI systems must be constructed with inclusive data sets that encompass a diverse range of individuals to prevent the skewing of decisions towards any specific demographic. The AI system should yield non-discriminatory outcomes, guaranteeing that every candidate has an equal opportunity based on merit, not on biased criteria embedded in the system. By conducting bias audits and maintaining inclusivity in training data, organizations can more effectively ensure fairness and equity in AI-driven recruitment (OECD, 2024) (ASEAN, 2023).

Transparency and Explainability

It is of paramount importance to ensure transparency in the use of AI in recruitment. This entails guaranteeing that both candidates and users of AI systems are fully informed about the criteria and rationale behind the decisions made. In order for an AI system to be considered ethical, it is essential that the processes and decision-making criteria employed by the system are fully explainable. It is incumbent upon employers to inform candidates that AI is being utilized in the recruitment process and to delineate the manner in which their data is being processed (UNESCO, 2021) (European Commission, 2019). Such transparency fosters trust in the system and provides candidates with a more comprehensive understanding of the process. Transparency necessitates the provision of explanations for AI-driven decisions, thereby enabling both candidates and recruiters to comprehend the rationale behind the shortlisting or rejection of specific candidates (OECD, 2024) (ASEAN, 2023).

The concept of explainability pertains to the capacity of an AI system to provide coherent and comprehensible justifications for its decisions. In the event that an AI system rejects a candidate, the system should be capable of articulating the underlying factors that led to this outcome, rather than merely presenting a decision with no accompanying rationale (European Commission, 2019). In the context of ethical recruitment practices, transparency is vital to ensure that AI-based decisions can be subjected to rigorous scrutiny and potential challenge, thereby promoting fairness and reducing the risk of opaque and potentially biased outcomes (OECD, 2024).

Data Privacy

The protection of data privacy is of paramount importance when utilising artificial intelligence (AI) systems in the context of recruitment, given that these systems process vast quantities of personal data belonging to prospective candidates. It is imperative that candidates be made aware of the manner in which their data will be utilized, processed, and stored. The principle of informed consent represents a fundamental aspect of ethical AI utilisation, whereby candidates are furnished with the requisite information regarding the manner in which their personal data will be handled processed (UNESCO, 2021) (European Commission, 2019). Moreover, AI systems must comply with rigorous data security protocols to prevent unauthorized access or misuse of personal data (OECD, 2024). This entails the implementation of encryption and other security measures to safeguard the data amassed from candidates throughout the recruitment process (ASEAN, 2023).

Furthermore, data minimization principles must be observed, whereby only the data necessary for recruitment purposes is collected and stored. AI systems should not gather excessive or irrelevant data that could infringe on candidates' privacy rights (OECD, 2024) (European Commission, 2019). It is also essential to implement clear data retention policies, whereby candidates are informed of the duration for which their data will be stored and the circumstances under which it will be deleted (UNESCO, 2021). These practices not only safeguard the privacy of candidates but also guarantee that organizations comply with legal and ethical data protection standards (ASEAN, 2023) (European Commission, 2019).

IV.3 Thematic Analysis

P1 – Interview Results

The interview results (Table 1) revealed some key ethical issues in the use of AI for recruitment. A key concern was algorithmic bias, where AI, if not managed properly, could perpetuate or even reinforce existing biases, despite its potential to reduce human bias. Participants highlighted the importance of using diverse and representative training data and conducting regular audits to identify and mitigate bias. Transparency in AI decision-making processes also emerged as another important issue. Ensuring that candidates understand how AI is affecting their recruitment and providing mechanisms for them to challenge or seek clarification on decisions made is critical to maintaining trust. Privacy concerns, especially with AI tools such as video analytics that assess non-verbal cues, were also emphasised. Ensuring candidate consent and securing data through strict encryption protocols were identified as important practices. Integrating AI with existing systems and maintaining data quality were noted as significant implementation challenges, requiring ongoing training and adaptation.

In addition, this analysis underscores the importance of balancing efficiency gains with ethical issues. While AI can significantly improve recruitment efficiency by speeding up the process and uncovering hidden talent, it is imperative to address ethical concerns to ensure fairness and transparency. Practices such as bias training for HR teams, involving various stakeholders in AI development, and engaging external experts for independent assessment were highlighted as effective strategies to maintain accountability and ethical integrity in AI recruitment.

Table IV.1 P1 Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical Issues
"I am an HR professional and I have been working with various AI tools in recruitment for over three years."	Professional Experience	Contextual Background
"One of the main concerns is bias in the algorithms. While AI can reduce some human biases if not properly managed it can also reinforce existing biases."	Algorithmic Bias	Bias
	Integration Challenges	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical Issues
"Training and demonstrating the effectiveness of AI tools were crucial in overcoming this. We also faced technical challenges such as integrating AI with our existing systems and ensuring data quality."	Data Quality	
	Implementation Challenges	
"We ensure that our training data is diverse and representative. This involves using data from various sources and making sure it reflects different demographics."	Diverse Training Data	Bias Mitigation
"Transparency in the decision-making process of AI is a major concern. Candidates should understand how decisions are made and have the ability to challenge or seek clarification on those decisions."	Transparency	Transparency
	Candidate Understanding	
"Another ethical concern is the potential invasion of privacy especially with video analysis tools that assess non-verbal cues. It's crucial to ensure that candidates are fully aware of how their data will be used and that their consent is obtained."	Privacy Concerns	Data Privacy
	Consent	
"We regularly audit our AI systems to check for any emerging biases. This involves analyzing outcomes to identify patterns that may indicate bias."	Regular Audits	Bias Mitigation
	Bias Identification	
"We aim to be very transparent with candidates. They are informed that AI is involved in the recruitment process and how their data will be used."	Information Disclosure	Transparency
"We handle negative feedback by addressing the concerns directly providing more information about how AI works and making adjustments to our processes if necessary."	Feedback Handling,	Fairness
	Process Adjustments	Transparency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical Issues
"Candidate data is stored with strict security protocols. We ensure data is encrypted both in storage and transmission."	Data Security	Data Privacy
	Encryption	
"We follow several best practices such as ensuring transparency reducing bias through regular testing and evaluation and involving multiple stakeholders in the development and maintenance of AI systems."	Best Practices	Accountability
	Stakeholder Involvement	
"AI has significantly improved the efficiency of our recruitment process by speeding up candidate screening and reducing administrative burdens."	Efficiency Improvement	Efficiency
	Administrative Burden Reduction	Fairness
"Instances like these highlight the potential of AI to uncover hidden talent and add value to the recruitment process."	Uncovering Hidden Talent	Fairness
	Added Value	
"Continuous learning and adaptation are crucial in this rapidly evolving field."	Continuous Learning	Accountability
	Adaptation	Fairness
"By using AI for initial resume screening and chatbot interviews we were able to shortlist candidates much faster than usual."	Speed and Efficiency	Efficiency
	Candidate Shortlisting	Fairness
"We utilize machine learning algorithms to provide candidate recommendations."	Machine Learning	Fairness
	Candidate Recommendations	
"We have a clear appeals process where candidates can raise concerns or seek clarifications about their application."	Appeals Process	Fairness
	Candidate Concerns	Transparency
"We conduct bias training for our HR team to help them understand the potential pitfalls and how to address them."	Bias Training	Bias Mitigation
	HR Education	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical Issues
"Ensuring that AI does not develop or reinforce existing biases will remain a primary challenge."	Bias Prevention	Bias
	Ongoing Challenges	
"We invest heavily in continuous training and development for our team."	Continuous Training	Accountability
	Team Development	Fairness
"We engage with external experts to review our AI systems and provide independent assessments."	External Review	Accountability
	Independent Assessment	
"Training and demonstrating the effectiveness of AI tools were crucial in overcoming this. We also faced technical challenges such as integrating AI with our existing systems and ensuring data quality."	Resistance to Change	Accountability
	Training Needs	

In addition, the first interview emphasised the importance of using diverse training data, regular audits, and transparent decision-making processes to reduce bias and maintain trust in AI-based recruitment. These basic steps are critical to balancing the efficiency gains of AI with ethical issues, ensuring a fair and accountable hiring process.

P2 – Interview Results

Table 2 revealed some important insights into the ethical issues and operational challenges faced by companies using AI in recruitment. Recruiters highlighted their professional experience and the gradual integration of AI tools over the past few years, from CV screening to candidate assessment and initial interactions using chatbots. These AI tools have significantly improved the efficiency and objectivity of the recruitment process, allowing companies to quickly manage large numbers of applications and assess candidates' skills and personalities more effectively. However, this analysis also underscores the ethical challenges associated with AI in recruitment. One of the main concerns is algorithmic bias, where AI can reinforce existing biases if not managed properly. Ensuring diverse and representative training data, conducting regular audits, and incorporating human supervision are important steps to mitigate this bias. Another important issue is transparency, with candidates often feeling unsure about how AI affects hiring decisions. To address this, companies are making efforts to provide detailed explanations, clear reporting, and better communication to ensure candidates understand the criteria used in the AI decision-making process.

Data privacy emerged as another important ethical issues. The use of AI tools such as video analytics raises concerns about potential privacy breaches. Companies address this by securing candidate data with strict protocols and obtaining explicit consent for data use. The importance of continuous improvement and utilization of feedback was also highlighted, with companies regularly training their AI systems and engaging various stakeholders to ensure accuracy and accountability. Despite the efficiency gains from AI, the analysis emphasizes the need to balance technological advancements with ethical responsibilities. The human element remains important in maintaining empathy and personal judgement in hiring. Future integration of AI is expected to become more widespread, but final decision-making will continue to involve human oversight to ensure fairness and accountability. Continuous innovation and compliance with privacy laws are essential to navigating the ethical landscape of AI-powered recruitment, ensuring that these technologies enhance rather than undermine the recruitment process.

Table IV.2 P2 Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"I'm a recruiter in an FMCG company. For the last two years we've been using AI for recruitment."	Professional Experience	Contextual Background
"We use various tools such as automated CV screening systems chatbots for initial interviews and AI-based assessment tools to assess candidates' skills and personality."	Diversity of AI Tools	Efficiency
	Technological Implementation	
"Automated CV screening allows us to quickly manage a large number of applications. Chatbots help us gather basic information from candidates efficiently and AI assessment tools help us assess candidates' skills and personality more objectively."	Process Improvement	Efficiency
	Objectivity	Fairness
"When we had an opening for a marketing manager position we received hundreds of CVs. With AI the most relevant CVs that met the criteria were immediately prioritized for further review."	Speed and Efficiency	Efficiency
	Candidate Shortlisting	
"AI filters CVs based on pre-defined criteria. For example if we	Criteria-based Screening	Fairness

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
are looking for candidates with at least five years of experience in marketing AI will prioritize CVs that mention that experience."	Keyword Matching	
"AI can recognize different formats of CVs. For example a candidate might use a creative format with infographics or visual design. AI can recognize key information such as work experience education and skills even if the format is non-standard."	Format Recognition	Efficiency
	Flexibility	Fairness
"There are times when the AI can make mistakes in screening CVs and it can happen for various reasons. For example there are candidates who are actually very suitable but their CVs don't use keywords that the AI recognizes."	Errors in Screening	Fairness
	Keyword Dependency	Bias
"We always double-check with the recruitment team. So while AI helps screen the initial CVs the final decision is still in the hands of humans. Every CV that is prioritized by AI will be reviewed again by the recruitment team."	Human Oversight	Accountability
	Double-checking	Fairness
"We continue to train the AI with the latest data and feedback from the recruitment team to improve its accuracy."	Continuous Improvement	Accountability
	Feedback Utilization	
"Transparency is indeed a big issue. Candidates often feel like they don't know the reasons behind recruitment decisions."	Transparency Issues	Transparency
	Candidate Understanding	
"We try to provide more detailed explanations to candidates. For example if they do not pass the CV screening stage we provide specific feedback on what criteria they did not meet."	Detailed Explanations	Transparency
	Enhanced Communication	
"We work closely with the AI development team to ensure that the algorithms used can produce	Clear Reporting	Transparency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
clear reports on each decision. These reports include the criteria used and how each candidate met or did not meet those criteria."	Algorithm Transparency	
"Candidate feedback is very important. By listening to their experiences we can identify areas for improvement."	Candidate Feedback	Fairness
	Continuous Improvement	Accountability
"I see AI becoming more integrated and sophisticated playing a bigger role at various stages of recruitment. AI will not only be used for CV screening but also for virtual interviews video analysis and game-based assessments."	Future Integration Ethical Concerns	Ethical Concerns
"Many people are still sceptical about using AI in the recruitment process because they fear that machines will replace humans entirely."	Scepticism	Fairness
	Human Replacement Concerns	
"We work closely with the IT team to ensure that all systems are well integrated. We also select AI tools that are compatible with existing systems and make necessary technical adjustments."	Integration Efforts	Accountability
	Team Collaboration	
"We ensure that there is a special team that focuses on implementing and monitoring the AI system. In addition we also create a clear roadmap for the integration of AI into the recruitment process."	Dedicated Implementation Team	Accountability
	Comprehensive Training	
"AI will play a more of a role as a tool that increases efficiency and objectivity while the final decision remains in the hands of humans."	Supportive Role of AI	Fairness
	Human Decision-making	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"We must ensure that AI complies with privacy laws and stays up to date with technological developments."	Privacy Laws	Data Privacy
"We must be aware of the risk of dependency if the system fails."	Risk Awareness	Accountability
	System Dependency	
"We develop clear reports from the AI system on how each decision was made and what were the main considerations."	Clear Reporting	Fairness
	Transparency in Feedback	Transparency
"We also hold online Q&A sessions for candidates who want to know more about our recruitment process."	Candidate Engagement	Transparency
	Transparency Initiatives	Fairness
"We measure success by looking at the level of candidate satisfaction which we evaluate through a survey after the recruitment process is complete."	Candidate Satisfaction	Transparency
"The human touch is still important to maintain the personal and empathetic aspect of recruitment."	Human Element	Fairness
	Empathy	
"Proper training is essential to harnessing the full power of AI and we must be aware of the risk of dependency if the system fails."	Proper Training	Accountability
	Risk Awareness	
"We must continue to innovate and find new ways to improve transparency and fairness in the recruitment process."	Innovation in Transparency and Fairness	Transparency Fairness
"We also face challenges in terms of transparency and ethics. Candidates often want to know how their data is used and how decisions are made."	Transparency and Ethics	Transparency
	Data Usage	Data Privacy

Highlighting the importance of diverse training data and regular audits, the previous insights emphasize the need to effectively manage algorithmic bias. Transparency in AI decision-making and ensuring data privacy through strict encryption protocols are also critical to maintaining trust and fairness in the recruitment process.

P3 – Interview Results

In Table 3, the summarized interview results highlight some important insights into the ethical issues and operational challenges of using AI in recruitment at a consulting firm in Jakarta. Over the past three years, the company has progressively integrated AI tools into their recruitment process, from CV screening to candidate assessment and initial interactions using chatbots. These tools have significantly improved efficiency, allowing the company to process many applications quickly and objectively, and gather basic candidate information through automated interactions. However, this analysis also highlights important ethical challenges. Algorithmic bias is a major concern, where AI systems can reinforce existing biases if not properly managed. This can be addressed by regular audits and using diverse data sets to train AI. Transparency is another important issue, with candidates often unsure about how AI affects the outcome of their application. Companies strive to be transparent by informing candidates about the use of AI in the selection process and providing clear feedback on their performance.

The issue of data privacy is also very important, given the large amount of personal data handled by AI systems. The company uses high-level encryption and restricts data access to authorized personnel only, conducting regular security audits to ensure data protection. Despite the efficiency of AI, there is a risk of over-reliance, which can make the process feel impersonal to candidates. The company mitigates this by maintaining human oversight and ensuring that final hiring decisions involve human judgement. Interviews also emphasized the importance of striking a balance between AI and human interaction. While AI handles administrative tasks such as CV screening and initial assessments, human recruiters conduct in-depth interviews and personality assessments to capture nuances that AI may miss. This balance ensures a fair and comprehensive evaluation of candidates.

Furthermore, AI is not only used for recruitment, but also for employee development, analyzing performance data to provide training recommendations. Continuous monitoring and evaluation of the effectiveness of AI in recruitment and employee development is essential to ensure the tool is used ethically and effectively. Overall, while AI improves recruitment efficiency, maintaining transparency, fairness and data privacy is essential to address the ethical challenges it poses.

Table IV.3 P3 Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"I'm a recruiter at a consulting firm in Jakarta. Usually we use AI to review CVs and help with the decision-making process."	Professional Experience	Contextual Background

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"What is most often used is an automatic CV filtering system so that it is easy to manage the number of incoming applications. Furthermore, we use chatbots for initial interaction with candidates and also AI-based assessment tools to evaluate their skills and personality."	Diversity of AI Tools	Efficiency
	Technological Implementation	
"These AI tools are very helpful in various stages of the recruitment process. First make your CV sound. In the past we had to manually check incoming CVs one by one which could take a very long time especially if there were a lot of applications. With AI this process becomes much faster because AI can process hundreds or even thousands of CVs in a short time. So we can immediately focus on candidates who really match the qualifications we are looking for."	Process Improvement	Efficiency
	Objectivity	Fairness
"AI also helps in the initial assessment of candidates. For example with a chatbot that can interact directly with candidates to gather basic information check availability and even give initial tests. This is really helpful for screening candidates before they meet the recruitment team so we already have an initial idea about them."	Initial Assessment	Efficiency
	Chatbot Interaction	
"This chatbot is like a virtual assistant that candidates can chat with. This chatbot is designed to answer basic questions and gather important	Virtual Assistant	Efficiency
	Information Gathering	

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
information from candidates in the early stages of recruitment."		
"For example if a candidate writes that they have experience with a particular software AI can immediately check whether the software is relevant to the position they are applying for. Then AI can also ask follow-up questions to dig deeper into the experience."	Specific Skill Assessment	Fairness
	Follow-up Questions	Efficiency
"For example a candidate applies for a software engineer position. After they submit their resume the chatbot will automatically greet them with a message like 'Hello thank you for applying for the software engineer position. Can you tell us a little bit about your experience using Python?' If the candidate answers 'I have 3 years of experience using Python for web development' the chatbot will check for keywords like '3 years' and 'Python.' If they match the chatbot will ask 'Have you ever used the Django or Flask framework?' If the candidate answers 'I used Django for 2 years' the chatbot will understand that the candidate has relevant experience and move on to the next question such as about a specific project they have worked on."	Keyword Matching	Efficiency
	Relevant Experience	Fairness
"Even though AI and chatbots take over many tasks in the	Human Oversight	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
early stages the recruitment team still monitors the process. We continue to check the screening results from the AI and review the answers collected by the chatbot."	HR Monitoring	Fairness
"Usually we use AI tools specifically designed to measure technical skills and soft skills such as communication teamwork leadership etc. These tests often take the form of quizzes or simulations of certain situations. The results can be immediately analyzed and given a score so we have clear data to compare between candidates."	Technical Skills	Efficiency
	Soft Skills Assessment	Fairness
"For example candidates can be given a simulated situation where they must choose the response that best suits their personality or provide a solution to a particular problem. AI will analyze these answers and compare them with the soft skills profile we are looking for."	Scenario-based Assessment	Fairness
	Personality Fit	Efficiency
"AI will analyze the answers based on certain patterns that have been programmed. For example if a candidate chooses an action that shows high initiative or good collaboration skills AI can immediately evaluate that as a plus."	Pattern Recognition	Fairness
	Initiative Assessment	Efficiency
"If they have strong technical skills but lack soft skills we can give them the opportunity to develop their soft skills through training or coaching. So the elimination decision is not only based on one aspect."	Balanced Evaluation	Fairness
	Skill Development Opportunity	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"Many candidates find this test interesting and challenging because they can feel like they are playing a real game or simulation. Plus they can also get direct feedback from the AI about which areas are strong and which need to be improved so that adds value to their experience too."	Engaging Assessments	Fairness
	Immediate Feedback	Efficiency
"Usually the feedback is in the form of a short report that gives an overview of their performance on the test. For example AI can show their scores in various aspects of the soft skills tested and then provide recommendations on areas that need improvement."	Performance Reports	Fairness
	Improvement Recommendations	Accountability
"There were several candidates who came back after getting feedback and they said that they really implemented the suggestions from AI. For example some take communication courses or are more active in teamwork activities at their current workplace."	Positive Feedback Implementation	Fairness
	Skill Improvement	Accountability
"There are several ethical issues that arise in the use of AI in recruitment. One of them is algorithm bias and also excessive dependence on AI."	Algorithm Bias	Bias
	Over-reliance on AI	
"For example if the training data contains more candidates with a certain background the AI may tend to prefer candidates with the same background."	Training Data Bias	Bias
"For example suppose we use historical data from a company where the majority of	Historical Data Bias	Bias

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
employees are graduates of a certain university or have a certain background. If AI is trained with this data it may tend to prefer candidates with similar backgrounds."	Educational Background Bias	
"Another example can arise from gender bias. For example if historical data shows that more men are successful in a certain position AI may tend to prefer men over women for the same position."	Gender Bias	Bias
"There have also been cases of geographic bias. For example if data shows that more successful employees come from urban areas AI may tend to favor candidates from urban areas over those from rural areas."	Geographic Bias	Bias
"We usually start with regular algorithm audits to check whether any biases have emerged. Apart from that we also use a more diverse dataset to train AI."	Regular Audits	Accountability
	Diverse Datasets	
"One of the most effective steps is dataset diversification. We ensure that the data we use to train AI covers a wide range of backgrounds gender education and geography."	Dataset Diversification	Fairness
"Candidates generally respond positively especially when they know that we are trying our best to reduce bias. Transparency in the recruitment process also helps candidates feel more comfortable and confident."	Positive Candidate Response	Fairness

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"One of them is the issue of transparency. Sometimes candidates don't know or don't understand how AI assesses them. They can get frustrated if there is no clear explanation as to why they didn't make it."	Transparency Issues	Transparency
"We try to be as transparent as possible by letting candidates know that AI is used in the selection process. We also give clear feedback if they do not pass explaining what areas they can improve."	Clear Feedback	Transparency
	Process Transparency	
"We usually communicate this information via email or the application portal that we use. When candidates first register they will receive a notification explaining that AI will be used in the selection process and how their data will be processed."	Communication Channels	Data Privacy
	Data Processing Information	Transparency
"We try to explain as clearly as possible the criteria that AI uses to screen and assess candidates. For example we explain that AI will evaluate CVs based on certain keywords that are relevant to the position being applied for."	Clear Criteria Explanation	Transparency
"Most candidates respond positively. They feel more calm and confident because they know what to expect and how the process works. This transparency also helps them feel more valued and treated fairly."	Candidate Trust	Transparency
	Process Understanding	Fairness
"The main challenge is ensuring that the information	Communication Clarity	Transparency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
we provide is easy to understand for all candidates especially those who may not be familiar with AI technology."	Technology Understanding	
"We have a dedicated team responsible for managing and updating information related to the recruitment process and the use of AI. This team works closely with the IT department and recruitment team to ensure that all information provided to candidates is accurate and relevant."	Information Management	Accountability Transparency
"There is also the concern about data security. Given that AI requires a lot of personal data to function properly this can be a problem if that data is not managed securely."	Data Security Concerns	Data Privacy
"We use high-level encryption to protect candidate personal data. In addition we limit access to data to authorized personnel and conduct regular security audits."	Encryption	Data Privacy
	Access Limitation	
"Over-reliance on AI can make the recruitment process too rigid and impersonal. For example AI can assess technical skills from CVs and online tests but it cannot capture the nuances of a candidate's personality motivations or values."	Over-reliance Issues	Accountability
	Lack of Personal Touch	Fairness
"Candidates can feel unappreciated or like they are just numbers in the system. They may feel the process is unfair if they don't get a chance to show their potential directly."	Candidate Perception	Fairness
	Fairness Concerns	

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"There was a case where a candidate with excellent technical qualifications did not make it to the initial selection because the AI assessment result was low in soft skills. However when we finally conducted a face-to-face interview it turned out that the candidate had a personality that was a perfect fit with the company culture and good communication skills."	Missed Potential	Fairness
	Importance of Human Assessment	Accountability
"We ensure that even though AI helps in the initial screening the final decision is always made by the human recruitment team. We also try to maintain direct interaction with candidates for example through face-to-face interviews or video calls."	Human Decision-making	Accountability
	Direct Interaction	Fairness
"The ideal balance is when AI is used to speed up and simplify administrative processes such as CV screening and initial assessments while human interaction is used for more in-depth and complex assessments such as interviews and personality assessments."	Balance of AI and Human Interaction	Fairness, Accountability
"AI is not only useful for recruitment but can also be used to develop the skills of existing employees. For example AI can analyze employee performance and provide recommendations for appropriate training for them."	Employee Development	Fairness
	Training Recommendations	Efficiency
"AI can analyze employee performance data such as work results feedback from	Performance Analysis	Fairness

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
superiors and skill assessments. Based on this data AI can identify areas that need improvement and provide appropriate training recommendations."	Skill Improvement	Accountability
"It is also important to continue to monitor and evaluate the effectiveness of AI use in all these aspects including employee recruitment and development."	Continuous Monitoring	Accountability
	Evaluation	

The insights from the consulting firm in Jakarta highlight the significant efficiency gains achieved through AI in recruitment, particularly in CV screening and candidate assessments. Despite these advancements, the firm faces ethical challenges such as algorithmic bias and the need for transparency in AI decision-making. Regular audits, diverse datasets, and clear communication with candidates are essential practices to mitigate these issues. Maintaining data privacy and balancing AI's capabilities with human oversight ensures a fair and personalized recruitment process. These considerations underline the importance of ethical AI integration in enhancing recruitment practices.

P4 – Interview Results

Continuing our exploration of AI integration in recruitment, insights from a Talent Acquisition Specialist at a large manufacturing company in Surabaya reveal further dimensions of the ethical issues and operational challenges faced in utilising AI technology (Table IV.4). The company uses AI to screen CVs, conduct initial assessments, and conduct automated interviews, significantly improving the efficiency and objectivity of their recruitment process. Candidates receive an invitation via email for an automated interview, where the AI analyses recorded responses based on factors such as body language, facial expressions and tone of voice. This method offers a more in-depth assessment compared to traditional CV screening or chatbot interactions. Despite these advantages, interviewing highlights some ethical and operational challenges. Algorithmic bias remains a major concern, as AI systems can reinforce existing biases if not properly managed. Companies address this by conducting regular audits and using diverse data sets to train AI. Transparency is another important issue, with companies endeavouring to inform candidates about the use of AI and provide clear feedback on their performance to maintain trust.

Data privacy is also emphasised, given the large amount of personal data handled by AI systems. High levels of encryption and data access limited to authorised personnel are standard practice,

along with regular security audits. Interviewees noted the importance of balancing AI capabilities with human supervision to ensure a comprehensive and fair evaluation of candidates. Automated interviews provide flexibility and consistency, but can feel impersonal to some candidates, highlighting the need for human interaction at crucial stages in the recruitment process.

Table IV.4 P4 Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"I'm a Talent Acquisition Specialist at a large manufacturing company in Surabaya. We've been using AI in the recruitment process for about four years now. Usually, we use AI to screen CVs, conduct initial assessments, and also to conduct automated interviews."	Professional Experience, AI Use in Recruitment	Contextual Background
"Candidates will receive an invitation to automated interviews via email. They will be asked to record their answers to several questions that have been prepared in advance."	Automated Interviews	Efficiency
	Candidate Instructions	Fairness
"AI will then analyze these recordings and provide an assessment based on various factors such as body language, facial expressions, and tone of voice."	AI Analysis	Fairness
"We feel that automated interviews can provide a more in-depth assessment than just CV screening or using a chatbot."	In-depth Assessment	Fairness
	Comparative Advantages	Efficiency
"First, candidates will log into the automated interviews platform that we use. These platforms are usually web-based, so candidates don't need to download a special application."	Web-based Platform	Fairness
	Accessibility	

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"Candidates will see a series of questions appear on the screen one by one. These questions typically cover topics such as work experience, technical skills, how to handle certain situations, and their motivations for applying to our company."	Structured Questions	Fairness
"The AI we use analyzes each recording based on algorithms that have been trained to detect various elements. For example, the AI will look for micro-facial expressions that indicate certain emotions, body postures that indicate confidence or nervousness, and tone of voice that can indicate levels of honesty and communication skills."	Algorithm Training	Bias Mitigation
	Detailed Analysis	
"AI is not 100% perfect. Therefore, the results of AI analysis are always combined with assessments from the human recruitment team to ensure more accurate and fair results."	AI Limitations	Accountability
	Human Oversight	Fairness
"One of the main advantages is efficiency. This process allows us to save a lot of time in the early stages of selection."	Efficiency Gains	Efficiency
	Time Savings	
"Automated interviews can be conducted at any time, giving candidates the flexibility to choose a time that is most convenient for them."	Flexibility	Fairness
	Candidate Convenience	Efficiency
"Automated interviews provide consistency in	Consistency	Fairness

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
assessment because all candidates are assessed with the same criteria without any possible human subjectivity."	Objective Assessment	
"Some candidates feel comfortable because they can interview anytime and from anywhere. They appreciate this flexibility, especially if they have busy schedules or live in remote locations."	Positive Candidate Reactions	Fairness
	Flexibility	
"However, others feel uncomfortable because of the lack of human interaction. They feel that the process feels less personal and intimidating to speak in front of a camera without a human being there."	Negative Reactions	Fairness
	Lack of Human Interaction	
"The platform provides practice interviews where candidates can try out some simulated questions before starting the actual automated interviews. This helps them get used to the format and feel more confident."	Practice Interviews	Fairness
	Candidate Preparation	Transparency
"We also provide guidance on how to prepare for automated interviews, such as technical tips and how to answer questions effectively."	Candidate Guidance	Fairness
	Preparation Tips	Transparency
"After the automated interviews, the results of the AI analysis will be reviewed by our recruitment team. If the candidate passes this stage, they will be invited for a follow-up interview with a human recruitment team."	Human Review	Accountability
	Follow-up Interviews	Fairness
"We also conduct additional skills assessments if	Additional Skill Assessments	Fairness, Efficiency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
necessary, such as technical tests or case studies to get a more complete picture of the candidate's abilities and suitability for the position they are applying for."		
"Candidates who pass the CV screening will be invited to take a skills test or other initial assessment, which can also be done online."	Initial Assessments	Fairness
	Skill Tests	
"Psychometric tests are tests designed to measure various aspects of a candidate's personality, cognitive abilities, and interpersonal skills."	Psychometric Tests	Fairness
	Comprehensive Assessment	
"These tests can include various types of questions, ranging from logic and reasoning questions, personality tests, to work situation simulations."	Test Types	Fairness
	Various Assessments	
"With the help of AI, we can get faster and more accurate results."	Speed and Accuracy	Efficiency
	AI Assistance	
"One of them is about data privacy. We need a lot of personal data for the recruitment process, so it is very important to ensure that the data is safe and not misused."	Security Concerns	Data Privacy
"If candidate data is leaked or misused, it can damage the company's reputation and make candidates lose trust in us."	Data Breach Risks	Data Privacy
	Trust Issues	
"Although AI can help reduce human bias, if the training data is not diverse, it can actually strengthen existing bias."	Bias Reduction	Bias
	Diverse Training Data	Accountability
	Continuous Monitoring	Accountability

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"We must continue to monitor and calibrate our AI tools to ensure fairness and accuracy."	Calibration	
"Candidates need to know how their data is used and how decisions are made. We try to be as transparent as possible by providing clear explanations to candidates about this process."	Data Usage Explanation	Transparency
"Candidates can feel less cared for or ignored because they interact more with machines than with humans."	Dehumanization Concerns	Fairness
	Candidate Perception	
"We try to address this by ensuring there is a human touch at every important stage such as follow-up interviews and personal feedback."	Human Touch	Fairness
	Personal Interaction	Accountability
"Not all candidates have the same access to the technology needed to participate in the online recruitment process."	Access to Technology	Fairness
	Inclusivity	
"We need to ensure that our recruitment process is inclusive and fair to all candidates, including providing alternatives or technical assistance if needed."	Inclusivity	Fairness
	Technical Assistance	Accountability
"We need to stay up to date with the latest developments to ensure that our recruitment process remains effective and efficient."	Continuous Learning	Accountability
	Technological Adaptation	

Companies are also using AI for additional skills assessments and psychometric tests to gain a comprehensive understanding of a candidate's abilities and suitability for a particular position. Ensuring inclusivity and providing alternatives or technical assistance for candidates with limited access to technology are also important considerations. Continuous learning and adaptation to

technological advancements are necessary to maintain an effective and efficient recruitment process. Overall, while AI improves recruitment efficiency, maintaining fairness, transparency and data privacy is essential to address the ethical challenges it poses.

P5 – Interview Results

Furthermore, Table IV.5 reveals an analysis of interviews with a researcher and project officer provides an in-depth perspective on the use of AI in recruitment, highlighting its benefits and challenges. The respondent, who has extensive experience with multinational companies and local startups, noted that AI tools make the recruitment process more efficient and enjoyable, especially during written tests, which are combined with gamification to reduce pressure and anxiety. This gamification makes the process less intimidating and more engaging for candidates. Despite the positive aspects, there are concerns about subjectivity in personality tests. The convenience of automated data entry and immediate results from personality and aptitude tests is appreciated, although there is caution about potential bias in personality assessment. The immediate feedback and career advice provided by the AI was considered very helpful, providing candidates with insights into their potential and suitable future positions.

Respondents also highlighted the importance of easy-to-use interfaces and clear instructions in AI tools, which contribute to a smoother experience. However, technical issues such as webcams not working during time-constrained tests underline the accessibility challenges candidates may face. The need for transparency and clear communication from companies regarding the use of AI in the recruitment process was emphasised, along with the importance of providing technical assistance and real-time help during assessments. Data privacy and security issues were a recurring theme, with respondents expressing continued concerns about the lack of regulatory frameworks in Indonesia to protect candidate data. The interviews underscored the importance of human oversight in AI-based recruitment, advocating for a collaborative approach where AI assessments are complemented by human assessments to ensure comprehensive and fair decision-making.

Table IV.5 P5 Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"Well right now I'm doing more as a researcher and also project officer. The kind of job positions that I was looking for right now and of course in the researcher positions and also involving with the project management and such."	Professional Experience	Contextual Background
"Most of the experiences are with big companies like multinational companies and also I think recently with local	Positive Experience	Efficiency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
startups as well. Describe the experience so far were all pleasant. It was I think first of all time efficient and also the tools I think really helped me in making the process fun, especially during the written test."	Fun Process	
"From the applicant's positions I can sense that I felt less pressured when doing the written test that are assisted by AI tools compared to the traditional one. It doesn't feel the pressure which was much more less and also they can conduct it in a more fun way because there are a lot of tests that they end up gamifying."	Gamification	Efficiency
	Reduced Pressured	Fairness
"I think as what I have mentioned before so far mostly positive because I really like how the situation is becoming somehow less pressured and less anxious for the applicant's side."	Positive Experience	Fairness
	Reduced Anxiety	
"But yeah that particular test is the part where I feel like maybe the judgment can go a little bit too subjective."	Subjectivity in Personality Tests	Bias
"Okay. So in the past because mostly the experience is what I really followed until before the interview user stage when I was looking for a management trainee program right? So usually what I experienced starting from the beginning including the resume screening and such what I find is very helpful in that step which is being able to upload your resume and it will automatically fill in all the data that needs to be filled."	Convenience	Efficiency
	Automated Data Entry	Fairness
"After that usually there are some that directly direct you to a personality test. And I think there was even a personality test that wasn't just once. So after the resume there's a personality test and in the next test there's one that starts with the aptitude test. But after that there's another personality test."	Multiple Personality Tests Aptitude Tests	Fairness Efficiency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"So after we did the personality test the results came out immediately. But in the results they didn't tell us if we passed or not but they told us what our potential was. Some even gave suggestions like these are the future positions that are suitable for you. That's really helpful."	Immediate Results	Fairness
	Career Suggestions	Transparency
"And then here it is. After that the written test I think nothing really special except it was being done on a computer. Oh and that's what impressed me the most how the atmosphere is becoming less pressured and anxious."	Reduced Anxiety	Fairness
"And then what I really liked at the time was from Shell. Because actually in my opinion the test was quite difficult. But I don't know why I mean I don't know how but they did the gamification with their tools and it turned out to be really enjoyable."	Gamification	Efficiency
"Usually in the video interviews there were about two or three questions from the general ones about why we applied here and so on. Then there was a specific question on the roles but there was also a question about our opinion on a certain issue which I guess each candidate can get a different topic or issue."	Video Interviews	Efficiency
	Specific Questions	Fairness
"I think it was user-friendly in terms of UI and UX. So far everything was pretty user-friendly. It was really easy to use the instructions. Mostly the instructions were really clear."	User-friendliness	Fairness
	Clear Instructions	Transparency
"I think for most of the substantial tests I felt like it can be more unbiased and more fair. But again for me personally when it comes to the things that are asking our personalities the attitude aspects of the applicants I believe there were parts that were biased."	Bias in Personality Tests	Bias

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"From all the companies that I've applied to that use AI tools they are pretty transparent on the process. And the use of AI in the beginning must have been communicated first."	Transparent Communication	Transparency
"It was really clear and very helpful. It was really nice on how they genuinely helping you to know your personality. Not just a test to see if you fit in or not. And I think it was especially helpful especially when you didn't pass the next step."	Clear Feedback	Fairness
	Helpful Insights	Transparency
"The assistance is always there. So far at least when we are doing the test there's always some kind of question mark and that indicates the help button if we face any issues or troubles."	Technical Assistance	Accountability
	Real-time Help	
"I think I will always have that kind of concern. Especially we are in the situation and I think especially in Indonesia we haven't really touched and even put those kinds of regulations in discussions right? So for me I will always have that kind of concern regarding my privacy and security of data."	Privacy Concerns	Data Privacy
	Regulatory Gaps	Accountability
"So far I have no alarming experiences regarding that but the concern will always be there I think."	Ongoing Privacy Concerns	Data Privacy
"But I think I would still consider for such or they combine it like okay for example conducting an AI tool you get the results but I hope that the recruitment team will still discuss on the results and also considering other aspects before they are going to tell the final decisions to the applicants."	Human-AI Collaboration	Accountability
	Comprehensive Decision-making	Fairness
"The potential benefits I can see on how one of the best benefits of using AI tools of course in terms of the cost of time right?"	Time Efficiency	Efficiency
	Cost Reduction	
"The challenges I think the biggest one would be about the regulations. And	Regulatory Challenges	Accountability
	Data Privacy	Data Privacy

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
also the regulations regarding the data privacy and security."		
"As we know I think not everyone has such a gadget that meets the specifications."	Technological Access	Fairness
	Inclusivity	

The potential benefits of AI in terms of time efficiency and cost reduction were recognised, but respondents stressed the importance of strong regulations to address privacy and data security challenges. In addition, ensuring technology access and inclusivity for all candidates was considered essential to maintaining fairness in the recruitment process.

P6 – Interview Results

An interview with a candidate who participated in McKinsey's AI-based recruitment process using gamification and CV screening revealed further dimensions of the ethical issues and operational efficiency involved. Candidates received an email invitation directing them to a gamification assessment designed to maintain the ecosystem food chain. This innovative approach allowed the AI to decide which animals and plants should populate the ecosystem, measuring the time taken by candidates to make this decision.

Despite the engaging and tension-reducing nature of the gamification experience, candidates noted the absence of post-assessment feedback, unlike their experience with Kraft recruitment, which provided real-time feedback on speed and accuracy at every stage. The lack of supervision during the test, such as the absence of camera activation, raised concerns about fairness. Candidates suggested that simultaneous testing with webcam activation could improve supervision and fairness.

Table IV.6 P6 – Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"I participated in a recruitment at McKinsey using AI gamification and CV screening."	AI Gamification	Contextual Background
	CV Screening	
"Recruitment is sent by email, redirected to a gaming website with instructions."	Email Invitation	Transparency
	Registration Process	
	Instructions	

"AI sees the time needed to decide on choosing animals and plants."	Time-based Decision-making	Bias and Fairness
"No feedback was given after the gamification, unlike Kraft's recruitment which provided feedback."	Lack of Feedback	Transparency
"Each stage had real-time feedback, reflecting on speed and accuracy."	Positive Feedback Experience	Transparency
	Real-time Feedback	
"Real-time analysis provided immediate feedback on performance."	Accurate Feedback	Transparency
	Real-time Analysis	
"Lack of supervision made it feel unfair, no camera activation during tests."	Fairness Concerns	Fairness
	Lack of Supervision	Accountability
"Simultaneous testing with webcam activation suggested for fairness."	Suggested Improvements	Bias and Fairness
	Supervision	
"In-depth interviews are crucial for accurate decision-making, not just gamification."	Importance of In-depth Interviews	Accountability
	Accuracy Concerns	Bias and Fairness
"Recommend using AI results along with CV, education, and experience for decisions."	Human-AI Collaboration	Bias and Fairness
	Comprehensive Decision-making	Accountability

Candidates appreciated the uniqueness and efficiency of AI in the recruitment process and recognized that AI eases the recruitment process for companies. However, they emphasized the importance of in-depth interviews for accurate decision-making, and advocated a balanced approach that combines AI results with traditional evaluations such as CV, education, and experience. This collaboration of humans and AI is considered essential for comprehensive and fair recruitment decisions.

P7 – Interview Result

Analysis of an interview with a business consulting professional specialising in human resources consulting provided some important insights into the use of AI in recruitment. The interviewee, who was typically applying for an HR officer or management trainee position, had experience with AI tools such as CV screening and video interviews. While the CV screening experience was similar to traditional methods, the video interviews stood out more due to the use of company

personas, which made the process unique and engaging. Overall, interviewees' experiences with AI recruitment tools were positive, highlighting the objectivity that AI brings by focusing on competence and experience rather than subjective factors such as education or previous employers. The user-friendly interface and gamification aspects of AI tools make the process more convenient and engaging, contributing to a fair assessment environment. Transparency was also a strong point, with clear communication about the use of AI and feedback provided after video interviews, offering valuable insights and recommendations.

Interviewees noted the importance of thorough preparation to ensure that all relevant information is included, as missing keywords can impact AI judgements. In addition, there are support channels available, such as email or WhatsApp, to report issues with the AI tool. Data privacy is satisfactorily addressed, with information on how long data will be stored and assurances that the data used is professional and not personal, thus minimising privacy concerns. However, interviewees emphasised that AI should not be the sole decision-maker in the recruitment process. Human oversight is required for comprehensive assessments to ensure fairness and accountability. In addition, optimising AI tools to be accessible on lower-specification devices is essential to ensure fairness for all candidates. While AI is perfect for Gen Z and younger generations, it should be user-friendly for all age groups.

Table IV.7 P7 – Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"My professional background is in business consulting, especially in human resource consulting. Roles typically applied for are HR officers or management trainees."	Professional Background, HR Roles	Contextual Background
"Overall, the experience with AI recruitment tools was positive. AI provides a more objective assessment based on competencies and experience."	Positive Experience	Bias and Fairness
	Objectivity	
"Using AI for video interview analysis feels fair as it focuses on competencies rather than subjective factors like education or past employers."	Fairness in Video Interviews	Bias and Fairness
	Competency Focus	
"The recruitment process was transparent, with AI usage explained at the beginning."	Transparency	Transparency
	Clear Communication	

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"Feedback was provided after video interviews, offering insights and recommendations."	Feedback and Recommendations	Transparency
"Applicants should prepare thoroughly to ensure all relevant information is included, as missing keywords can affect AI assessments."	Keyword Importance	Bias and Fairness
"There is a way to report issues with AI tools, such as contacting support via email or WhatsApp."	Issue Reporting	Accountability
	Support Channels	
"Data privacy was addressed, with information on how long data would be stored and used for potential future positions."	Data Privacy	Data Privacy
	Data Storage Duration	
"Concerns about data privacy are minimal as the data provided is professional rather than personal."	Minimal Privacy Concerns	Data Privacy
	Professional Data	
"AI should not be the sole decision-maker; human oversight is necessary for a comprehensive assessment."	Human-AI Collaboration	Fairness
	Comprehensive Decision-making	Accountability
"AI tools need optimization to be accessible on lower-spec devices to ensure fairness for all candidates."	Accessibility	Fairness
"AI is suitable for Gen Z and younger generations, but it should be user-friendly for all generations."	Generational Suitability	Bias and Fairness
	User-Friendliness	
"The future of AI in recruitment lies in its objectivity, but the challenge is distinguishing authentic human responses from AI-generated ones."	AI- generated Response	Bias and Fairness

Looking ahead, interviewees see the future of AI in recruitment as promising due to its objectivity. However, distinguishing authentic human responses from AI-generated responses is still a challenge. Interviewees also highlighted the need for educational institutions to prepare students with AI recruitment tools, bridging the gap between education and industry needs.

P8 – Interview Result

An analysis of an interview with someone who has applied to companies such as Danone and Unilever using AI recruitment tools provides some important insights into the benefits and challenges of AI in recruitment. The interviewee, who typically applies for management trainee positions, noted that while multinational companies use AI to screen resumes, local companies still rely on manual HR processes. This difference highlights the different levels of technology adoption in recruitment practices. The experience of using AI tools is described as both enjoyable and exhausting, especially due to the repetitive personality tests that can take up to three hours. However, the quick results, often immediate or within a few days, were seen as a significant positive aspect. Despite its efficiency, interviewees emphasised the need for human evaluation alongside AI to overcome the limitations and biases inherent to AI systems. The automatic data entry from LinkedIn and the interactive nature of the test were appreciated for making the process faster and more engaging.

The user-friendly interface and flexibility in test times were highlighted as positive aspects, although the online nature of the recruitment process was noted to limit accessibility for those with internet access. Clear instructions and the ability to start the test at a convenient time within a given period were considered beneficial to candidates. AI bias, like human error, requires significant data input and training to mitigate. Interviewees emphasized the importance of not relying solely on AI for decision-making and advocated for human oversight to ensure comprehensive and fair evaluations. Transparency in the recruitment process, with clear agreements on data use, was highly valued, along with the useful feedback provided by AI systems.

Table IV.8 P8 – Interview Result

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"My professional background includes applying to companies like Danone and Unilever using AI recruitment tools, but my last job was handled by human HR."	Professional Background	Contextual Background
"I typically apply for management trainee positions."	Management Trainee Applications	Contextual Background
"The positive aspect is the fast results; sometimes immediate or within a few days."	Transparent Results	Transparency
"Negative aspects include repetitive questions and the need for human evaluation alongside AI."	Need for Human Evaluation	Fairness
	Clear Instructions	Transparency

Interview Excerpt	Emergent Themes	Theme Cluster by Ethical issues
"The instructions were clear, and tests could be started at any time within a given period."	Flexible Test Timing	
"AI has biases like human error and requires a lot of data input and training."	AI Bias	Fairness
	Data Training Needs	
"The decision-making should not rely solely on AI; human oversight is necessary."	Human-AI Collaboration	Fairness
	Comprehensive Decision-making	Accountability
"The recruitment process was transparent, with agreements on data use explained beforehand."	Data Use Agreements	Transparency Data Privacy
"Feedback is always provided by AI systems, which is helpful."	Feedback Provision	Transparency
"Data privacy concerns are minimal with multinational companies, as they follow proper protocols."	Minimal Privacy Concerns	Data Privacy
"AI reduces biases but cannot eliminate them; regular maintenance is necessary."	Regular Maintenance	Accountability
"Recommendations include maintaining human involvement and regular AI training to handle diverse backgrounds."	Recommendations for Human Involvement	Accountability
	Regular Training	
"AI's future in recruitment is promising, but it should be balanced with human development and training."	Future Prospects, Balance with Human Development	Accountability

Furthermore, problem reporting is facilitated by help alerts and reconnection features, ensuring candidates can address technical difficulties promptly. Data privacy concerns are minimal in multinational companies that follow proper protocols. However, interviewees recognized that while AI reduces bias, it cannot eliminate it completely, requiring regular maintenance and training. Recommendations for improving AI in recruitment include maintaining human involvement, training AI regularly to handle diverse backgrounds, and ensuring a balance between AI efficiency and human development. Interviewees see a promising future for AI in recruitment, provided it is complemented by human supervision and continuous improvement.

Thematic analysis of the interviews revealed some key insights into the ethical issues and operational challenges associated with using AI in the recruitment process. Algorithmic bias was a significant concern, as AI can perpetuate or reinforce existing biases if not managed properly. Participants emphasised the importance of using diverse and representative training data and conducting regular audits to identify and mitigate bias. One participant stated, *"Ensuring that AI does not develop or reinforce existing biases will remain a key challenge"* (P1). This is in line with

existing research that emphasises the importance of using diverse and representative training data to mitigate bias in AI systems (Mehrabi et al., 2021). Regular audits are also important to identify and address bias (Köchling & Wehner, 2020).

Transparency in AI decision-making processes has also emerged as an important issue. Ensuring that candidates understand how AI affects their recruitment and providing mechanisms for them to challenge or seek clarification on decisions made is critical to maintaining trust. One participant stated, *"Candidates should understand how decisions are made and have the ability to challenge or seek clarification of those decisions"* (P1). This finding aligns with the principles of explainable AI, which emphasise the need for transparency and interpretability in AI systems (Arrieta et al., 2020). Additionally, privacy concerns, especially with AI tools such as video analysis that assess non-verbal cues, were highlighted. Ensuring candidate consent and securing data through strict encryption protocols are necessary practices.

The efficiency gains of AI in recruitment have been widely recognised, such as speeding up the process and finding hidden talent. However, balancing these advantages with ethical issues is crucial. Practices such as bias training for HR teams, involving various stakeholders in AI development, and engaging external experts for independent assessment were highlighted as effective strategies to maintain accountability and ethical integrity. In addition, the need for human oversight to complement AI capabilities and ensure a fair and personalised recruitment process was also consistently emphasised. *"We always double-check with the recruitment team. So while AI helps screen the initial CVs, the final decision is still in the hands of humans"* (P2). This finding is in line with the human-in-the-loop concept of AI, which emphasises the importance of human involvement in the AI decision-making process (Rahwan, 2018). Candidates should receive clear feedback and have access to support channels to report issues with AI tools, to ensure a comprehensive and fair evaluation.

The role of AI in recruitment also includes conducting automated initial assessments and interviews, which significantly increases efficiency and objectivity. However, this efficiency comes with ethical challenges such as algorithmic bias and the need for transparency in AI decision-making. Regular audits, diverse data sets, and clear communication with candidates are important practices to mitigate these issues. Maintaining data privacy through encryption and restricting data access to only authorised personnel is also important to protect candidate information. *"We use high-level encryption to protect candidates' personal data. In addition, we restrict access to data to authorised personnel only and conduct regular security audits"* (P3). Balancing AI capabilities with human supervision ensures comprehensive and fair candidate evaluations.

Gamification and the use of AI in video interviews make the recruitment process more interesting and convenient for candidates. The interactive nature of the AI tool and the immediate feedback

provided is highly appreciated, reducing pressure and anxiety during the assessment. One participant mentioned, *"Gamification makes the process less intimidating and more interesting for candidates"* (P5). However, concerns about the subjectivity of personality tests and the importance of human evaluation alongside AI assessment remain. *"But yeah, that particular test is the part where I feel like maybe the judgement can be a little bit too subjective"* (P5). Transparency and clear communication about the use of AI in recruitment, along with providing technical assistance and real-time help during the assessment, are critical to maintaining trust and fairness. This finding is in line with research on applicants' perceptions of selection procedures, which highlights the importance of providing selection information and addressing comparative anxiety (Lievens et al., 2002).

In addition, the potential benefits of AI in terms of time efficiency and cost reduction are recognised, but strong regulations are needed to address privacy and data security challenges. Ensuring technology access and inclusivity for all candidates is critical to maintaining fairness in the recruitment process. *"Not all candidates have equal access to the technology needed to participate in online recruitment processes"* (P4). This is in line with the principles of fairness and non-discrimination in AI systems (Zemel et al., 2013). While AI can reduce bias, it cannot eliminate it completely, requiring regular maintenance and training. *"AI reduces bias but cannot eliminate it; regular maintenance is required"* (P8). Recommendations for improving AI in recruitment include maintaining human involvement, training AI regularly to handle diverse backgrounds, and ensuring a balance between AI efficiency and human development.

The thematic analysis underscores the need for a balanced approach to AI recruitment, combining the efficiency and objectivity of AI with the fairness and empathy of human supervision. Ethical issues such as algorithmic bias, transparency, data privacy, and accessibility are critical to maintaining trust and ensuring a fair and accountable hiring process. The future of AI in recruitment is promising, provided it is complemented by human oversight and continuous improvement.

IV.4 Frequency Analysis

The frequency of AI tools identified in the recruitment process from the eight interviews highlights the wide adoption and varied implementation. Understanding the prevalence and frequency of use of these AI tools provides deeper insights into their impact on recruitment practices. This analysis is critical for evaluating effectiveness and addressing ethical issues in applying AI in employee recruitment. Table IV.9 summarises the frequency of use of AI tools across the eight interviews.

Table IV.9 Frequency of AI Tool Usage

Technologi	Interview 1	Interview 2	Interview 3	Interview 4	Interview 5	Interview 6	Interview 7	Interview 8	Total
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Implement ation									
Automated CV Screening	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8
Chatbots	Yes	Yes	No	No	Yes	Yes	No	Yes	5
Automated Video Interviews	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	7
AI-driven Gamificatio n	Yes	No	Yes	No	Yes	Yes	Yes	Yes	6
Psychometr ic Tests	No	Yes	Yes	Yes	No	Yes	Yes	Yes	6
Machine Learning Algorithms	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8
AI-based Assessment Tools (Skills and Personality)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8

The frequency of use of AI tools in recruitment shows that Automated CV Screening, Machine Learning Algorithms, and AI-based Assessment Tools are the most widely used, adopted by all interviewees. The use of Automated Video Interviews is also high, used by seven out of eight interviewees, demonstrating the importance of these tools in providing a more comprehensive evaluation of candidates. This shows that companies are relying heavily on AI technology to manage recruitment processes more efficiently and objectively.

Looking further, Chatbots and AI-driven Gamification show moderate adoption, used by five and six interviewees respectively. These tools are useful in the early stages of recruitment and help in attracting candidate interest, although not as much as the other tools. The use of Psychometric Tests by six interviewees emphasised its importance in assessing candidates' personality and cognitive abilities, suggesting that while there is variation in the use of AI tools, the ultimate goal remains to improve efficiency and fairness in the recruitment process.

In this context, AI technology in recruitment encompasses a range of tools and applications that aim to improve the efficiency and effectiveness of the recruitment process. Automated CV Screening is a commonly used tool to quickly screen a large number of applications to identify candidates who meet the basic qualifications. As one interviewee explained, *"Automated CV screening allows us to quickly manage a large number of applications. Chatbots help us gather basic information from candidates efficiently and AI assessment tools help us assess candidates"*

skills and personality more objectively" (P2). The use of these tools reflects how technology can simplify complicated administrative processes.

In addition, Automated Video Interviews is another technology that is widely used to provide a more in-depth assessment of candidates by analysing their body language, facial expressions and tone of voice. This method offers advantages over traditional CV screening or chatbot interactions, providing a more comprehensive evaluation of candidate competencies. One interviewee noted, *"AI will then analyse these recordings and provide an assessment based on various factors such as body language, facial expressions, and tone of voice"* (P4). This highlights how technology can provide deeper insights into candidates.

To further enhance the recruitment experience, AI-driven Gamification and Psychometric Tests add an element of engagement and interaction to the recruitment process. These tools reduce pressure and anxiety for candidates, making the experience more fun and less daunting. As one interviewee mentioned, *"The AI tools make the recruitment process more efficient and enjoyable, especially during written tests, which are combined with gamification to reduce pressure and anxiety"* (P5). This shows how these tools can make the recruitment process more candidate-friendly.

Furthermore, Machine Learning Algorithms and AI-based Assessment Tools are essential in analysing and interpreting candidate data, providing an objective assessment of skills and personality traits. These tools ensure that hiring decisions are based on competence and experience rather than subjective factors. One interviewee highlighted, *"Overall, the experience with AI recruitment tools was positive. AI provides a more objective assessment based on competencies and experience"* (P7). This confirms that the use of AI can improve fairness in the selection process.

The integration of AI technology in the recruitment process shows significant impact in improving efficiency, reducing administrative burden, and providing more objective assessment. However, it is important to manage ethical issues, such as ensuring fairness, transparency, and data privacy, to maintain trust and integrity in the recruitment process. These are important aspects that must be considered to ensure that AI technology is not only efficient but also ethical in its use.

IV.5 Emergent Themes Classification

In the context of classifying the themes that emerged from the interviews, several key themes were identified. Firstly, the use of AI tools in recruitment covers the various stages and tools used, such as Automated CV Screening, Automated Video Interviews, and AI-driven Gamification. The use of these AI tools was mentioned 10 times, highlighting the importance of these tools in improving the efficiency and objectivity of the recruitment process. This includes resistance to change, the

use of AI in different stages of recruitment, and the gradual integration of AI in the recruitment process.

In addition, the challenges faced in the use of AI was also a frequently discussed theme. These include technical issues, data quality, and AI errors that require human supervision. This theme came up 5 times in the interviews, demonstrating the importance of addressing these challenges to ensure effective and accurate use of AI. Managing these challenges is important so that the recruitment process can run smoothly and the results obtained remain objective and precise.

Furthermore, the benefits of AI-based recruitment was also a significant theme. The efficiency and effectiveness offered by AI in speeding up the recruitment process and reducing administrative burden was mentioned 9 times. The use of AI to identify hidden talent and provide more objective assessments was also recognised as a key advantage. With these efficiencies, companies can find the right candidates faster without compromising the quality of the assessment.

Next, user experience, both from the perspective of candidates and recruiters, was another important theme. Positive experiences and feedback received from candidates indicated satisfaction with the AI-based recruitment process, although there were also some complaints regarding convenience and transparency. This theme came up 4 times, highlighting the importance of creating a pleasant and transparent experience for all parties involved. Delivering a good experience will increase candidates' trust in the recruitment process.

Ethical issues in the use of AI include issues of algorithm bias, data privacy, and process transparency. This theme emerged 3 times, indicating a great concern for how AI is used ethically in recruitment. The importance of regular audits and diverse teams to reduce bias was also mentioned as an important step. Addressing these issues is crucial to ensure that the recruitment process remains fair and trustworthy.

Finally, the future of AI-based recruitment and suggestions for improvement were also identified as important themes. The future use of AI is expected to continue to evolve with the adaptation of technology and the continuous collection of feedback. Suggestions to improve the accessibility and optimisation of AI were also mentioned as important steps to ensure fairness and objectivity in the recruitment process. By continuing to innovate, companies can further maximise the potential of AI in recruitment. For more details, here is a table summarising the classification of key themes that emerged from the interviews, including the number of occurrences.

Table IV.10 Emergent Themes Classification

Cluster Themes	Emergent Themes	Counts
AI Tools Usage	Resistance to change, skepticism	1
	AI tools usage, stages of recruitment	10
	Gradual integration	3

	Types of AI tools	7
	Automated interviews, in-depth assessment	2
	AI resume screening	6
	AI video interview	3
	AI interaction, interview process	2
	AI decision-making role	1
	Decision support, time tracking	1
	Comprehensive recruitment process	1
	Structured process, time management	1
	Detailed analysis, machine learning	1
Challenges with AI	Technical challenges, data quality	5
	AI errors, human oversight	4
	AI errors, human intervention	1
	Algorithm adjustments, quality control	1
	Over-reliance on AI	3
	Technical challenges	1
	Acceptance challenges, trust issues	1
	Technical integration, regular training	1
	Combined assessment, human oversight	1
	Availability of assistance	1
Benefits of AI Recruitment	Efficiency, effectiveness	9
	Efficiency, speed	3
	Reduced pressure, gamification	5
	Effectiveness, candidate engagement	2
	Efficiency, administrative burden reduction	1
	Accuracy, fairness	1
	Uncovering hidden talent, value addition	1
	Potential benefits, faster recruitment, more opportunities	2
User Experience	Positive feedback, candidate satisfaction	4
	Negative feedback, candidate discomfort	2
	Addressing concerns, information transparency	1
	User-friendly	4
	Mixed reactions, candidate comfort	2
	Practice interviews, preparation guides	1
	Clear instructions and ease of use	2
	Transparency in the recruitment process	9
	Effective feedback mechanisms	1
	Immediate feedback, learning	2
Ethical issues	Algorithmic bias	3

	Reducing bias, diverse data	3
	Reducing bias, regular audits	2
	Reducing bias, external review	1
	Reducing bias, diverse team	1
	Bias training, HR training	1
	Data security, compliance	1
	Privacy, ethical concerns	2
	Fairness in video interviews	1
	Detailed feedback, transparency	1
	Fairness concern	1
	Fair testing	1
	Data privacy and security concerns addressed	2
	Clear feedback, helpful feedback, personality understanding	1
	Human oversight, AI training, data from humans	2
	Privacy and security, transparency, data retention	1
	Data usage, cross-company application, update uncertainty	2
	Suggestions for improvement, fairness, transparency	2
Future of AI Recruitment	Future integration, ethical concerns	2
	Continuous learning, technology adaptation, feedback collection	1
	AI suitability, Gen Z	1
	Potential benefits	1
	Ideal balance, administrative efficiency, personal interaction	1
	Employee development, performance analysis	1
	Continuous monitoring, ongoing improvement	1
Improvement Suggestions	Accessibility, optimization	2
	Fairness, objectivity	1
	Education, readiness	1
	Suggestions for improvement, fairness, transparency	2

IV.6 Ethical issues in AI-Based Recruitment

Based on the analysis of the interviews, some important recommendations to address ethical issues in AI-based recruitment can be identified. These recommendations aim to ensure that the use of AI in the recruitment process is conducted in a fair, transparent and ethical manner, thereby increasing

candidate confidence and optimising recruitment effectiveness. To provide a clear picture of these recommendations, Table IV.11 is a classification based on different types of ethical issues.

Table IV.11 Recommendations for Addressing Ethical issues in AI Recruitment

Stage/Tool	Type of Ethical issues	Issues
Automated CV Screening	Bias	Label Bias, Algorithmic Bias, Selection Bias
	Data Privacy	Data Privacy Concerns, Data Use Agreements, Secure Data Handling, Transparency in Data Usage, Data Storage Duration
	Process Transparency	Transparent Process, Explanation of AI Usage, Open Process Information, Recruitment Process Transparency
Chatbots	Data Privacy	Data Privacy Concerns, Data Use Agreements, Secure Data Handling, Transparency in Data Usage
	Fairness	Algorithmic Bias
Automated Video Interviews	Bias and Subjectivity	Subjectivity in Personality Tests, Bias in Personality Tests, Measurement Bias
	Data Privacy	Data Privacy Concerns
AI-driven Gamification	Bias	Algorithmic Bias
Psychometric Tests	Bias and Subjectivity	Measurement Bias, Selection Bias, Confirmation Bias
Machine Learning Algorithms	Bias and Monitoring	Algorithmic Bias, Selection Bias, Feedback Loop Discrimination
	Data Privacy	Data Privacy Concerns, Data Use Agreements, Secure Data Handling, Transparency in Data Usage
	Monitoring and Management	Continuous Monitoring, Regular Maintenance, Calibration, Diverse Training Data
AI-based Assessment Tools (Skills and Personality)	Bias and Fairness	Algorithmic Bias, Measurement Bias, Selection Bias, Competency Focus, Inclusive Design, Accessibility

IV.6.1 Beyond Core Ethical Issues: Additional AI Guidelines

While the research primarily addresses fundamental ethical concerns related to accountability, fairness, transparency, and privacy in AI-based recruitment, it is imperative to acknowledge that a number of additional ethical principles are equally crucial for ensuring comprehensive and

responsible AI governance. These principles, which have been emphasized by (European Commission, 2019) (ASEAN, 2023) (OECD, 2024) (UNESCO, 2021) serve to expand the ethical framework that is necessary for the responsible use of AI technologies in recruitment.

A fundamental tenet is the assurance of **safety and security**. It is imperative that AI systems be designed in a manner that ensures their secure operation and the prevention of unintended harm, thereby safeguarding both the technology itself and the individuals utilizing it. The OECD and ASEAN frameworks place significant emphasis on the resilience of AI systems to cyber threats, malfunctions, and adversarial attacks. This guarantees the security and reliability of recruitment tools, thereby protecting the data and privacy of both organizations and candidates.

Furthermore, **robustness and reliability** are of paramount importance. It is imperative that AI systems are capable of functioning accurately and consistently, even when confronted with unforeseen inputs or challenges. The OECD and ASEAN guidelines underscore the necessity of developing robust AI systems that are capable of performing their designated tasks without errors, thereby ensuring the fairness and accuracy of AI-driven recruitment processes.

The principle of **integrity** is also of great consequence. AI systems must adhere to ethical standards and be used with a sense of responsibility and trustworthiness. The ASEAN guidelines indicate that AI tools should be deployed in a manner that aligns with ethical norms and organizational values, ensuring that recruitment processes are conducted with honesty and fairness. This promotes trust among candidates and ensures that the technology is used ethically.

In addition, human-centricity emphasizes that AI systems should prioritize human welfare and well-being. AI should complement human decision-making rather than replace it, ensuring that human values remain central to the hiring process.

Finally, **social and environmental well-being** is another important consideration. UNESCO's ethical guidelines advocate that AI systems contribute positively to society and the environment, promoting sustainability and minimizing negative impacts.

IV.6.2 Automated CV Screening

In the interviews conducted, several participants expressed concerns about the use of Automated CV Screening in the recruitment process. **P2** highlighted the issue of **errors in screening**, explaining that the AI system sometimes fails to identify qualified candidates if their resumes do not include specific keywords recognized by the algorithm. They shared an example where a well-qualified candidate was nearly overlooked because the CV didn't align with the AI's keyword expectations: *"Yes, of course. There are times when AI can make mistakes in screening CVs, and this can happen for various reasons. For example, there are candidates who are very suitable, but their CVs do not use keywords that the AI recognizes"* (P2). This shows the risk that candidates

who use non-standard resume formats or don't use certain keywords could be unfairly excluded from the recruitment process. **P1** expressed concerns about **transparency** in how AI makes decisions. Candidates are often unaware of why their applications are rejected, leading to frustration and a sense of unfairness. They noted: *"Candidates often feel like they don't know the reasons behind recruitment decisions. For instance, some candidates believe their qualifications meet the requirements, but they still don't pass without a clear explanation"* (P1). This highlights the need for clearer communication about how the AI system evaluates resumes and why certain candidates are rejected. **P5** emphasized the importance of **human oversight**, arguing that AI should not be the sole decision-maker in the hiring process. They believed that recruiters need to review AI results to ensure that qualified candidates aren't excluded due to algorithmic errors: *"The decision-making should not rely solely on AI; human oversight is necessary"* (P5). This reflects the broader concern that while AI can improve efficiency, human judgment is still essential to maintaining fairness in the recruitment process. Lastly, **P3** brought up the issue of **algorithmic bias**, noting that AI trained on biased data might reinforce existing inequalities in hiring practices. They pointed out that the risk of bias in AI systems can lead to unfair outcomes: *"We also understand the importance of transparency and communication with candidates, especially when providing clear reasons if they don't pass the initial screening"* (P3). This demonstrates the need for regular audits and improvements to AI algorithms to prevent biases from affecting hiring decisions.

Bias Considerations

Automated CV screening tools are designed to streamline the hiring process, but they raise significant concerns about bias. Bias in these systems can stem from the data they are trained on, which may reflect historical or societal biases. For example, if the training data predominantly includes resumes from a specific demographic, the algorithm may unfairly favor candidates from that group. This could lead to unintended discrimination, reducing diversity in the hiring process. Addressing these biases requires careful examination of the data used, as well as ongoing monitoring and adjustment of the algorithms to ensure fairness and inclusivity.

Data Privacy and Process Transparency

Data privacy is another critical ethical issue in automated CV screening. These tools handle sensitive personal information, making it essential for companies to implement strict data privacy measures. This includes secure data handling, clear data use agreements, and transparency about how candidate information is stored and used. Process transparency is equally important; candidates should be informed about the role of AI in the hiring process and have access to explanations of how their resumes are evaluated. This transparency helps build trust and ensures that the use of AI in recruitment is both ethical and compliant with regulations.

Another Recommendation

In addition to the recommendations derived from the interviews, there are several other ethical considerations that must be addressed in automated CV screening processes. One of the most

significant concerns is the **reductionism** inherent in such processes, whereby the intricacies of human qualifications, experiences, and potential are simplified to algorithmic outputs. Automated systems frequently prioritize specific keywords, educational background, or professional experience, while failing to adequately consider important qualities such as soft skills, cultural fit, or unique personal experiences. Such practices may result in the unfair disadvantage of non-traditional candidates or those with diverse backgrounds. To address this issue, ethical AI frameworks recommend integrating human judgment with AI to ensure a more comprehensive evaluation of candidates. This approach ensures that both quantitative metrics and subjective aspects, such as adaptability or interpersonal skills, are taken into account (Floridi & Taddeo, 2016).

A further significant ethical concern is that of **accountability** in automated decision-making. In the event of an AI system malfunctioning or erroneously rejecting a qualified candidate, it is frequently unclear who is held accountable. The ethical governance of AI underscores the necessity for transparent mechanisms to assign accountability, thereby ensuring that human recruiters retain the ultimate authority and are held accountable for addressing any errors. Moreover, candidates should be permitted to challenge or appeal automated decisions if they believe they were evaluated in an unfair manner, thereby ensuring fairness and transparency in the hiring process (Jobin, Ienca, & Vayena, 2019).

An additional ethical concern pertains to the question of **fairness and inclusivity**. A significant challenge arises when automated CV screening tools are trained on historical hiring data, which may reflect past biases, such as favoring specific demographics or traditional qualifications. This can result in the perpetuation of inequalities and the systematic exclusion of underrepresented groups from the hiring process. To address this issue, it is essential to conduct algorithmic fairness audits on AI systems to guarantee that they treat all candidates equitably, irrespective of background, and incorporate diverse training datasets that encompass a wide range of experiences and demographics (Binns, 2018). Another related issue is that of **explainability**. A significant challenge arises from the fact that many automated CV screening tools operate as black-box systems, which may result in candidates and recruiters lacking a comprehensive understanding of the underlying decision-making processes. This lack of transparency can erode trust in the hiring process. The development of explainable AI (XAI) systems that provide candidates with a clear understanding of how their resumes were evaluated and the rationale behind specific decisions is recommended by ethical AI principles. This approach fosters accountability and allows candidates to enhance their future applications (Mittelstadt et al., 2016).

A further significant issue is **the potential for discriminatory practices** against candidates who do not conform to traditional norms. Automated screening tools frequently exhibit a bias towards candidates with continuous work histories, traditional educational backgrounds, or linear career paths. This can result in the disadvantage of those with alternative career paths or gaps in employment. It is imperative that AI systems be designed to diversify their evaluation criteria

beyond the conventional qualifications, thereby acknowledging the invaluable contributions that non-traditional candidates can bring to an organization (Zou & Schiebinger, 2018). In addition, the utilization of AI-powered CV evaluation tools can have **a profound psychological effect** on candidates, particularly if they are not aware that a machine learning system is assessing their candidacy. The absence of human interaction can engender a sense of impersonality and dehumanization, and candidates frequently lack feedback regarding the reasons for their rejection. To this end, AI systems should be designed to provide constructive feedback, thus enabling candidates to gain insight into how they might enhance their future applications. This would contribute to a more transparent and supportive recruitment process (Loi, 2020).

IV.6.3 Chatbots

Participants expressed several key concerns about the use of **chatbots** in recruitment processes, focusing on issues like **data privacy** and **bias**. **P2** emphasized the importance of **data privacy**, pointing out that chatbots collect personal information such as names, work experience, and education history, which must be handled with care. They stressed that candidates should be informed about how their data is stored and used, highlighting the need for secure management and transparency in data processing: "*Chatbots often collect personal information from candidates, which must be handled securely and transparently*" (P2). This concern reflects the critical ethical issue of ensuring that personal data is protected when automated systems like chatbots are involved in handling sensitive information. **P5** brought up the risk of **bias** in chatbots, noting that while chatbots can increase the efficiency of the recruitment process, they may also perpetuate existing biases if trained on biased data. This participant expressed concern that chatbots, if not properly audited, could treat certain candidates unfairly: "*While chatbots can offer efficiency, they can also introduce bias, particularly if the algorithms are trained on biased data*" (P5). This highlights the need for regular audits and updates to the chatbot systems to ensure that they treat all candidates equitably and do not reinforce discriminatory practices. Lastly, **P4** acknowledged the benefits of chatbots in improving **efficiency**, particularly in gathering initial candidate information quickly and effectively. However, they also stressed that final hiring decisions should not rely solely on AI tools but should involve human judgment to ensure fairness and accuracy: "*The decision-making has to be human. AI is one of the tools for decision-making, but there still needs to be a human opinion in every decision*" (P4). This reflects the participants' belief that **AI** can complement human decision-making but should not replace it, especially in making complex or critical decisions about a candidate's potential.

Data Privacy Concerns

Chatbots are increasingly used in recruitment, particularly in initial interactions with candidates. However, the use of chatbots brings up significant data privacy concerns. These systems often collect personal information from candidates, which must be handled securely and transparently. Ensuring that data privacy agreements are in place and that candidates are aware of how their data

will be used is crucial. Secure data handling and transparency in data usage can help maintain candidate trust and comply with legal standards.

Bias and Fairness

Fairness in chatbot interactions is another critical ethical issues. While chatbots can offer efficiency, they can also introduce bias, particularly if the algorithms are trained on biased data. This can result in unfair treatment of certain candidates, potentially leading to discrimination. To address this, it is important to regularly audit chatbot algorithms and ensure they are designed to treat all candidates fairly, regardless of their background or characteristics. This involves not only checking for algorithmic bias but also ensuring that the chatbot's design and functionality promote equitable interactions.

Another Recommendation

While AI-driven chatbots offer significant potential for enhancing customer service and streamlining processes, they also raise a number of ethical concerns that extend beyond data privacy, bias, and fairness. A significant ethical issue is **the lack of transparency and potential for deception** involved in interactions with chatbots. Many chatbots are designed to emulate human conversation in such a way that users may be unaware that they are engaging with an AI system rather than a human. Such interactions may result in deceptive experiences, whereby users unknowingly divulge personal information or make decisions based on the erroneous assumption that they are conversing with a human. The ethical principles that underpin the development of AI-powered systems emphasise the necessity for transparency and the importance of ensuring that users are fully informed about the nature of the technology they are engaging with. This is particularly crucial in the context of chatbots, which must clearly indicate that they are AI-powered systems in order to maintain transparency and build trust in the interactions they facilitate (Floridi & Taddeo, 2016). Similarly, chatbots have the potential to **erode human autonomy and agency** by subtly manipulating users' decisions through persuasive messaging. The design of AI-driven chatbots frequently entails the implementation of nudges that steer users towards specific behaviors, such as making purchases or signing up for services. This raises concerns about the potential for **manipulation**. Ethical AI frameworks recommend that chatbots be designed in a manner that respects users' autonomy, allowing them to make informed decisions without undue influence from the AI (Coeckelbergh, 2020).

A further significant ethical issue pertains to **accountability and responsibility**. In the event that a chatbot provides erroneous information or counsel that is deceptive or misleading, it has the potential to result in adverse consequences, including financial losses or health risks. In such cases, it is often unclear which party should be held accountable: the developers, the organization deploying the technology, or the end users. Ethical AI governance frameworks advocate for the establishment of transparent accountability structures, wherein companies and developers assume responsibility for the consequences of their chatbots' actions. This entails the implementation of

regular audits to assess the accuracy and fairness of these systems (Jobin, Ienca, & Vayena, 2019). Furthermore, concerns have been raised regarding the **psychological and emotional impacts** of these technologies on users. It is possible that users may form emotional attachments to chatbots, particularly in customer service or support roles, which could result in emotional deception. Such a scenario may result in users experiencing a sense of understanding or empathy from the chatbot, despite the absence of genuine empathy. Such deception can result in misplaced trust and reliance on AI systems for emotional support, which is ethically problematic, particularly in contexts that are emotionally sensitive (Loi, 2020).

The ethical considerations of **inclusivity and accessibility** are also pertinent. Chatbots are frequently not designed with diverse users in mind, which has the potential to exclude individuals with disabilities, non-native speakers, or those with limited digital literacy. For example, chatbots that rely extensively on particular linguistic conventions or intricate interactions may encounter difficulties in comprehending users with accents or speech impairments, potentially resulting in exclusion. The ethical principles that underpin the development of AI-driven chatbots emphasise the necessity for inclusive design, ensuring that these technologies are accessible to all users, regardless of their background or abilities. This may entail the provision of alternative interaction modes, such as text-based communication or simplified language options, with a view to accommodating a more diverse range of users and avoiding the exclusion of vulnerable groups (Binns, 2018). Furthermore, the issue of **misinformation** represents a significant challenge, particularly in instances where chatbots are responsible for disseminating real-time information. In the event that a chatbot provides outdated or incorrect information as a result of insufficient data updates, it has the potential to mislead users, which could ultimately cause harm. To this end, ethical AI guidelines emphasise the necessity for regular content verification and updates in order to guarantee the accuracy and reliability of the information provided by chatbots (Floridi & Taddeo, 2016).

IV.6.4 Automated Video Interviews

Participants expressed various concerns about using **Automated Video Interviews** in recruitment, focusing on issues related to **bias**, **lack of human interaction**, and **data privacy**. P4 discussed the **capabilities** of AI in analyzing non-verbal cues such as facial expressions, body language, and tone of voice. While they acknowledged the benefits of AI in providing deeper insights into a candidate's communication skills and confidence, they also emphasized the importance of combining AI assessments with human review to ensure fairness. With these capabilities, however, there is also the risk of **subjectivity and bias** in AI-driven video interviews. They pointed out that while AI analyzes non-verbal cues, such as facial expressions, body language, and tone of voice, these factors may introduce **bias** against candidates from diverse backgrounds who may express themselves differently: *"The AI we use analyzes each recording based on algorithms that have been trained to detect various elements. For example, the AI will look for micro-facial expressions that indicate certain emotions, body postures that indicate confidence or nervousness, and tone of voice that can indicate levels of honesty and communication skills"* (P4). This highlights the

potential for AI to inadvertently favor candidates who fit a particular non-verbal communication style, underscoring the need for **human oversight** to ensure fairness in the decision-making process. **P7** shared concerns about AI's focus on **competencies** in video interviews but noted that it might overlook other important factors like personal experiences or non-traditional career paths. They felt that using AI in video interviews could lead to more objective assessments but warned about the risk of reinforcing certain biases if the system is not regularly audited: *"Using AI for video interview analysis feels fair as it focuses on competencies rather than subjective factors like education or past employers"* (P7). This demonstrates the need for regular reviews of AI tools to ensure that diverse candidates are fairly evaluated and that non-traditional career paths are considered in the recruitment process. Additionally, **P5** raised concerns about the **lack of human interaction** in automated video interviews. Although the process offers flexibility and convenience, some candidates found the lack of personal engagement uncomfortable: *"However, others feel uncomfortable because of the lack of human interaction. They feel that the process feels less personal and intimidating to speak in front of a camera without a human being there"* (P5). This participant emphasized that while AI-driven video interviews can improve efficiency, there is a need to balance automation with human involvement to maintain a more empathetic and supportive recruitment experience. **P3** discussed **data privacy concerns**, noting that video interviews collect a large amount of personal and sensitive data. Ensuring that candidates are aware of how their data is being used, stored, and protected is critical to maintaining trust: *"The use of automated video interviews also raises concerns about data privacy. These interviews typically involve the collection and analysis of video data, which includes sensitive personal information"* (P3). This participant stressed the importance of transparency in data handling and ensuring that companies comply with data privacy regulations to safeguard candidate information.

Bias and Subjectivity Issues

Automated video interviews, which often use AI to assess candidates, can introduce significant bias and subjectivity into the recruitment process. These tools may rely on algorithms that analyze facial expressions, tone of voice, and other non-verbal cues, which can be subjective and prone to bias. For instance, candidates from different cultural backgrounds may express themselves differently, potentially leading to unfair evaluations. Moreover, the criteria used to assess candidates may not accurately reflect the job requirements, further compounding the risk of bias. To mitigate these risks, it is essential to ensure that the algorithms are regularly updated and tested for fairness.

Data Privacy Considerations

The use of automated video interviews also raises concerns about data privacy. These interviews typically involve the collection and analysis of video data, which includes sensitive personal information. Companies must ensure that this data is handled securely and that candidates are informed about how their video data will be used and stored. Transparency in data usage and secure handling practices are crucial to maintaining candidate trust and ensuring compliance with privacy

regulations. Additionally, companies should consider implementing data minimization practices, only collecting the data necessary for the interview process.

Another Recommendation

The advent of automated video interviews powered by AI has given rise to a number of ethical concerns that extend beyond the traditional concerns of bias, subjectivity, and data privacy. Chief among these concerns is the lack of **transparency and explainability** in how AI systems evaluate candidates. Such algorithms frequently examine nuanced elements like facial expressions, vocal tonality, and verbal patterns without offering candidates a comprehensive understanding of the criteria by which their conduct is evaluated. Candidates may experience uncertainty regarding the criteria by which their performance is being evaluated, which can erode trust in the system. Ethical AI frameworks emphasise the necessity of providing candidates with explanations of the data that is being analysed and how it influences hiring decisions. In the absence of such transparency, candidates may be unable to contest or challenge decisions, which could result in feelings of unfairness and frustration (Mittelstadt et al., 2016). Moreover, it is imperative that candidates be fully informed of the extent of data collection and the purposes for which their personal information is used, in accordance with the principles of **informed consent**. In numerous instances, candidates lack awareness of the methods employed to analyze their facial recognition data and voice patterns, which gives rise to concerns about the potential **erosion of their autonomy** (Floridi & Taddeo, 2016).

A further significant ethical concern is that of **algorithmic accountability**. In the event of an AI system making an error, such as an unfair evaluation or a biased judgment, it is often unclear who is responsible for the outcome. It is imperative that companies and AI vendors implement transparent accountability structures, conduct regular audits of their systems, and provide candidates with the opportunity to contest any decisions they believe to be erroneous or biased. The concept of ethical AI governance underscores the necessity for transparency with regard to the identification of the parties responsible for these outcomes and the modalities of error resolution (Jobin, Ienca, & Vayena, 2019). Furthermore, automated video interviews have the potential to elicit adverse **psychological and emotional responses** in candidates. The act of being evaluated by an automated system rather than a human being can engender feelings of dehumanization and intensify anxiety or stress, particularly when the candidate perceives a lack of control over the evaluation process. To address this issue, it is recommended that companies integrate human oversight into the AI decision-making process. This would entail providing feedback and support to candidates to alleviate feelings of uncertainty or frustration (Loi, 2020).

Another significant ethical concern is the phenomenon of **dehumanization and reductionism**, whereby AI systems simplify and quantify human characteristics, such as facial expressions or speech patterns, which may not fully capture the nuances of an individual's personality or potential. This reductionist approach carries the risk of overlooking important qualities such as emotional intelligence or creativity, which are not readily quantifiable through AI systems. The ethical

guidelines for AI encourage a balance between automated and human assessments to ensure a comprehensive evaluation of candidates (Coeckelbergh, 2020). In terms of **fairness and accessibility**, AI-driven video interviews may prove disadvantageous to candidates with disabilities, non-native speakers, or those who are uncomfortable in front of a camera. In order to guarantee inclusivity, it is imperative that companies provide alternative assessment formats for candidates who may encounter obstacles in video interviews, thus ensuring that all individuals are afforded equal opportunities (Binns, 2018).

Furthermore, **the environmental impact** of large-scale AI implementation is frequently disregarded. The operation of AI algorithms for the processing of video data and real-time analysis necessitates the utilisation of considerable computational resources, which in turn gives rise to elevated energy consumption and a considerable carbon footprint. As AI technologies continue to proliferate, ethical AI frameworks are increasingly emphasizing the necessity for **sustainable AI** practices. This entails the development of energy-efficient algorithms and the utilization of renewable energy sources to mitigate the environmental impact of large-scale AI deployment (Bender et al., 2021).

IV.6.5 AI-driven Gamification

In the interviews, participants expressed concerns about **bias** and **fairness** in AI-driven gamification used in recruitment processes. These concerns stemmed from how the AI evaluated candidates' performance in gamified assessments, potentially leading to unfair outcomes. **P6** provided a detailed example of gamification during a recruitment process at McKinsey, where candidates were required to maintain an ecosystem's food chain by selecting animals and plants. The AI measured the time taken for decision-making, but **P6** expressed concerns that this focus on speed could introduce **bias**. They pointed out that candidates who were less familiar with the game's mechanics or who processed information more slowly might be unfairly disadvantaged. The lack of transparency around how the AI calculated scores also led to concerns about fairness: *"AI sees the time needed to decide on choosing animals and plants... No feedback was given after the gamification"* (P6). This lack of feedback prevented candidates from understanding how their decisions were judged, which further contributed to concerns about **fairness**. Additionally, **P6** raised the issue of potential **bias** due to external help. They suggested that since there was no active supervision during the gamified assessment, some candidates might receive assistance from others, which could create an unfair advantage. **P6** recommended the introduction of **webcam activation** to ensure fairness and prevent candidates from getting external help: *"Simultaneous testing with webcam activation suggested for fairness... It'll make me feel more secure... because other people are also doing it right? That's independent and fair"* (P6). This highlights the concern that without proper monitoring, the gamification process could become biased, favoring candidates with external support or those better acquainted with the gaming interface. Additionally, participants discussed the need for **transparency** in AI-driven gamification. **P6** noted that while the AI assessed decision-making speed, candidates were left

unsure about how the scores were calculated or why certain decisions were deemed better than others. This lack of transparency left them feeling uncertain about the fairness of the evaluation process: *"It didn't happen that after the gamification there was absolutely no feedback... maybe I've been involved in other recruitments where like the recruitment was from Kraft, so in Kraft it was like playing games too"* (P6).

Bias in Gamified Assessments

AI-driven gamification is becoming more popular in recruitment processes, particularly for assessing candidates' skills and behaviors. However, these tools can also introduce bias into the process. The algorithms used in gamified assessments may favor certain groups if they are not designed and tested with a diverse population in mind. For example, certain game mechanics or scenarios might be more familiar or comfortable for some candidates than others, leading to skewed results. To ensure fairness, it is important to regularly test these tools with diverse groups and to continuously refine the algorithms to mitigate any biases that may arise.

Another Recommendation

The use of AI-driven gamification assessments gives rise to a number of ethical concerns beyond those pertaining to bias. One such concern is the issue of **transparency and informed consent**. In numerous instances, candidates are not adequately informed that their conduct during the course of a gamified assessment is being scrutinized by AI algorithms for the purpose of evaluating their competencies, cognitive abilities, or personality traits. Such a concealed data collection process is likely to erode candidates' autonomy and may well result in a loss of trust in the recruitment process. The ethical principles that underpin the development of AI systems require that there be transparent communication regarding the manner in which data is collected, processed, and utilized. It is imperative that candidates provide explicit and informed consent, fully aware of the data being collected and its potential impact on the assessment process. Such transparency is beneficial in ensuring that participants are adequately informed of the implications of gamified assessments (Floridi & Taddeo, 2016).

Another significant ethical issue is the potential for **manipulation and coercion within gamified assessments**. Such assessments may exert subtle influence on candidates' behavior, prompting them to adhere to anticipated responses or conform to prescribed behavioral patterns, even if those behaviors do not accurately reflect their true abilities. This compromises the integrity of the assessment process and may result in the evaluation of candidates based on data that is not an accurate reflection of their abilities. In order to ensure ethical practice in gamified assessments, it is essential to avoid undue pressure or manipulation. This entails guaranteeing that the games in question reflect the authentic abilities and decision-making styles of the candidates in question, without forcing them into predetermined outcomes (Zichermann & Cunningham, 2011).

Furthermore, there is a concern that AI-driven gamified assessments may be **overly reliant on behavioral data**. These tools record and analyze candidates' interactions and behaviors during

gameplay, thereby generating comprehensive behavioral profiles. Nevertheless, an overreliance on these behavioral metrics may result in individuals being reduced to mere patterns of interaction, with other important aspects of their qualifications, such as emotional intelligence, creativity, or adaptability, being overlooked. In order to address this issue, ethical AI frameworks recommend that gamified assessments be supplemented with traditional methods, such as interviews and written evaluations, in order to provide a more comprehensive view of a candidate's skills and potential (Jobin, Ienca, & Vayena, 2019).

Additionally, concerns pertaining to **fairness and accessibility** emerge as ethical issue. These tools frequently depend on digital platforms that may not be equally accessible to all candidates, such as those with disabilities, lower digital literacy, or limited access to technology. This may result in the exclusion of certain candidates or the imposition of an unfair disadvantage. In accordance with the tenets of ethical AI, assessments must be designed in an inclusive manner, ensuring that all candidates have equal access and are not disadvantaged by the format or nature of the gamified platform (Binns, 2018).

Furthermore, **the protection of data privacy and the assurance of data security** represent pivotal concerns. These assessments amass copious amounts of personal and behavioral data, frequently without candidates being fully cognizant of the scope of the information being accumulated. The ethical frameworks that underpin the development of AI place significant emphasis on the importance of secure data governance. This requires that companies implement robust measures to protect the data they collect from any potential misuse or unauthorized access. It is also incumbent upon companies to ensure that data is stored securely and that the privacy of candidates is maintained in accordance with data protection legislation, such as the General Data Protection Regulation (GDPR), in order to establish trust and protect individuals' rights (Floridi & Taddeo, 2016).

An additional ethical concern pertains to the **psychological consequences** of gamified assessments. Although gamification is frequently employed to enhance the appeal of assessments, certain game designs have the potential to induce stress, anxiety, or frustration, particularly when candidates perceive that their career prospects hinge on their performance. The use of overly competitive or complex games has the potential to negatively impact the mental health and well-being of candidates. To address this issue, it is recommended that organizations implement assessment designs that promote well-being. This entails providing candidates with sufficient breaks and support throughout the process to mitigate any negative psychological effects (Loi, 2020).

In addition, **algorithmic accountability and responsibility** also represent pivotal ethical issue. In the event that an AI algorithm utilized in a gamified assessment yields erroneous or inequitable outcomes, it is imperative to delineate transparent pathways of accountability. It is incumbent upon companies to assume responsibility for the outcomes generated by these algorithms, ensuring that

any errors or unintended consequences are identified and corrected. In order to ensure the ethical governance of AI, it is recommended that these algorithms be subjected to regular auditing and evaluation. This will allow for the maintenance of fairness and the possibility of candidates challenging or appealing decisions made by the AI system (Jobin, Ienca, & Vayena, 2019).

IV.6.6 Psychometric Tests

Participants expressed concerns about **bias** and **fairness** when using **psychometric tests** in AI-driven recruitment processes. These tests, designed to assess a candidate's cognitive abilities, personality traits, and interpersonal skills, often raise concerns about **measurement bias** and subjectivity. **P5** emphasized that while the AI-based personality and aptitude tests made the recruitment process more efficient and less stressful, there was still potential for **bias** in the interpretation of results. They mentioned that psychometric tests might focus too much on certain traits, potentially leading to **biased outcomes**: *"But yeah, that particular test is the part where I feel like maybe the judgment can go a little bit too subjective" (P5)*. This suggests that candidates felt that certain personality traits could be unfairly emphasized or interpreted, leading to subjective assessments that may not accurately reflect their overall abilities. Additionally, **P7** highlighted concerns about **fairness** in how psychometric tests are designed and implemented. They pointed out that AI-driven assessments might unintentionally favor candidates with particular cultural or educational backgrounds if the test data is not representative: *"Psychometric tests are tests designed to measure various aspects of a candidate's personality, cognitive abilities, and interpersonal skills" (P7)*. This demonstrates that psychometric tests could be prone to **bias**, especially if they fail to account for the diverse range of candidates applying for a role. Regular auditing and ensuring diverse training data are crucial to mitigating this bias.

Bias and Subjectivity Concern

Psychometric tests are widely used in recruitment to assess candidates' cognitive abilities, personality traits, and other characteristics. However, these tests can be prone to bias and subjectivity. Measurement bias can occur if the tests are not properly validated for different demographic groups, leading to unfair outcomes. Subjectivity in interpretation can also influence the results, especially if evaluators have preconceived notions about the traits that are desirable for a particular role. To address these issues, it is important to ensure that psychometric tests are scientifically validated, and that the interpretation of results is done objectively and fairly.

Another Recommendation

In addition to concerns regarding bias and subjectivity, psychometric tests powered by AI present a number of other ethical challenges, with one key issue being that of **algorithmic accountability and responsibility**. In the event of an AI-driven psychometric tool producing an unfair or inaccurate result, it is frequently unclear who is accountable. This may be the developer, the company utilising the tool, or the data scientists who trained the model. This ambiguity gives rise to concerns regarding the manner in which errors or unintended biases should be addressed. The development of ethical AI frameworks has highlighted the necessity for transparent accountability

structures. These frameworks emphasise the importance of ensuring that companies assume responsibility for the decisions generated by their AI systems and have mechanisms in place to rectify any harms caused. It is imperative that algorithmic outcomes be held accountable in order to maintain the integrity of AI applications (Jobin, Ienca, & Vayena, 2019).

A further significant ethical concern is the lack of **transparency and explainability**. A significant challenge is the lack of transparency and explainability in the scoring mechanisms employed by these tests. Many AI-driven tests function as "black boxes," making it difficult for individuals to understand how their scores are determined. This lack of explainability erodes trust, as candidates may be unable to ascertain why they received a specific result or how it affects subsequent decisions. The ethical principles that underpin the development of AI systems require that users be able to access clear explanations of the processes and algorithms that underpin the decisions made by these systems. This is of particular importance in psychometric assessments, in which candidates' skills and personality traits are evaluated in ways that can have a significant impact on their career prospects (Mittelstadt et al., 2016).

A further significant issue is the **erosion of autonomy and informed consent**. The use of AI-powered psychometric tests frequently entails the processing of personal data without candidates being fully aware of how their information will be utilized or the potential implications of the test results. This lack of transparency undermines individuals' autonomy in decision-making processes. Ethical AI guidelines emphasise the necessity of obtaining explicit and informed consent, thereby affording candidates control over the collection, processing and application of their data. It is imperative that candidates possess a comprehensive understanding of the scope of the psychometric assessment and its implications for hiring or promotion decisions (Floridi & Taddeo, 2016).

Furthermore, **data security and confidentiality** are of paramount importance in the context of AI-powered psychometric tests. The aforementioned assessments process highly sensitive personal data pertaining to individuals' mental health, cognitive abilities, and personality traits. Any misuse or breach of this data could have severe consequences for the candidates in question. Consequently, it is incumbent upon organizations to implement robust data protection measures to guarantee the confidentiality of this information and to comply with pertinent data protection legislation, such as the General Data Protection Regulation (GDPR). The ethical governance of AI underscores the necessity for secure data management practices to safeguard individuals' privacy and maintain trust (Binns, 2018).

A topic that has received less attention in ethical debates is the **psychological impact**. Receiving unfavorable results, such as being classified as having low emotional intelligence or poor leadership potential, has the potential to negatively impact individuals' self-esteem, mental health, and career aspirations. In the absence of adequate support, these assessments have the potential to exert a detrimental impact on an individual's psychological well-being over an extended period.

To address this issue, it is recommended that organizations provide professional feedback sessions where candidates can discuss their results with trained personnel and receive constructive insights. Such human involvement ensures that the results are not perceived as rigid, final judgments, but rather are contextualized and utilized for personal development (Loi, 2020).

In addition, **cultural sensitivity and inclusion** are crucial ethical considerations. A significant limitation of psychometric tests is that many are developed based on data from specific cultural contexts, which may not be applicable to diverse populations. Such practices may result in the production of unfair outcomes for candidates from disparate cultural backgrounds. The ethical principles that underpin the development of AI emphasise the necessity for the creation of algorithms that are inclusive and take into account the diversity of cultures. Furthermore, it is of paramount importance that psychometric tools are validated and adapted for use in a multitude of cultural contexts. This approach ensures fairness and prevents the perpetuation of cultural biases in assessments (Zou & Schiebinger, 2018).

IV.6.7 Machine Learning Algorithms

Participants voiced significant concerns regarding **bias** and **fairness** when using **machine learning algorithms** in recruitment. These algorithms, while enhancing efficiency by analyzing vast amounts of candidate data and offering recommendations, also present ethical risks, particularly concerning **algorithmic bias**. P1 expressed that **bias in machine learning algorithms** is a major issue, especially if the training data is biased. The participant explained that these algorithms can unintentionally favor certain demographics or educational backgrounds, thus perpetuating existing societal biases: *"One of the main concerns is bias in the algorithms. While AI can reduce some human biases, if not properly managed, it can also reinforce existing biases"* (P1). They highlighted the importance of using **diverse training data** and conducting regular **audits** to prevent this bias. Without proper monitoring, machine learning algorithms might prioritize certain types of candidates, leading to unfair treatment of those from different backgrounds. Additionally, P3 noted that machine learning algorithms must be continuously monitored to ensure **fairness**. The participant pointed out that **feedback loops** in machine learning models can sometimes reinforce discriminatory patterns unless diverse datasets are used: *"We take several steps to mitigate bias. Firstly, we ensure that our training data is diverse and representative... We also conduct regular audits of our AI systems to check for any emerging biases"* (P3). This reflects the need for companies to be proactive in identifying and addressing any potential biases introduced by machine learning systems. Concerns about **fairness** were echoed by P2, who emphasized that transparency and clear communication with candidates are essential to maintaining trust. They mentioned the importance of explaining how the algorithm evaluates candidates and providing **feedback mechanisms** so that candidates can seek clarification or challenge decisions: *"Transparency in the decision-making process of AI is a major concern. Candidates should understand how decisions are made and have the ability to challenge or seek clarification on those decisions"* (P2). Participants also raised significant concerns

regarding **data privacy** and **management**. These algorithms, which often handle large amounts of personal data, present challenges in ensuring the secure handling, storage, and ethical use of candidate information. **P1** emphasized that **data privacy** is a critical issue, particularly when dealing with the vast amounts of sensitive data that machine learning algorithms process. They pointed out that securing this data is crucial, especially when algorithms analyze personal details such as educational background, work experience, and even non-verbal cues in video interviews: *"Candidate data is stored with strict security protocols. We ensure data is encrypted both in storage and transmission"* (P1). This highlights the participant's concern about maintaining **data security** through encryption and ensuring that only authorized personnel have access to this sensitive information. Additionally, **P3** raised concerns about the **management** of personal data within machine learning systems, noting that candidates must be fully informed about how their data will be used and stored. They emphasized the importance of **transparency** and obtaining candidate consent, ensuring that data is handled ethically: *"These algorithms often process large amounts of personal data, raising concerns about how this data is used, stored, and shared. Companies must implement strong data privacy measures including secure data handling practices and clear data use agreements"* (P3). This underscores the necessity for **clear data use agreements** to maintain candidate trust and comply with legal data protection requirements.

Bias and Monitoring

Machine learning algorithms are increasingly used in recruitment, but they come with significant ethical concerns, particularly related to bias. These algorithms can perpetuate and even exacerbate existing biases if they are trained on biased data. This can lead to unfair treatment of certain candidates and reinforce societal inequalities. Continuous monitoring and regular audits of these algorithms are essential to identify and correct biases. This includes using diverse and representative training data, as well as implementing mechanisms to detect and mitigate bias in real-time.

Data Privacy and Management

In addition to bias, data privacy is a critical ethical issue when using machine learning algorithms in recruitment. These algorithms often process large amounts of personal data, raising concerns about how this data is used, stored, and shared. Companies must implement strong data privacy measures, including secure data handling practices and clear data use agreements. Regular monitoring and management of the data and algorithms are also necessary to ensure that they are functioning as intended and that they are compliant with data protection regulations.

Another Recommendation

The application of machine learning algorithms gives rise to a number of ethical issues that extend beyond the conventional concerns associated with bias, monitoring, and data privacy. One of the most significant challenges is the **opacity of algorithms**, which is often referred to as the "black box" problem. A significant challenge associated with machine learning models, particularly those based on deep learning algorithms, is their inherent complexity, which often renders them difficult

to interpret, even for the developers themselves. This lack of transparency gives rise to issues pertaining to accountability and trust, as users and stakeholders are unable to readily comprehend the processes through which decisions are reached. The ethical principles that underpin the development of AI systems advocate for the implementation of **explainable AI (XAI)**, whereby the reasoning behind the decisions made by the models in question is made clear and accessible to the relevant parties. This is of particular importance in high-stakes domains such as healthcare, finance, and the legal sector, where the consequences of machine learning decisions have a direct impact on individuals' lives (Mittelstadt et al., 2016).

Another significant ethical concern pertains to the phenomenon of **overfitting and lack of generalizability** in machine learning models. When models are overfitted to specific training data, they may demonstrate satisfactory performance in limited scenarios but exhibit deficiencies when confronted with new, unseen data. This can result in unreliable or biased outcomes in real-world applications. To address this issue, ethical AI guidelines underscore the necessity of developing models that demonstrate robust generalization capabilities. This can be achieved through the use of balanced datasets, regular testing, and the avoidance of overfitting. This helps to guarantee that the algorithms retain accuracy, fairness, and reliability in diverse, real-world contexts (Floridi & Taddeo, 2016). In order to ensure the ethical use of machine learning, it is essential to monitor the performance of the model across a range of datasets and conditions on an ongoing basis.

A topic that has received less attention in the literature but is nevertheless of great importance is **the environmental impact** of machine learning. The training of large machine learning models, particularly deep learning networks, necessitates the utilisation of substantial computational resources, which subsequently results in elevated energy consumption and a considerable carbon footprint. As AI models become more complex and larger in size, the environmental costs associated with them are also increasing. In accordance with the ethical principles that underpin the development of AI, there is a growing imperative for organisations to adopt more sustainable approaches to model development. This entails optimising algorithms for efficiency, reducing computational waste and considering the use of renewable energy sources for data centres. This approach, designated as "sustainable AI," strives to harmonize technological advancement with environmental responsibility (Bender et al., 2021).

Furthermore, the growing prevalence of machine learning in automation raises concerns about the implications for **human dignity and autonomy**. As algorithms assume an increasing number of decision-making responsibilities, particularly in domains that involve discretion and public trust, such as hiring or law enforcement, there is a potential risk of reducing human supervision and undermining the role of human judgment. The phenomenon of over-automation has the potential to result in decisions that appear impersonal or dehumanizing, as individuals are reduced to data points without the contextual considerations that humans might otherwise apply. The ethical principles of AI emphasise the necessity of maintaining human involvement in critical decision-

making processes. This ensures that AI serves to augment human capabilities, rather than replacing them entirely, thereby preserving human dignity and autonomy (Coeckelbergh, 2020).

Furthermore, the potential for machine learning to **amplify social inequalities** is contingent upon rigorous monitoring and oversight. The reinforcement and exacerbation of existing social disparities may result from the application of algorithms trained on biased historical data. To illustrate, if the data in question reflects gender or racial biases in past hiring or lending decisions, the algorithm may serve to perpetuate those biases in future decisions. In order to ensure the ethical use of AI, it is recommended that algorithmic fairness audits are conducted on a regular basis. These audits involve checking for any discriminatory patterns within the algorithms and then retraining them in order to mitigate these issues. This guarantees that AI systems do not perpetuate historical injustices but rather advance fairness and inclusivity across diverse demographic groups (Zou & Schiebinger, 2018).

Finally, the issue of **ownership and intellectual property rights** pertaining to machine learning data and models represents a complex ethical challenge. The use of vast quantities of data in the training of machine learning models gives rise to questions concerning the ownership of the data and the models themselves. Ethical concerns pertain to the question of whether individuals, organizations, or developers are entitled to control and profit from the data and the models derived from it. To this end, organizations must establish transparent governance policies that delineate data ownership, respect intellectual property rights, and guarantee that individuals retain control over their data and its utilization (Jobin, Ienca, & Vayena, 2019). This approach helps to maintain ethical standards while protecting the rights of data owners and users.

IV.6.8 AI-based Assessment Tools (Skills and Personality)

Participants raised significant concerns about **bias** and **fairness** when using **AI-based assessment tools** in recruitment processes, especially those designed to evaluate skills and personality. These tools, while efficient, introduce ethical challenges that must be addressed to ensure fair and transparent recruitment. **Bias and Fairness** were primary concerns, as AI-based assessment tools can favor certain demographic groups if not carefully designed and tested. **P5** pointed out the risk of **algorithmic bias**, noting that these tools may rely on data that could favor candidates with particular cultural backgrounds or personality traits. This could result in biased outcomes, where certain candidates are inadvertently disadvantaged: *"But yeah, that particular test is the part where I feel like maybe the judgment can go a little bit too subjective"* (P5). This concern emphasizes the need for **inclusive design** in AI-based assessment tools, ensuring that they are accessible to all candidates and regularly audited to prevent bias and ensure fairness in evaluations. **P7** further elaborated on the issue of **fairness**, stating that while AI-based assessments can be more objective in evaluating competencies, there is still a risk of excluding non-traditional candidates or those from diverse backgrounds if the algorithm isn't properly designed or audited: *"AI provides a more objective assessment based on competencies and experience, but fairness can still be compromised if the system is not regularly updated"* (P7).

Bias and Fairness in Assessments

AI-based assessment tools, particularly those used to evaluate skills and personality, are subject to bias and fairness concerns. These tools rely on algorithms that may favor certain groups if they are not designed and tested with a diverse population in mind. For example, an assessment tool might be biased towards candidates with certain cultural backgrounds or personality traits. To ensure fairness, it is crucial to design these tools inclusively, considering the diverse range of candidates who will use them. Regular audits and updates to the algorithms are also necessary to maintain fairness and accuracy in the assessments.

Ensuring Inclusive Design and Accessibility

Beyond bias, AI-based assessment tools must be designed with inclusivity and accessibility in mind. This means that the tools should be accessible to candidates with disabilities and should not disadvantage candidates from different cultural or socio-economic backgrounds. Inclusive design practices, such as user testing with diverse groups and ongoing feedback mechanisms, are essential to creating fair and effective assessment tools. Additionally, continuous monitoring and management are required to ensure that the tools remain accessible and effective over time.

Another Recommendation

The advent of AI-based assessment tools for skills and personality has given rise to a number of ethical concerns that extend beyond the realms of bias and fairness. Among these concerns, the impact on **candidate autonomy and agency** represents a particularly salient issue. Such tools frequently operate in a manner that may be perceived as overly deterministic, as they rely on automated systems to make decisions based on predefined algorithms. Candidates may perceive that their distinctive characteristics and experiences are reduced to data points, thereby obscuring the subtleties of their individuality. Such an approach may result in a "one-size-fits-all" mentality that fails to capture the depth of a candidate's potential. To address this issue, it is recommended that organizations provide candidates with the opportunity to provide additional context or to challenge the assessment's findings. Providing a platform for candidates to elucidate or supplement the evaluation restores their sense of control over the process and humanizes the AI-driven assessment (Loi, 2020).

A further significant issue is **the excessive reliance on psychometric profiling** in AI-based personality assessments. These tools frequently rely on psychometric data that may not fully encompass the intricacies of human personality, resulting in overly simplistic categorizations. Psychometric models can inform decisions such as hiring or promotion, yet they frequently fail to consider the situational factors that might influence a candidate's performance. This deficiency in nuance in personality profiling can result in suboptimal hiring outcomes, as it fails to take into account essential traits or situational behaviors that may be critical for the role. To address this issue, it is recommended that AI assessments be complemented by human judgment. The integration of structured interviews, real-world feedback, and human-led assessments ensures a

more comprehensive evaluation of the candidate, facilitating the capture of elements that automated tools might miss (Mittelstadt et al., 2016).

Furthermore, the **psychological impact on candidates** represents a significant ethical consideration. In particular, personality assessments may result in feelings of inadequacy or misjudgment if the AI labels the candidate in a way that is incongruent with their self-perception. For example, candidates may be labeled as "introverted" or "low on leadership potential" without understanding the rationale behind the assessment. Such an outcome may result in a negative psychological impact, including a reduction in self-esteem or a sense of rejection. To mitigate these effects, companies should exercise caution when processing feedback from these tools, integrating AI assessments with human-led conversations to furnish constructive insights and support to candidates (Loi, 2020).

Finally, concerns pertaining to **privacy, consent, and diversity** also emerge in the context of AI-based assessments. The collection of vast amounts of personal data by these tools gives rise to questions regarding the manner in which such information is handled. It is imperative that candidates be informed about the data being collected and how it will be used. Furthermore, explicit consent must be provided to avoid any ethical violations. Furthermore, an excessive reliance on AI assessments may unwittingly result in a reduction in organizational diversity and creativity. If AI models are trained on historical data that reflect existing workforce norms, they may perpetuate homogeneity, thereby excluding unconventional candidates with innovative traits. In order to promote inclusivity, organizations should diversify their data sources and implement strategies that ensure their AI tools recognize and value a broad range of skills and personalities (Floridi & Taddeo, 2016; Zou & Schiebinger, 2018).

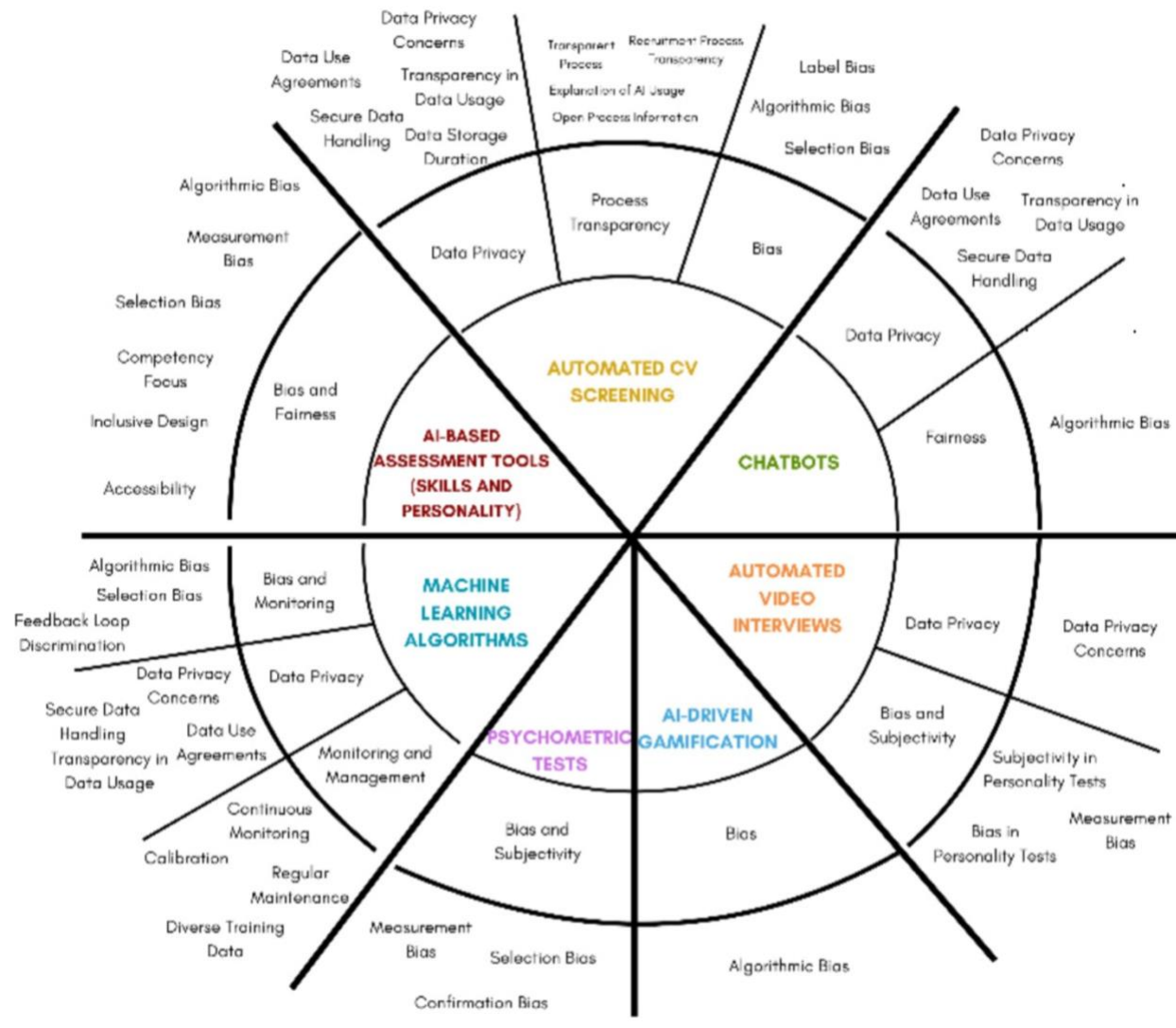


Figure IV.1 Recommendations to address ethical issues in AI Recruitment

The integration of AI into recruitment processes offers significant potential benefits, including increased efficiency, reduced time-to-hire, and enhanced decision-making capabilities. However, the ethical implications of AI in recruitment cannot be overlooked. One of the most prominent concerns is algorithmic bias. Automated systems, such as CV screening tools, can inadvertently reinforce existing biases present in historical data. If the data used to train these algorithms is biased, the AI system may favor certain demographics over others, leading to discriminatory outcomes. This issue extends to AI-driven gamification and psychometric tests, where biases in algorithm design and data interpretation can result in unfair assessments of candidates.

In addition to bias, data privacy is a critical ethical issues in AI-based recruitment. The use of AI involves the collection, processing, and storage of large amounts of personal data, which raises significant concerns about how this data is handled. For instance, chatbots and automated video interview systems collect sensitive information that must be protected through secure data

handling practices and transparent data use agreements. Candidates need to be fully informed about how their data will be used, stored, and for how long. Ensuring transparency in data usage and implementing strong data protection measures are essential for maintaining trust and complying with legal regulations.

Process transparency is another important aspect of ethical AI use in recruitment. Candidates often do not fully understand how AI tools influence their chances of being hired. Providing clear explanations about how AI is used in the recruitment process, the criteria it evaluates, and the weight of its decisions is crucial. This transparency not only builds trust with candidates but also helps ensure that the AI's role in the process is fair and justifiable. Companies should strive to create open processes where candidates have access to information about how their applications are evaluated, particularly in systems like automated CV screening and AI-driven interviews.

The ethical challenges of AI in recruitment are further complicated by the need for continuous monitoring and management of AI systems. As these systems evolve and are exposed to new data, they can develop new biases or exacerbate existing ones. Regular audits and updates to the algorithms are necessary to ensure they remain fair and accurate. This is particularly important in machine learning algorithms used in recruitment, where feedback loops can lead to unintended discrimination. Continuous monitoring helps detect and correct biases, ensuring that AI systems evolve in a way that promotes fairness and inclusivity.

Finally, the literature on AI-based recruitment underscores the necessity of addressing these ethical issues comprehensively. Studies such as those by Mujtaba et al. (2019) and Tsiskaridze et al. (2023) emphasize the need for balancing the benefits of AI with its potential risks. They highlight the importance of implementing ethical guidelines and conducting external audits to ensure that AI systems are used responsibly. The research by Fernández-Martínez et al. (2020) and Gupta et al. (2022) further illustrates the ethical and legal implications of AI in recruitment, particularly concerning data privacy and bias. These studies collectively advocate for a cautious and well-regulated approach to the adoption of AI in recruitment, ensuring that its implementation enhances rather than detracts from fairness and equity in hiring practices.

IV.7 Discussion

The incorporation of artificial intelligence (AI) into recruitment procedures has resulted in unprecedented efficiency, allowing organizations to process a substantial number of applications with precision. Nevertheless, this technological advancement also presents considerable ethical challenges that demand rigorous examination. The deployment of AI in recruitment processes has significant implications for a number of critical areas, including fairness, transparency, accountability, and data privacy. Each of these areas carries profound implications for individual rights and dignity. Consequently, ethical considerations in recruitment frequently give rise to moral concerns, exerting influence over values such as equity, justice, and respect for autonomy.

In light of this, the present study builds upon existing research by incorporating a comprehensive ethical framework into the discussion of AI in recruitment. In doing so, it aims to bridge the gap between technical efficiency and moral responsibility. While previous studies have primarily focused on the operational advantages of AI in recruitment, this research goes beyond that by integrating ethical theories, including deontological ethics, virtue ethics, and consequentialism. These perspectives provide a more comprehensive understanding of how AI-enhanced recruitment can align with principles that promote justice, clarity, and accountability.

This study, therefore, not only emphasizes the transformative potential of AI but also addresses the ethical responsibilities that organizations must uphold to ensure that these systems respect individual rights and promote fair treatment. The following sections will examine specific ethical concerns, compare the findings with those of previous studies, and highlight the unique contributions of this approach.

Furthermore, an examination of these ethical implications through the lens of moral theories allows for a discussion of pivotal themes, including fairness, bias, accountability, data privacy, and transparency in AI-driven recruitment. This multifaceted analysis provides a foundation for the promotion of more ethical and equitable recruitment practices, combining theoretical insights with practical recommendations for the deployment of AI.

A key example is the concept of fairness, which is closely aligned with deontological ethics, particularly Kantian ethics. Deontological ethics places significant emphasis on the importance of adhering to moral rules and duties that are universally applicable. The concept of fairness in recruitment is reflective of this, as it ensures that all candidates are treated equally and justly, and that consistent principles are followed without bias. In deontological ethics, the focus on treating people with respect and dignity, regardless of the outcome, aligns with the idea that recruitment processes should be governed by universal rules that guarantee equitable treatment for all individuals (Dimmock & Fisher, 2017).

Building upon this, the issue of bias in AI recruitment extends the conversation by incorporating both virtue ethics and consequentialism. Virtue ethics places an emphasis on the moral character and virtues of those involved in the creation and implementation of AI systems. In this context, the reduction of bias becomes a moral obligation to ensure that AI systems reflect ethical virtues such as fairness and justice, which promote equitable treatment for all candidates (Tilmes, 2022). Conversely, consequentialism assesses bias based on the consequences it produces. The presence of bias in AI recruitment can result in adverse outcomes, including the exclusion and discrimination of candidates. From a consequentialist standpoint, it is imperative to mitigate bias in order to guarantee that AI systems yield beneficial outcomes, including enhanced fairness, diversity, and equal opportunity (Hunkenschroer & Lütge, 2021). Consequently, addressing bias

is imperative from both the standpoint of promoting virtuous conduct and minimizing adverse consequences.

Similarly, the concept of accountability introduces another layer of moral responsibility, particularly when viewed through the lens of consequentialism. In the context of AI, accountability refers to the obligation of those responsible for AI systems to accept responsibility for the outcomes of their decisions. In the event that an AI system is found to have resulted in discriminatory hiring practices or biased decisions, the individuals responsible for its development and implementation must be held to account. From a consequentialist perspective, the objective is to maximize benefits and minimize harm. This necessitates the development of recruitment systems that promote fairness, efficiency, and transparency while actively preventing negative outcomes such as bias or exclusion (Chen Z. , 2023). In this context, the moral issue of accountability is closely linked to the consequences of AI decisions, thereby reinforcing the case for ethical AI practices.

The issue of data privacy also becomes a pressing moral concern, especially when examined through the lens of deontological ethics. Deontological ethics places significant emphasis on the responsibility to safeguard individuals' rights, particularly their right to privacy. In this framework, the safeguarding of data privacy is not merely a matter of achieving favorable outcomes; rather, it is a moral obligation to respect individual autonomy and dignity. It is the responsibility of organizations to safeguard personal data and ensure that it is not used or disclosed without consent. This fundamental principle is reflected in legal frameworks such as the General Data Protection Regulation (GDPR) (Floridi, 2014). Therefore, data privacy is not only a legal concern but also a moral obligation to protect individual rights.

Furthermore, transparency is inextricably linked to these ethical issues, particularly when viewed through a consequentialist lens. Transparency is of paramount importance in order to guarantee that candidates are fully informed about the decision-making processes, thereby fostering trust and preventing any potential misunderstandings. From a consequentialist perspective, transparency is conducive to positive outcomes, including enhanced fairness, improved candidate experiences, and stronger reputations for organizations. The extant research demonstrates that transparency not only fosters trust but also facilitates the identification and rectification of biases or errors in AI systems, thereby engendering a more ethical and efficacious recruitment process (Diakopoulos, 2020). This illustrates how transparency is a moral obligation that guarantees fairness and accountability in recruitment, thus aligning with the overarching objectives of consequentialism.

A comparison of this study with prior research reveals that it is consistent with the existing body of work examining the integration of AI into recruitment, particularly in terms of enhancing efficiency and objectivity. Prior studies, including those by (Heilmann, 2018) and (Raghavan, Barocas, Kleinberg, & Levy, 2019), have illustrated the capacity of AI to optimize recruitment processes by automating tasks such as resume screening and candidate ranking. However, these

studies frequently neglect to provide a comprehensive examination of the ethical challenges that AI presents, such as those related to algorithmic bias and privacy concerns.

In contrast, this research takes a more detailed approach, examining the ethical challenges associated with AI in recruitment. Furthermore, the study places emphasis on the importance of fairness, accountability, and transparency in addition to the improvement of efficiency. This is consistent with the concerns previously articulated by (Bogen, 2019) and (Sanchez-Monedero, Dencik, & Edwards, 2020), who have highlighted the potential for AI to reinforce societal biases. However, this study builds upon these arguments by proposing ethical safeguards and frameworks to mitigate these risks. In particular, it emphasizes the importance of deontological ethics in guiding AI development and use, ensuring that moral obligations, such as fairness and transparency, are maintained.

While previous research has primarily focused on enhancing operational efficiency and mitigating bias through technical solutions, this study distinguishes itself by integrating ethical theories, including deontology, virtue ethics, and consequentialism, into the discourse. For example, studies by (Chapman & Webster, 2003) and (Dastin, 2018) addressed the potential risks of bias in AI-driven recruitment but did not provide a comprehensive ethical framework. This study addresses this gap by establishing a link between ethical concerns and broader moral principles, thereby ensuring that AI-driven recruitment is both technically and ethically sound.

Moreover, this study presents a novel application of virtue ethics in recruitment, emphasizing the cultivation of virtues such as fairness and integrity in the development and implementation of AI systems. This approach humanizes the discourse, emphasizing the importance of moral character in the creation and deployment of AI tools.

The distinguishing feature of this research is its sophisticated approach to ethical theory, particularly with regard to the manner in which ethical considerations give rise to moral issues in AI-driven recruitment. By examining the implications of biased algorithms through the lens of consequentialism, this study illustrates how AI systems may unwittingly contribute to the perpetuation of societal inequalities, as previously cautioned by (O'Neil, 2016). By integrating deontological ethics, this research offers a novel perspective, suggesting that the duty to ensure fairness and prevent discrimination should take precedence over any operational gains offered by AI.

IV.8 Chapter Summary

The integration of AI technologies in the recruitment process has changed the way organisations identify and evaluate potential candidates. AI technologies such as Automated CV Screening, Automated Video Interviews, and AI-driven Gamification significantly improve the efficiency and accuracy of candidate assessment by comprehensively analysing various aspects, making the

recruitment process faster and more objective. However, it is important to balance the efficiency of technology with human judgement to ensure a fair and inclusive selection process. The reciprocal relationship between AI and recruiters emphasises the importance of human supervision in capturing the complex nuances of human behaviour that AI may miss.

Recruiters' experience with AI technology shows substantial improvements in the speed and efficiency of application screening, enabling faster decision-making. AI's ability to process large numbers of applications quickly optimises hiring time, but recruiters stress that AI cannot fully replace the sensitivity and judgement that humans bring to the process. The interplay between AI efficiency and human insight highlights the need for continuous improvement and refinement of AI tools to ensure they remain effective and easy to use. Proper training of AI users and compliance with privacy laws are essential to maintain candidate trust and ensure the ethical application of AI in recruitment.

In addition, ethical issues are critical in the application of AI in recruitment. Sources of bias, including data, algorithmic, and interaction bias, pose significant challenges in creating a fair and equitable recruitment process. These biases can arise at various stages of recruitment, such as resume screening, video interviews, and skills assessment, potentially resulting in discriminatory outcomes. Addressing these biases requires a multifaceted approach that involves the use of diverse data sets, transparent algorithms, continuous bias monitoring, and inclusive design.

The consequences of bias in AI-based recruitment technologies can reinforce existing inequalities, pose legal and reputational risks, and result in a loss of talent diversity. Biased AI systems can compound historical disparities, leading to the exclusion of qualified candidates from underrepresented groups. Ensuring regulatory compliance and maintaining ethical standards are critical to mitigating these risks. Organisations should implement ethical safeguards, such as diverse data sets, transparent algorithms and human oversight, to enforce fairness and accountability in the recruitment process. Continuous improvement and assessment of results are integral to successful AI integration in talent acquisition. Regular evaluation of AI tools, informed by feedback from candidates and recruiters, ensures that AI technology evolves to meet user needs and ethical standards. This dynamic process of refinement and adaptation fosters a fair, transparent and efficient recruitment environment, thereby improving the overall experience for both candidates and recruiters.

This chapter also explores the pivotal ethical concerns surrounding AI-driven recruitment, with a particular emphasis on fairness, bias, accountability, data privacy, and transparency. An analysis of fairness, as defined by deontological ethics, reveals the necessity of providing all candidates with equal treatment. The topic of bias is discussed in relation to virtue ethics and consequentialism, with particular emphasis on the moral duty of AI developers to take all possible steps to minimize discriminatory outcomes. Accountability, a pivotal concept in consequentialism, underscores the obligation of developers to guarantee ethical outcomes. Data privacy is situated

within deontological ethics, underscoring the importance of safeguarding personal information. From a consequentialist perspective, transparency is regarded as a crucial element for fostering trust and ethical AI practices. The chapter compares its findings with existing research and highlights the study's originality in integrating ethical theory with industry insights to provide a comprehensive moral analysis of AI in recruitment.

Chapter V Conclusion

V.1 Conclusion

The findings from this analysis provide a comprehensive understanding of the key AI technologies currently used in talent acquisition and the potential ethical issues associated with their use. The integration of AI technologies in the recruitment process has become increasingly prevalent, with Automated CV Screening, Machine Learning Algorithms and AI-based Assessment Tools being most widely adopted by all participants. These technologies play a vital role in efficiently managing large volumes of applications and providing objective assessments of candidates' skills and personalities. Automated Video Interviews are also widely used, highlighting their importance in offering a more comprehensive evaluation of candidates through the analysis of body language, facial expressions, and tone of voice. In addition, AI-based Chatbots and Gamification were also moderately adopted, demonstrating their effectiveness in engaging candidates during the early stages of recruitment and reducing pressure through gamified assessments. Psychometric Tests are also significant, reflecting their value in evaluating candidates' cognitive abilities and personality traits. This widespread adoption of AI tools underscores their importance in improving the efficiency and effectiveness of the recruitment process.

Despite the significant advantages brought by AI technology in recruitment, some ethical issues need to be addressed to ensure a fair and trustworthy process. Algorithmic bias is a major concern, as AI systems can perpetuate or reinforce existing biases if not managed properly. Ensuring the use of diverse and representative training data, conducting regular audits, and maintaining human oversight are important steps to reduce bias and ensure fairness. Transparency in AI decision-making processes is also critical, as candidates need to understand how AI affects their recruitment and have the ability to seek clarification or challenge decisions. Privacy concerns, especially with AI tools that analyse non-verbal cues, require strict data security measures and candidate consent to protect personal data. Addressing these ethical issues involves implementing strategies such as providing clear feedback, maintaining transparency in the recruitment process, ensuring data privacy through robust security measures, and continuously monitoring and improving AI systems. By balancing AI capabilities with ethical practices and human oversight, organisations can maintain trust and integrity in their recruitment processes.

V.2 Comparison of Ethical Issues in Conventional and AI-Driven Recruitment

Traditionally, recruitment processes have relied on human-driven methods, whereby recruiters manually screen resumes, conduct interviews, and make decisions based on subjective evaluations. Conventional recruitment practices offer the advantage of human intuition and empathy; however, they are often time-consuming, prone to bias, and lack consistency (Chapman & Webster, 2003). Personal biases related to cultural background, gender, and education have the potential to

influence hiring decisions, which may result in discriminatory practices and inconsistency in evaluations (Bogen, 2019).

The advent of artificial intelligence (AI) has brought about a profound transformation in the recruitment landscape. Artificial intelligence (AI)-driven recruitment tools promise increased efficiency, objectivity, and scalability (Heilmann, 2018). However, while AI has the potential to mitigate certain human biases, it also introduces new ethical concerns, particularly around algorithmic bias, transparency, and accountability (Raghavan, Barocas, Kleinberg, & Levy, 2019; Sanchez-Monedero, Dencik, & Edwards, 2020). The following table presents a comparative analysis of the ethical issues that emerge in both conventional and AI-driven recruitment methodologies, emphasizing pivotal dimensions such as bias, fairness, transparency, and human supervision.

Table V. 1 Comparison of Ethical Dimensions in Conventional Recruitment vs AI-Driven Recruitment Tools

Ethical Issues	Conventional Approach	AI-Driven Approach
Bias	Human recruiters may be influenced by personal biases related to culture, gender, education, or appearance, leading to unconscious or conscious bias in decision-making. Biases can stem from stereotyping, favoritism, or a lack of diversity in the recruitment team.	AI can reduce human bias by objectively analyzing qualifications based on data. However, algorithmic bias arises if the AI is trained on biased historical data, perpetuating existing societal inequalities. AI may unintentionally discriminate if the training data skews toward a particular demographic (e.g., gender or ethnicity).
Transparency	Often lacks transparency as hiring decisions are typically made behind closed doors with little explanation to candidates. Candidates may not understand how their applications are evaluated, and feedback can be vague or non-existent.	AI-driven recruitment often operates as a "black-box" system, making it difficult to understand or explain how decisions are made. Although decisions may be based on data, the process can be opaque to both candidates and recruiters.

		Efforts to increase algorithm explainability are ongoing.
Fairness	Decisions can be inconsistent across recruiters, as each may have different criteria or subjective impressions of candidates. Favouritism or preferences for certain schools, work experiences, or demographic characteristics can skew decisions.	AI brings consistency to decision-making, applying the same criteria to all candidates, promoting fairness in theory. However, fairness can still be compromised if the AI's criteria are based on biased data or assumptions that don't account for diversity or inclusion.
Efficiency	Time-consuming process involving manual resume screening, multiple rounds of interviews, and coordination between human evaluators. Delays often occur due to scheduling, availability, and decision-making bottlenecks.	AI significantly increases efficiency, allowing for rapid screening of large numbers of applicants and quick analysis of resumes and assessments. Processes such as chatbot screening and resume parsing are instantaneous, reducing time-to-hire, but may miss the human touch in complex cases.
Privacy	Multiple people, including recruiters and HR staff, handle candidates' personal data, increasing risk of data breaches or privacy violations. Data is often stored in various formats, which may not meet the highest security standards.	AI systems handle large amounts of personal and sensitive data (e.g., video interviews, personality assessments), which raises privacy concerns. Companies must implement strong data protection and encryption to avoid breaches, and clear consent must be obtained from candidates.
Human Oversight	Human recruiters have empathy and contextual understanding, allowing them to consider candidate potential beyond what's on paper.	AI lacks empathy and nuance, evaluating candidates purely based on predefined criteria. In hybrid models, human

	They can detect subtle interpersonal cues and adapt their judgment based on context.	oversight is crucial to review AI results, particularly in assessing cultural fit or soft skills, which algorithms may miss.
Accountability	Human recruiters are fully accountable for their decisions, and candidates can request clarifications on the basis for selection or rejection. Responsibility for a bad hire or biased decision can be easily assigned to an individual or team.	Accountability becomes diffused when AI tools are used, as recruiters rely on automated systems. It's often unclear who is responsible if the AI makes a biased decision—the HR team, AI developers, or external vendors. There is also a risk of over-reliance on AI tools, reducing human accountability.
Cost	The conventional process incurs high costs due to recruiter time, interviews, and manual processing of applications. Larger teams are required to handle different stages of recruitment, making the process expensive.	AI tools can reduce costs significantly by automating repetitive tasks, allowing HR teams to handle more candidates with fewer resources. However, initial investment in AI systems and ongoing maintenance can be high, offsetting some cost savings.
Feedback to Candidates	Feedback is often limited or generic, with candidates rarely receiving detailed explanations for rejection. Human recruiters may lack time or resources to provide meaningful feedback.	AI tools can provide immediate and detailed feedback based on performance data, such as results from assessments or interview evaluations. However, the feedback may be overly data-driven and lack nuance, reducing its value for improving future job applications.

Consistency	Human decision-making can vary between recruiters, leading to inconsistent assessments of candidates for the same role. Personal opinions and subjective judgments may skew decisions, resulting in variations in how candidates are assessed.	AI tools offer high consistency in applying predefined criteria across all candidates. Every candidate is evaluated based on the same parameters, reducing variability in assessments. However, this consistency could fail to account for unique or atypical profiles that may have been considered valuable in a manual process.
Diversity & Inclusion	Diversity efforts may be constrained by unintentional recruiter biases or preferences for candidates from certain schools, regions, or professional networks. Personal biases can impact how "fit" or "suitable" a candidate is perceived to be, potentially limiting diversity in hiring.	AI can improve diversity by anonymizing candidates and focusing on qualifications. However, if historical biases are baked into the data, the AI may reinforce existing exclusionary patterns. AI could unintentionally reject diverse candidates if it doesn't account for alternative or non-traditional career paths.

V.3 Recommendation for HR Manager

As AI-driven recruitment tools become more widely adopted, it is crucial for HR specialists and managers to take proactive steps to mitigate the ethical concerns associated with these systems. These concerns include, but are not limited to, bias, lack of transparency, and data privacy risks. The following recommendations delineate specific actions that human resources (HR) teams can implement to mitigate the adverse effects of artificial intelligence (AI) in the hiring process and ensure the responsible use of AI in recruitment.

Firstly, it is recommended that **regular training sessions** on AI ethics be conducted for HR managers and recruiters. Such training programs, conducted at least quarterly, should encompass the essentials of algorithmic bias, transparency, and fairness in AI systems. This would enable HR teams to comprehend the inherent risks associated with AI-driven recruitment and to identify and mitigate potential issues. Such training would enable HR professionals to identify indications of bias in AI-driven decisions and implement appropriate interventions when necessary (Binns, 2018). Furthermore, the regular education of recruitment teams will foster a stronger

understanding of the ethical implications of AI, thereby ensuring that decisions remain aligned with the organization's values.

It is imperative that **bias audits and performance reviews** of AI systems be implemented. Bias audits should be conducted at least twice a year, allowing human resources (HR) professionals to assess whether artificial intelligence (AI) tools are exhibiting disparate impact based on characteristics such as gender, race, or age. Such audits will facilitate the identification of discriminatory patterns and provide avenues for rectifying bias through algorithmic adjustments or the retraining of the system on more representative data. This ongoing process guarantees that the recruitment tools are fair and inclusive (Mehrabi et al., 2021).

Moreover, it is incumbent upon HR to collaborate with vendors to **integrate explainability features** into their AI recruitment tools. Artificial intelligence systems frequently operate as "black boxes," wherein users are unable to readily discern the rationale behind a given decision. The incorporation of explainability features, such as the provision of feedback on the rationale behind a candidate's ranking, enhances transparency. This approach guarantees that both recruiters and candidates have unambiguous insights into the rationale behind decision-making, thereby fostering trust in AI-driven recruitment (Doshi-Velez & Kim, 2017). Transparency not only fosters confidence in the AI system but also holds the technology accountable for its decisions.

To further enhance ethical oversight, human resources departments should consider appointing an **AI Ethics Officer** or creating a dedicated task force responsible for monitoring the ethical use of AI in recruitment. This role or team would be responsible for the oversight of the deployment of AI systems, ensuring compliance with ethical standards, and addressing concerns related to bias, fairness, and privacy. By appointing a dedicated individual or team to oversee these matters, organisations can guarantee that AI tools are employed in an ethical manner and that any issues are addressed in a timely manner (Floridi et al., 2018).

Prior to the full deployment of AI systems, it is also imperative to **conduct pre-deployment testing** to ensure fairness and inclusivity. Such testing should include a diverse set of test subjects in order to evaluate the extent to which the AI performs across different demographic groups. By identifying and addressing any biases or unfair outcomes prior to the system's implementation, companies can ensure that their AI tools promote inclusivity from the outset (Raji et al., 2020).

It is similarly recommended that all final hiring decisions be subject to **human oversight**. Although AI can be advantageous for preliminary screening and candidate ranking, it is imperative that human recruiters conduct a final review to guarantee that contextual factors, cultural alignment, and individual capabilities are taken into account. This approach precludes the possibility of AI making potentially biased or overly rigid decisions and ensures that the final judgment incorporates human values and ethical considerations (Raghavan et al., 2020).

It is similarly imperative to guarantee **the privacy and security** of candidate data. It is incumbent upon the human resources department to implement robust data privacy protocols that comply with regulations such as the General Data Protection Regulation (GDPR). This will ensure that candidate information is stored securely and that candidates are informed about how their data is used. It is essential to conduct periodic assessments of privacy policies and provide staff with training on the handling of sensitive data. This approach is vital for safeguarding candidate information and maintaining public confidence in the recruitment process (Tene & Polonetsky, 2013).

It is further recommended that AI systems be programmed **to support diversity and inclusion**. Human resources (HR) departments can collaborate with external suppliers to modify the settings of recruitment software in order to prioritize underrepresented groups, thereby addressing historical imbalances in hiring practices. By actively promoting diversity through AI, HR teams can leverage technology to achieve more equitable outcomes (Binns, 2018).

Moreover, candidates should be afforded the **opportunity to decline participation** in AI-driven decision-making processes if they are uncomfortable with automated assessments. The provision of this choice enables candidates to select a recruitment process that is more human-centered, thereby enhancing transparency and ensuring that they feel in control of their own application journey (Zarsky, 2016).

In conclusion, it is recommended that human resources departments **implement regular feedback loops** and updates for AI systems. It is recommended that AI tools undergo annual review and update based on feedback from both candidates and recruiters. This approach ensures that the systems remain aligned with the latest ethical standards and best practices. Such updates will assist in maintaining the fairness and accuracy of the recruitment process (Raji et al., 2020).

V.4 Limitations

While this study provides important insights into the ethical issues surrounding AI-driven recruitment, several limitations should be acknowledged. First, many AI hiring tools use quantitative matrices to evaluate candidates, speeding up the decision-making process compared to traditional qualitative methods such as in-depth interviews. This study does not delve into how these quantitative methods may alter the depth of candidate assessments or overlook qualitative aspects, such as personality or cultural fit, that human interviews typically reveal.

In addition, the scope of AI recruitment tools is expanding beyond the interview process. Future developments in AI are likely to include more advanced tools for analyzing broader candidate data, such as behavioral assessments or psychometric tests. However, this study focuses primarily on the current use of AI in interviewing and resume screening, leaving out potential future applications of AI in recruitment. In addition, the study is limited by its focus on five key ethical issues: bias, transparency, privacy, fairness, and accountability. While these issues represent the

most prominent ethical concerns in AI recruitment, other important ethical considerations such as safety, security, human centricity, and environmental well-being were not explored in depth. Future research could benefit from a more comprehensive assessment of all relevant AI ethical guidelines. Finally, this study is limited by its focus on the perspectives of candidates and recruiters. It does not consider the perspectives of other key stakeholders, such as AI developers, HR policymakers, or legal experts, whose insights could provide a more holistic understanding of the ethical challenges of AI-driven recruitment.

These limitations highlight the need for further research to explore the long-term effects of AI in recruitment, the integration of qualitative assessments alongside quantitative AI tools, and the perspectives of a broader range of stakeholders.

V.5 Implication

The integration of AI technologies into recruitment processes has profound implications for both the recruitment function and broader organizational practices. The ethical concerns surrounding AI, such as algorithmic bias, transparency, privacy, and human oversight, must be carefully managed to ensure that AI-powered recruitment tools are not only efficient, but also fair and ethical.

Addressing algorithmic bias is one of the most critical implications. Bias can be inadvertently built into AI systems through skewed training data, leading to unfair assessments of candidates based on gender, ethnicity, or background. By implementing diverse training data and conducting regular audits, organizations can significantly reduce the risk of bias and ensure that assessments are fair and inclusive. This in turn promotes diversity in the workforce and helps prevent existing biases from being perpetuated, contributing to a fairer workplace where all candidates are evaluated equally based on merit.

Transparency in the AI process is also critical. AI-driven systems often operate as "black boxes," leaving candidates unsure of how decisions are being made. Increasing transparency-by informing candidates about how AI is influencing the hiring process and providing clear feedback-will help build candidate trust and satisfaction. This transparency allows candidates to challenge decisions and seek clarification, fostering a sense of fairness and openness. A transparent recruitment process not only strengthens the ethical foundation of AI use, but also positions the organization as a responsible and trustworthy employer, enhancing its reputation in the competitive job market.

Ensuring data privacy and security is also critical to maintaining candidate trust. Given the vast amount of personal data processed by AI systems, organizations must implement strict security measures, such as encryption and access restrictions, to protect candidate information from unauthorized access and misuse. This commitment to data privacy demonstrates an organization's responsibility and care for candidate data, thereby enhancing its reputation as a trustworthy

employer. In an era where data breaches are increasingly common, prioritizing data security is key to maintaining trust in AI-driven processes.

In addition, providing a positive and engaging candidate experience through the use of gamification and user-friendly interfaces can significantly improve candidates' perceptions of the organization. Gamified assessments that make the hiring process more interactive and less intimidating help reduce pressure and anxiety among candidates. When candidates feel more engaged and less pressured during the hiring process, they tend to have a more favorable view of the company, which in turn makes the organization an employer of choice and helps attract top talent.

Human oversight remains essential in AI-based recruiting to ensure a comprehensive and accountable decision-making process. While AI tools can streamline assessments and increase objectivity, they may miss important nuances in candidates' personalities, motivations, or values. By combining AI assessments with human judgment, organizations can achieve a balanced and thorough evaluation of candidates. This human element ensures that empathy and personal interaction are maintained, preventing AI from becoming too mechanistic or disconnected from the human aspects of hiring.

In addition, ongoing training for HR teams on the ethical use of AI reinforces the importance of maintaining ethical standards and prepares organizations to adapt to evolving AI technologies. By providing ongoing training on the ethical implications of AI, organizations can ensure that HR professionals are well-equipped to manage AI tools effectively and ethically. This training is essential to fostering a more responsible and competent workforce, and it enables HR teams to proactively address ethical challenges.

Ultimately, integrating these ethical issues into AI-based recruitment processes will improve the overall fairness, transparency, and efficiency of talent acquisition. A commitment to ethical practices not only improves the candidate experience, but also strengthens an organization's reputation, competitiveness, and ability to attract and retain a diverse and talented workforce. As AI continues to evolve, organizations that prioritize these ethical considerations will be better positioned to succeed in an increasingly AI-driven job market.

As AI hiring tools evolve, many are using quantitative matrices to evaluate candidates, resulting in faster and more standardized assessments compared to traditional qualitative methods. This shift toward quantitative analysis enables faster decision-making and the ability to more efficiently process large volumes of applicants, addressing one of the core challenges of traditional recruiting. Looking ahead, the development of AI tools is likely to extend beyond interviews to include other types of assessments or studies, further enhancing the recruitment process and providing deeper insights into a candidate's potential.

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Lampiran

Interview Transcript

P1

Interviewer: Good afternoon. How are you? Thank you for taking the time for this interview.

Interviewee: Good afternoon. I'm well, thank you. I'm glad to participate. How about you?

Interviewer: I'm good, thank you. Before we begin, I would like to inform you that this interview will be recorded for transcription and analysis purposes. Do you consent to this?

Interviewee: Yes, I consent.

Interviewer: Thank you. I would like to gather qualitative insights into the ethical considerations, challenges, and practices associated with the use of AI in recruitment processes. Could you describe your role and experience with AI in recruitment?

Interviewee: Certainly. I am an HR professional, and I have been working with various AI tools in recruitment for over three years. Our organization uses AI to screen resumes, conduct initial interviews, and provide candidate recommendations based on data analysis. Over the past few years, I've been involved in the implementation and optimization of these AI systems, ensuring they align with our recruitment goals and ethical standards.

Interviewer: How long has your organization been utilizing AI in recruitment processes?

Interviewee: We started adopting AI in recruitment about five years ago. Initially, we only used AI for resume screening, but over time, we have integrated more AI tools into various stages of the recruitment process. This gradual integration allowed us to identify the strengths and weaknesses of each tool and make necessary adjustments. For instance, we started with basic keyword matching in resumes and have now moved to more sophisticated natural language processing algorithms.

Interviewer: That's interesting. Can you tell me more about how you managed the transition and what challenges you faced during this integration?

Interviewee: Transitioning to AI was a significant change. Initially, there was resistance from some team members who were skeptical about the technology. Training and demonstrating the effectiveness of AI tools were crucial in overcoming this. We also faced technical challenges, such as integrating AI with our existing systems and ensuring data quality. Over time, with continuous learning and adjustments, we managed to smooth out these issues.

Interviewer: What types of AI tools does your organization use in recruitment?

Interviewee: We use several types of AI tools, including chatbots for initial interviews, automated resume screening systems, and video analysis tools for interviews. Additionally, we utilize machine learning algorithms to provide candidate recommendations. The chatbots handle initial queries and collect preliminary information, which saves us significant time. Our automated resume screening systems help sift through thousands of applications quickly, identifying those that match our criteria. The video analysis tools assess non-verbal cues during video interviews, which provide additional insights into candidates' communication skills and confidence levels.

Interviewer: Can you provide an example of a situation where AI significantly improved the recruitment process?

Interviewee: Sure. There was a time when we had to fill a critical position within a tight deadline. By using AI for initial resume screening and chatbot interviews, we were able to shortlist candidates much faster than usual. The video analysis helped us quickly assess soft skills, which are crucial for the role. As a result, we filled the position ahead of schedule with a highly qualified candidate.

Interviewer: How do these tools assist in the recruitment process?

Interviewee: These tools significantly enhance the efficiency of our recruitment process. For example, chatbots can handle initial interviews quickly and gather basic information from candidates. Automated screening systems help us manage large volumes of resumes, and video analysis can assess non-verbal aspects of candidates during interviews. The machine learning algorithms analyze vast amounts of data to identify patterns and make recommendations, which helps us make more informed decisions. Additionally, these tools free up our recruiters' time, allowing them to focus on more strategic aspects of the recruitment process, such as building relationships with potential hires and ensuring a good cultural fit.

Interviewer: What ethical concerns do you consider most pressing with the use of AI in recruitment?

Interviewee: One of the main concerns is bias in the algorithms. While AI can reduce some human biases, if not properly managed, it can also reinforce existing biases. Additionally, transparency in the decision-making process of AI is a major concern. Candidates should understand how decisions are made and have the ability to challenge or seek clarification on those decisions. Another ethical concern is the potential invasion of privacy, especially with video analysis tools that assess non-verbal cues. It's crucial to ensure that candidates are fully aware of how their data will be used and that their consent is obtained.

Interviewer: Bias in AI is a significant issue. Could you elaborate on the steps you take to mitigate this bias?

Interviewee: We take several steps to mitigate bias. Firstly, we ensure that our training data is diverse and representative. This involves using data from various sources and making sure it reflects different demographics. Secondly, we regularly audit our AI systems to check for any emerging biases. This involves analyzing outcomes to identify patterns that may indicate bias. We

also collaborate with external experts to review our systems and provide independent assessments. Additionally, we involve a diverse team in the development and testing phases to ensure various perspectives are considered. Finally, we conduct bias training for our HR team to help them understand the potential pitfalls and how to address them. By combining human oversight with advanced technology, we aim to create a more equitable recruitment process.

Interviewer: Can you share a specific instance where you identified and addressed a bias in your AI system?

Interviewee: Yes, there was an instance where we noticed our AI system was favoring candidates from certain educational backgrounds. Upon investigating, we found that the training data included a disproportionate number of resumes from those institutions. To address this, we diversified our training data and adjusted the algorithm to weigh different factors more equally. We also implemented regular reviews to ensure the bias did not re-emerge.

Interviewer: How transparent are the AI recruitment processes at your organization?

Interviewee: We aim to be very transparent with candidates. They are informed that AI is involved in the recruitment process and how their data will be used. We also provide feedback to candidates on how decisions were made, although not in exhaustive detail to maintain the integrity of the process. For instance, we explain the criteria used for resume screening or the aspects evaluated during video interviews. Transparency helps build trust with candidates and ensures they feel fairly treated. We also have a clear appeals process where candidates can raise concerns or seek clarifications about their application.

Interviewer: How do you ensure that candidates understand and are comfortable with the use of AI in the recruitment process?

Interviewee: We make sure to communicate clearly at every stage of the process. When candidates first apply, they receive information about how AI will be used. During the initial interview, conducted by our chatbot, we reiterate this and provide an opportunity for candidates to ask questions. We also include information on our website and in job postings. Additionally, we provide feedback to candidates on how their data was used and the outcomes of each stage of the process. By being transparent and open, we aim to build trust and ensure candidates feel respected and valued.

Interviewer: Have you received any feedback from candidates about the use of AI in your recruitment process? How do you handle negative feedback?

Interviewee: Yes, we have received feedback from candidates. Most of it is positive, appreciating the speed and efficiency of the process. However, we do get some negative feedback, particularly from candidates who feel uncomfortable with the use of AI or those who want more detailed feedback on their applications. We handle negative feedback by addressing the concerns directly, providing more information about how AI works, and making adjustments to our processes if necessary. We also offer candidates the option to request a human review if they are not comfortable with the AI evaluation.

Interviewer: How is candidate data handled and protected in AI systems?

Interviewee: Candidate data is stored with strict security protocols. We ensure data is encrypted both in storage and transmission. We also comply with data privacy regulations such as the Personal Data Protection Act (PDPA). Access to candidate data is restricted to authorized personnel only, and we conduct regular security audits to identify and address potential vulnerabilities. We also have data retention policies in place to ensure that candidate information is not kept longer than necessary, aligning with legal requirements and best practices.

Interviewer: Can you share any best practices or guidelines followed by your organization to ensure ethical AI recruitment?

Interviewee: We follow several best practices, such as ensuring transparency, reducing bias through regular testing and evaluation, and involving multiple stakeholders in the development and maintenance of AI systems. We also adhere to industry standards and regulations. For example, we conduct regular training for our HR team on ethical AI usage and update our policies to reflect the latest regulatory changes. Additionally, we engage with external experts to review our AI systems and provide independent assessments. By fostering a culture of continuous improvement and ethical awareness, we aim to stay ahead of potential challenges and ensure our recruitment processes are fair and effective.

Interviewer: What impact has AI had on the efficiency and effectiveness of recruitment in your organization?

Interviewee: AI has significantly improved the efficiency of our recruitment process by speeding up candidate screening and reducing administrative burdens. Additionally, AI helps enhance the accuracy of candidate assessments, although we continuously monitor and adjust to ensure fairness. For example, the time to fill a position has been reduced by approximately 30%, allowing us to respond more quickly to business needs. AI also helps us identify high-potential candidates who might have been overlooked in a traditional recruitment process. This has led to better hiring outcomes and improved overall satisfaction among hiring managers and candidates.

Interviewer: Have there been any instances where AI provided unexpected insights or outcomes during the recruitment process?

Interviewee: Yes, there have been a few instances. For example, our AI tools identified a candidate who didn't meet the traditional qualifications on paper but had skills and experiences that were a perfect match for the role. The machine learning algorithm picked up on patterns and attributes that human reviewers might have missed. This candidate turned out to be a high performer and a great fit for our company culture. Instances like these highlight the potential of AI to uncover hidden talent and add value to the recruitment process.

Interviewer: Do you believe AI has improved the fairness and objectivity of your recruitment processes?

Interviewee: Generally, yes. AI helps reduce some human biases, but there is still room for improvement, especially in terms of transparency and managing algorithmic biases. While AI can be more consistent than humans in applying criteria, it's important to ensure those criteria are fair and inclusive. Continuous monitoring and updating of the AI systems are necessary to maintain and enhance fairness. We also encourage feedback from candidates and recruiters to identify areas for improvement. By maintaining a balance between technological advancement and human oversight, we strive to create a more equitable recruitment environment.

Interviewer: How do you see the role of AI in recruitment evolving in the next five years?

Interviewee: I see AI becoming more integrated into all stages of the recruitment process, from initial screening to final interviews. Ethical challenges will become more complex, particularly regarding transparency and fairness, but I am optimistic that technology and regulations will continue to evolve to address these issues. AI will likely play a bigger role in candidate engagement, providing personalized experiences and improving communication throughout the recruitment process. Additionally, AI might evolve to provide deeper insights into candidate potential and cultural fit, beyond just skills and experience. However, it's crucial to ensure that these advancements are accompanied by robust ethical guidelines and regulatory frameworks to protect candidates' rights and interests.

Interviewer: Are there any ethical challenges you anticipate will become more significant in the future?

Interviewee: I think data privacy issues and how candidate data is used will become increasingly important. Ensuring that AI does not develop or reinforce existing biases will remain a primary challenge. Additionally, as AI becomes more sophisticated, there may be concerns about the extent to which decisions are made by algorithms versus humans. Striking the right balance between automation and human judgment will be critical. Another potential challenge is ensuring that AI systems are accessible and fair to all candidates, including those who may not be as tech-savvy. We need to be mindful of creating an inclusive process that considers diverse backgrounds and abilities.

Interviewer: How do you stay updated on the latest developments and best practices in AI and recruitment?

Interviewee: We stay updated through a combination of methods. We participate in industry conferences and workshops, subscribe to relevant journals and publications, and engage with professional networks and online forums. Additionally, we collaborate with academic institutions and research organizations to stay abreast of the latest developments. Continuous learning and adaptation are crucial in this rapidly evolving field.

Interviewer: Given the rapid evolution of AI, how do you ensure your team remains skilled and knowledgeable about the latest technologies?

Interviewee: We invest heavily in continuous training and development for our team. This includes attending workshops, participating in webinars, and enrolling in online courses focused

on AI and machine learning. We also encourage cross-functional collaboration within the organization to share knowledge and best practices. By fostering a culture of learning, we ensure that our team stays ahead of technological advancements and can effectively leverage AI in our recruitment processes.

Interviewer: Thank you very much for your insights and time. Is there anything else you would like to add that we have not covered?

Interviewee: No. I think we have covered the main points. Thank you for the opportunity. One last thing I'd like to mention is the importance of continuous learning and adaptation in this field. The landscape of AI in recruitment is rapidly evolving, and staying informed about new developments and best practices is crucial for maintaining ethical and effective recruitment processes.

Interviewer: Thank you. After this interview, we will analyze the data and compile a report. You will receive a summary of our findings in a few weeks. If you have any further questions, please do not hesitate to contact us.

Interviewee: Thank you. I look forward to the results. Good luck with your research.

Interviewer: Thank you, Stephanie. Have a great day.

P2

Pewawancara: Halo. Gimana kabarnya? Terima kasih sudah mau meluangkan waktu untuk wawancara ini.

Narasumber: Halo. Alhamdulillah baik, terima kasih. Senang bisa ngobrol-ngobrol. Gimana kabar kamu?

Pewawancara: Baik juga, terima kasih. Sebelum mulai, saya mau kasih tahu bahwa wawancara ini akan direkam untuk transkripsi dan analisis. Setuju, Pak?

Narasumber: Oh, tentu saja. Gak masalah.

Pewawancara: Oke, terima kasih. Bisa cerita sedikit tentang peran dan pengalaman Anda dengan AI dalam rekrutmen?

Narasumber: Tentu. Saya rekruter di perusahaan FMCG. Selama dua tahun terakhir, kami sudah pakai AI untuk rekrutmen. Kami pakai AI buat nyaring CV, wawancara awal, dan membantu pengambilan keputusan.

Pewawancara: Sudah berapa lama perusahaan Anda pakai AI dalam rekrutmen?

Narasumber: Mulai sekitar tiga tahun lalu. Awalnya cuma untuk CV screening, tapi sekarang sudah diperluas ke penilaian kandidat dan interaksi awal pakai chatbot.

Pewawancara: Alat AI apa saja yang dipakai?

Narasumber: Kami pakai berbagai alat seperti sistem CV screening otomatis, chatbot buat wawancara awal, dan alat penilaian berbasis AI buat menilai keterampilan dan kepribadian kandidat. Kami juga pakai platform seperti LinkedIn, Kalibrr, dan JobStreet buat cari kandidat.

Pewawancara: Alat-alat ini gimana caranya membantu rekrutmen?

Narasumber: Sangat membantu. Misalnya, automated CV screening mempermudah kami mengelola jumlah aplikasi yang banyak dengan cepat. Chatbot membantu ngumpulin informasi dasar dari kandidat dengan efisien, dan alat penilaian AI membantu kami menilai keterampilan dan kepribadian kandidat dengan lebih objektif.

Pewawancara: Boleh gak Bapak kasih contoh konkret gimana AI membantu dalam CV screening?

Narasumber: Tentu. Misalnya, saat buka lowongan untuk posisi manajer pemasaran, kami terima ratusan CV. Dengan AI, CV yang paling relevan dan memenuhi kriteria langsung diprioritaskan untuk ditinjau lebih lanjut, jadi kami bisa fokus pada kandidat yang paling sesuai.

Pewawancara: Bisa lebih rinci tentang gimana AI menyaring CV tersebut?

Narasumber: Tentu, AI menyaring CV berdasarkan kriteria yang sudah ditetapkan sebelumnya. Misalnya, kalau kami mencari kandidat dengan pengalaman minimal lima tahun di bidang pemasaran, AI akan memprioritaskan CV yang menyebutkan pengalaman tersebut. AI juga bisa mengenali kata kunci tertentu yang relevan dengan posisi yang dibuka, seperti "digital marketing", "brand management", atau "SEO". Selain itu, AI juga menilai berdasarkan pendidikan, sertifikasi, dan keterampilan yang disebutkan dalam CV.

Pewawancara: Bagaimana AI menangani CV yang gak standar atau format yang beda-beda?

Narasumber: AI bisa mengenali berbagai format CV. Misalnya, ada kandidat yang mungkin pakai format kreatif dengan infografis atau desain visual. AI bisa mengenali informasi kunci seperti pengalaman kerja, pendidikan, dan keterampilan meskipun formatnya gak standar. Selain itu, AI juga bisa mengekstrak data dari CV dalam berbagai bahasa dan mengonversinya jadi format yang mudah dianalisis.

Pewawancara: Apakah AI pernah melakukan kesalahan dalam menyaring CV? Gimana Anda menanganinya?

Narasumber: Iya, tentu. Ada kalanya AI bisa salah dalam menyaring CV, dan itu bisa terjadi karena berbagai alasan. Misalnya, ada kandidat yang sebenarnya sangat cocok, tapi CV-nya gak menggunakan kata kunci yang dikenali oleh AI. Ini bisa membuat AI melewati kandidat tersebut. Kami juga pernah mengalami kasus di mana AI memprioritaskan kandidat yang kurang sesuai karena algoritma terlalu fokus pada satu aspek saja, seperti pengalaman kerja, tanpa mempertimbangkan keterampilan atau pendidikan yang relevan.

Pewawancara: Bisa cerita lebih banyak tentang kasus-kasus kesalahan tersebut?

Narasumber: Salah satu contoh yang saya ingat adalah ketika kami membuka lowongan untuk posisi data analyst. Ada seorang kandidat dengan pengalaman yang sangat bagus di bidang data science, tapi dia nulis pengalaman kerjanya dalam bentuk narasi tanpa menggunakan kata kunci seperti "data analysis" atau "machine learning". AI kami gak mendeteksi CV tersebut sebagai prioritas karena gak menemukan kata kunci yang sesuai. Untungnya, tim rekrutmen kami yang melakukan pengecekan ulang menemukan CV ini dan langsung menyadari potensinya.

Contoh lain adalah ketika AI kami memprioritaskan seorang kandidat yang punya pengalaman panjang di bidang marketing, tapi setelah wawancara, ternyata keterampilan teknis yang dibutuhkan untuk posisi tersebut kurang memadai. Ini terjadi karena AI terlalu fokus pada jumlah tahun pengalaman tanpa mempertimbangkan kualitas dan relevansi dari pengalaman tersebut. Kami kemudian melakukan penyesuaian pada algoritma untuk lebih menyeimbangkan antara pengalaman dan keterampilan teknis yang relevan.

Pewawancara: Gimana Anda menanganinya ketika AI membuat kesalahan seperti itu?

Narasumber: Kami selalu melakukan double-check oleh tim rekrutmen. Jadi, meskipun AI membantu menyaring CV awal, keputusan akhir tetap di tangan manusia. Setiap CV yang diprioritaskan oleh AI akan ditinjau kembali oleh tim rekrutmen. Jika ada kesalahan atau kandidat potensial yang terlewat, kami segera menyesuaikan algoritma untuk memperbaiki kesalahan tersebut. Kami juga terus melatih AI dengan data terbaru dan feedback dari tim rekrutmen untuk meningkatkan akurasi.

Pewawancara: Apakah ada pelajaran yang dipelajari dari kesalahan-kesalahan ini?

Narasumber: Tentu, ada banyak pelajaran yang kami ambil. Salah satu yang paling penting adalah bahwa AI bukan pengganti manusia, tapi alat yang membantu. Kami juga belajar bahwa penting untuk selalu memperbarui dan menyesuaikan algoritma berdasarkan hasil nyata dan feedback dari tim. Selain itu, kami juga memahami pentingnya transparansi dan komunikasi dengan kandidat, terutama dalam memberikan alasan yang jelas jika mereka gak lolos seleksi awal.

Pewawancara: Bisa Bapak jelaskan lebih lanjut tentang masalah transparansi ini?

Narasumber: Transparansi memang jadi isu besar. Kandidat sering kali merasa gak tahu alasan di balik keputusan rekrutmen. Misalnya, ada kandidat yang merasa kualifikasinya sudah sesuai, tapi mereka tetap gak lolos tanpa penjelasan yang jelas. Ini bisa menyebabkan ketidakpuasan dan merusak citra perusahaan.

Pewawancara: Gimana Bapak mengatasi masalah transparansi ini?

Narasumber: Kami berusaha memberikan penjelasan yang lebih detail kepada kandidat. Misalnya, jika mereka gak lolos tahap CV screening, kami berikan feedback spesifik tentang kriteria apa yang gak terpenuhi. Selain itu, dalam wawancara awal yang dilakukan oleh chatbot, kami tambahkan penjelasan tentang gimana jawaban mereka dievaluasi. Kami juga

mengembangkan laporan yang jelas dari sistem AI tentang gimana setiap keputusan dibuat dan apa saja yang jadi pertimbangan utama.

Pewawancara: Gimana Bapak memastikan bahwa keputusan yang diambil oleh AI bisa dijelaskan kepada kandidat?

Narasumber: Kami bekerja sama dengan tim pengembang AI untuk memastikan algoritma yang digunakan bisa menghasilkan laporan yang jelas tentang setiap keputusan. Laporan ini mencakup kriteria yang digunakan dan gimana setiap kandidat memenuhi atau gak memenuhi kriteria tersebut. Kami juga melatih tim rekrutmen untuk bisa menjelaskan laporan ini dengan cara yang mudah dipahami oleh kandidat. Selain itu, kami selalu siap menjawab pertanyaan lebih lanjut dari kandidat jika mereka masih merasa kurang jelas.

Pewawancara: Apakah Anda menerima feedback dari kandidat tentang transparansi ini? Gimana tanggapannya?

Narasumber: Iya, kami menerima banyak feedback dari kandidat. Sebagian besar merasa lebih dihargai karena mendapatkan penjelasan yang jelas. Mereka merasa prosesnya lebih adil dan transparan. Tapi, ada juga yang merasa penjelasannya masih kurang memadai, terutama jika mereka gak puas dengan hasilnya. Kami terus berusaha untuk memperbaiki cara kami memberikan feedback dan menjelaskan proses yang ada.

Pewawancara: Gimana Anda mengukur keberhasilan transparansi dalam proses rekrutmen berbasis AI?

Narasumber: Kami mengukur keberhasilan dengan melihat tingkat kepuasan kandidat, yang kami evaluasi melalui survei setelah proses rekrutmen selesai. Kami juga memonitor feedback yang diterima dan berapa banyak kandidat yang meminta penjelasan lebih lanjut. Selain itu, kami lihat juga apakah ada peningkatan dalam jumlah kandidat berkualitas yang melamar setelah transparansi ditingkatkan. Tingkat kejelasan dalam komunikasi kami juga dievaluasi secara berkala untuk memastikan bahwa informasi yang kami sampaikan mudah dipahami.

Pewawancara: Apakah ada inisiatif lain yang dilakukan untuk meningkatkan transparansi?

Narasumber: Kami juga mengadakan sesi Q&A secara online untuk kandidat yang ingin tahu lebih banyak tentang proses rekrutmen kami. Selain itu, kami memperbarui informasi di website perusahaan tentang gimana AI digunakan dalam rekrutmen dan apa saja yang dinilai oleh sistem. Ini membantu mengurangi ketidakpastian dan kecemasan kandidat sebelum mereka melamar. Kami juga menyediakan pelatihan internal bagi tim rekrutmen tentang cara berkomunikasi secara transparan dengan kandidat.

Pewawancara: Gimana peran feedback dari kandidat dalam meningkatkan transparansi dan proses rekrutmen secara keseluruhan?

Narasumber: Feedback dari kandidat sangat penting. Dengan mendengarkan pengalaman mereka, kami bisa mengidentifikasi area yang perlu diperbaiki. Misalnya, jika banyak kandidat

yang merasa penjelasan tentang keputusan gak cukup jelas, kami bisa menyesuaikan cara kami memberikan feedback. Kami juga menggunakan feedback untuk mengembangkan alat AI kami agar lebih user-friendly dan responsif terhadap kebutuhan kandidat.

Pewawancara: Gimana Anda melihat peran AI dalam rekrutmen berkembang dalam lima tahun ke depan?

Narasumber: Saya lihat AI akan semakin terintegrasi dan canggih, memainkan peran yang lebih besar di berbagai tahap rekrutmen. AI gak hanya akan digunakan untuk CV screening, tetapi juga untuk wawancara virtual, analisis video, dan assessment berbasis game. AI akan membantu kita mengenali bakat dan potensi kandidat dengan lebih akurat dan cepat. Tapi, ethical concerns seperti transparansi, keadilan, dan privasi data akan jadi lebih signifikan dan butuh perhatian yang terus-menerus. Kami juga harus terus berinovasi untuk memastikan AI gak hanya efisien, tetapi juga adil dan transparan. Selain itu, AI akan membantu dalam menciptakan pengalaman kandidat yang lebih baik dan personal, yang akan meningkatkan brand perusahaan sebagai employer of choice.

Pewawancara: Apakah Bapak merasa ada tantangan lain terkait adopsi AI di bidang rekrutmen?

Narasumber: Iya, selain masalah teknis, ada juga tantangan dalam hal penerimaan dan kepercayaan dari para kandidat dan karyawan. Banyak orang masih merasa skeptis tentang penggunaan AI dalam proses rekrutmen karena takut bahwa mesin akan menggantikan peran manusia sepenuhnya. Ada juga kekhawatiran bahwa AI bisa memperkuat bias yang ada dalam data historis atau membuat keputusan yang gak adil. Selain itu, memastikan bahwa tim rekrutmen kami benar-benar memahami cara kerja AI dan dapat menggunakannya secara efektif juga jadi tantangan tersendiri.

Kami juga menghadapi tantangan dalam hal transparansi dan etika. Kandidat sering kali ingin tahu gimana data mereka digunakan dan gimana keputusan dibuat. Ini berarti kami harus sangat jelas dan terbuka tentang proses kami, yang bisa sulit karena teknologi AI seringkali kompleks dan sulit dijelaskan. Kami juga harus memastikan bahwa kami mematuhi semua regulasi privasi data yang berlaku, yang bisa menjadi cukup rumit tergantung pada yurisdiksi tempat kami beroperasi.

Terakhir, ada tantangan dalam hal biaya dan investasi. Implementasi dan pemeliharaan sistem AI yang canggih membutuhkan investasi yang signifikan, baik dalam hal perangkat lunak maupun pelatihan karyawan. Kami harus memastikan bahwa investasi ini memberikan hasil yang sesuai dengan harapan dan bahwa kami mendapatkan keuntungan yang maksimal dari penggunaan AI. Semua ini memerlukan perencanaan yang matang dan evaluasi yang berkelanjutan.

Pewawancara: Gimana Anda mengatasi masalah integrasi tersebut?

Narasumber: Kami bekerja sama erat dengan tim IT untuk memastikan semua sistem dapat terintegrasi dengan baik. Kami juga memilih alat AI yang kompatibel dengan sistem yang sudah ada, dan melakukan penyesuaian teknis yang diperlukan. Selain itu, kami pastikan ada dukungan teknis yang selalu siap jika terjadi masalah. Kami juga adakan pelatihan rutin untuk tim rekrutmen agar mereka selalu update dengan perkembangan teknologi dan tahu cara menggunakannya dengan efektif. Kami juga memiliki tim project management yang memantau dan

mengoordinasikan semua aspek integrasi ini, memastikan bahwa setiap langkah berjalan lancar dan sesuai rencana.

Pewawancara: Apa langkah-langkah konkret yang diambil untuk memastikan implementasi AI berjalan lancar?

Narasumber: Kami pastikan ada tim khusus yang fokus pada implementasi dan monitoring sistem AI. Selain itu, kami juga buat roadmap yang jelas tentang integrasi AI dalam proses rekrutmen dan pastikan ada komunikasi yang terbuka antara semua pihak yang terlibat. Evaluasi dan feedback juga rutin dilakukan untuk terus meningkatkan sistem yang ada. Kami juga menjalankan program pelatihan yang komprehensif untuk semua anggota tim rekrutmen agar mereka memahami dan mampu memanfaatkan AI secara optimal. Kami juga memiliki sesi evaluasi berkala untuk memastikan bahwa semua proses berjalan sesuai rencana dan mencapai hasil yang diharapkan.

Pewawancara: Gimana Anda melihat masa depan rekrutmen dengan adanya AI?

Narasumber: Saya lihat AI akan terus jadi bagian integral dari proses rekrutmen. Tapi, sentuhan manusia tetap penting untuk menjaga aspek personal dan empati dalam rekrutmen. AI akan lebih berperan sebagai alat bantu yang meningkatkan efisiensi dan objektivitas, sementara keputusan akhir tetap di tangan manusia. Dengan perkembangan teknologi, AI juga akan semakin mampu menyesuaikan diri dengan kebutuhan spesifik perusahaan dan memberikan rekomendasi yang lebih tepat. Namun, kita harus terus memastikan bahwa penggunaan AI tetap etis dan transparan, sehingga kandidat merasa dihargai dan diperlakukan dengan adil.

Pewawancara: Terima kasih banyak atas wawasan dan waktunya. Apakah ada hal lain yang ingin Bapak tambahkan yang belum kita bahas?

Narasumber: Saya mau tambahkan bahwa integrasi AI memang telah ubah cara kami mendekati perekrutan. Kami harus pastikan AI patuhi undang-undang privasi dan terus ikuti perkembangan teknologi. Pelatihan yang tepat sangat penting untuk memanfaatkan kemampuan AI sepenuhnya, dan kami harus sadar akan risiko ketergantungan jika sistem gagal. Meskipun ada kekhawatiran tentang AI yang ambil alih pekerjaan rekrutmen, saya lihatnya lebih sebagai alat yang melengkapi penilaian manusia daripada menggantikannya. Selain itu, kami juga harus terus berinovasi dan mencari cara baru untuk meningkatkan transparansi dan keadilan dalam proses rekrutmen. Semoga apa yang kami lakukan bisa memberikan manfaat tidak hanya bagi perusahaan, tetapi juga bagi para kandidat yang melamar.

Pewawancara: Itu poin yang sangat bagus. Terima kasih sekali lagi. Setelah wawancara ini, kami akan analisis data dan susun laporan. Bapak akan terima ringkasan temuan kami dalam beberapa minggu ke depan. Jika ada pertanyaan lebih lanjut, jangan ragu untuk hubungi kami.

Narasumber: Terima kasih. Saya tunggu hasilnya. Semoga sukses dengan penelitian Anda.

Pewawancara: Terima kasih.

Pewawancara: Hai, selamat siang. Gimana kabarnya hari ini? Terima kasih udah nyempetin waktu buat ngobrol nih.

Narasumber: Hai, siang! Baik, makasih. Seneng banget bisa ngobrol bareng.

Pewawancara: Btw, wawancara ini bakalan direkam buat transkripsi dan analisis. Kamu oke gak?

Narasumber: Iya, nggak masalah kok. **Pewawancara:** Oke, buat mulai nih, bisa cerita sedikit tentang peranmu dan pengalamanmu pake AI dalam rekrutmen?

Narasumber: Tentu. Jadi, aku ini recruiter di firma konsultasi di Jakarta. Biasanya kami pake AI buat nyaring CV dan bantuin proses ngambil keputusan.

Pewawancara: Sejak kapan organisasi kamu mulai pake AI dalam rekrutmen?

Narasumber: Kira-kira tiga tahun lalu kami mulai pake AI buat nyaring CV. Seiring waktu, kami makin ngembangin penggunaannya buat penilaian kandidat sama interaksi awal pake chatbot. Jadi, sekarang prosesnya jauh lebih efisien dan efektif.

Pewawancara: Alat AI apa aja yang kalian pake?

Narasumber: Ada beberapa sih. Yang paling sering dipake itu sistem penyaringan CV otomatis, biar gampang ngatur banyaknya aplikasi yang masuk. Terus, kami pake chatbot buat interaksi awal sama kandidat, dan juga alat penilaian berbasis AI buat ngevaluasi keterampilan dan kepribadian mereka.

Pewawancara: Gimana alat-alat ini ngebantu dalam proses rekrutmen?

Narasumber: Alat-alat AI ini ngebantu banget dalam berbagai tahap proses rekrutmen. Pertama, buat nyaring CV. Dulu, kami harus manual ngecek satu-satu CV yang masuk, yang bisa makan waktu lama banget apalagi kalau aplikasinya banyak. Dengan AI, proses ini jadi jauh lebih cepet karena AI bisa ngeproses ratusan bahkan ribuan CV dalam waktu singkat. Jadi, kita bisa langsung fokus ke kandidat yang bener-bener sesuai kualifikasi yang kita cari. Kedua, AI juga ngebantu dalam penilaian awal kandidat. Misalnya, dengan chatbot yang bisa interaksi langsung sama kandidat buat ngumpulin informasi dasar, ngecek ketersediaan, bahkan ngasih tes-tes awal. Ini ngebantu banget buat nyaring kandidat sebelum mereka ketemu sama tim rekrutmen, jadi kita udah punya gambaran awal tentang mereka.

Pewawancara: Aku udah pernah dikasih tau sih tata cara proses yang ada di CV screening, kalo misalkan chatbot itu gimana ya sistemnya? Eh tapi kalo CV screening di setiap perusahaan tuh sama aja kan ya mekanisme nya?

Narasumber: Oke, aku jelasin ya. Jadi, chatbot ini kayak asisten virtual yang bisa diajak ngobrol sama kandidat. Chatbot ini dirancang buat ngejawab pertanyaan-pertanyaan dasar dan ngumpulin informasi penting dari kandidat di tahap awal rekrutmen. Misalnya, waktu kandidat pertama kali daftar, chatbot bisa langsung nyapa dan nanya beberapa pertanyaan dasar kayak nama, pengalaman

kerja, pendidikan terakhir, dan sebagainya. Selain itu, chatbot bisa nanya hal-hal spesifik yang relevan sama posisi yang dilamar, misalnya keterampilan teknis atau pengalaman tertentu. Proses interaksi ini biasanya berlangsung lewat teks, kayak chatting biasa di aplikasi pesan instan. Kandidat bakal ngerasa kayak lagi ngobrol sama orang beneran, padahal sebenarnya yang mereka hadapi adalah AI yang udah diprogram buat merespon berbagai pertanyaan dan skenario.

Pewawancara: Wah, keren juga ya sistem chatbot ini. Kalau chatbotnya nanya pertanyaan spesifik tentang keterampilan teknis, gimana cara AI-nya nentuin apakah jawabannya memadai?

Narasumber: Nah, jadi AI dalam chatbot ini udah dilatih dengan berbagai macam data dan skenario. Dia bisa ngecek jawaban kandidat berdasarkan kata kunci dan pola jawaban yang udah diatur sebelumnya. Misalnya, kalo kandidat nulis punya pengalaman dengan software tertentu, AI bisa langsung ngecek apakah software itu relevan sama posisi yang dilamar. Terus, AI juga bisa ngasih pertanyaan lanjutan buat ngegali lebih dalam tentang pengalaman tersebut.

Pewawancara: Boleh gak jelasin kayak gimana sih contohnya cara kerja si chatbot?

Narasumber: Tentu. Misalnya, kandidat daftar buat posisi software engineer. Setelah mereka submit CV, chatbot bakal otomatis nyapa mereka dengan pesan kayak, "Halo, terima kasih udah melamar di posisi software engineer. Boleh cerita sedikit tentang pengalamanmu pake Python?" Kalau kandidat jawab, "Saya punya pengalaman 3 tahun pake Python buat pengembangan web," chatbot bakal ngecek kata kunci kayak "3 tahun" dan "Python." Kalau sesuai, chatbot lanjut nanya, "Kamu pernah pake framework Django atau Flask?" Kalau kandidat jawab, "Saya pake Django selama 2 tahun," chatbot bakal ngerti bahwa kandidat punya pengalaman yang relevan dan lanjut ke pertanyaan berikutnya, misalnya tentang proyek spesifik yang pernah mereka kerjakan. Jadi, chatbot ini bekerja kayak asisten virtual yang terus menerus mengecek dan menggali informasi dari kandidat berdasarkan jawaban yang diberikan. Kalau ada yang nggak sesuai, chatbot bisa ngasih notifikasi ke tim rekrutmen buat dicek lebih lanjut atau langsung menandai kandidat buat eliminasi kalau jawaban nggak memenuhi kriteria.

Pewawancara: Wah, menarik banget. Jadi kalo tahapan awal, tim rekrutmen itu bener-bener lepas tangan dari tahapan rekrutmennya?

Narasumber: Nggak juga sih. Meskipun AI dan chatbot ngambil alih banyak tugas di tahap awal, tim rekrutmen masih memantau prosesnya. Kami tetep ngecek hasil screening dari AI dan nge-review jawaban-jawaban yang dikumpulin chatbot. Jadi, kalau ada sesuatu yang nggak jelas atau perlu penilaian lebih lanjut, tim rekrutmen bisa langsung intervensi. AI dan chatbot lebih sebagai alat bantu buat ngurangin beban kerja dan mempercepat proses, tapi keputusan akhir tetep ada di tangan manusia.

Pewawancara: Ih keren ya. Lalu, untuk alat penilaian berbasis AI yang buat ngevaluasi keterampilan dan kepribadian kandidat, gimana cara kerjanya? **Narasumber:** Nah, untuk alat penilaian berbasis AI, ini juga keren banget. Biasanya, kami pake alat AI yang dirancang khusus buat ngukur keterampilan teknis dan soft skills kayak komunikasi, kerja sama tim, kepemimpinan, dan lain-lain. Tes-tes ini sering kali berbentuk kuis atau simulasi situasi tertentu. Hasilnya bisa langsung di-analisis dan dikasih skor, jadi kita punya data yang jelas buat dibandingin antar

kandidat. Misalnya, kandidat bisa dikasih situasi simulasi dimana mereka harus milih respon yang paling sesuai dengan kepribadian mereka atau ngasih solusi buat masalah tertentu. AI bakal menganalisis jawaban-jawaban ini dan ngebandingin dengan profil soft skills yang kita cari. Hasilnya nanti bisa ngasih gambaran yang cukup jelas tentang bagaimana kandidat ini berpotensi ngadepin situasi nyata di tempat kerja.

Pewawancara: Wah! Jadi, kandidat dikasih semacam skenario dan mereka harus pilih tindakan yang menurut mereka paling tepat ya? Terus gimana AI bisa ngevaluasi jawaban mereka?

Narasumber: Betul banget. AI bakal ngeanalisis jawaban berdasarkan pola-pola tertentu yang udah diprogram. Misalnya, kalau kandidat milih tindakan yang menunjukkan inisiatif tinggi atau kemampuan kerja sama yang bagus, AI bisa langsung ngevaluasi itu sebagai nilai plus. Sebaliknya, kalau jawaban kandidat cenderung pasif atau nggak relevan dengan skenario, itu bisa jadi nilai minus.

Pewawancara: Kalau ada kandidat yang jawaban soft skills-nya kurang memadai, apakah mereka langsung dieliminasi juga?

Narasumber: Nggak selalu sih. Kami biasanya masih liat keseluruhan profil kandidat. Kalau mereka punya keterampilan teknis yang kuat tapi soft skills-nya kurang, kami bisa kasih mereka kesempatan buat ngembangin soft skills tersebut lewat pelatihan atau coaching. Jadi, keputusan eliminasi nggak cuma berdasarkan satu aspek aja.

Pewawancara: jadi cukup fleksibel juga ya prosesnya. Terus, gimana pengalaman kandidat selama menjalani tes ini?

Narasumber: Sejauh ini, umumnya positif sih. Banyak kandidat yang merasa tes ini menarik dan menantang karena mereka bisa ngerasa kayak lagi main game atau simulasi nyata. Plus, mereka juga bisa dapet feedback langsung dari AI tentang area mana yang kuat dan mana yang perlu diperbaiki, jadi itu nambah nilai buat pengalaman mereka juga.

Pewawancara: seru juga ya kalau tesnya berasa kayak main game. Feedback dari AI itu biasanya bentuknya gimana?

Narasumber: Biasanya feedbacknya berupa laporan singkat yang ngasih gambaran tentang performa mereka di tes tersebut. Misalnya, AI bisa nunjukin skor mereka di berbagai aspek soft skills yang diuji, terus ngasih rekomendasi area mana yang perlu diperbaiki. Misalnya, kalo performa di komunikasi kurang, AI bisa ngasih tips atau saran buat ningkatin keterampilan komunikasi mereka. Jadi kandidat bisa langsung tau kekuatan dan kelemahan mereka, dan itu bisa jadi bekal buat pengembangan diri ke depannya.

Pewawancara: Terus, gimana pengalaman kandidat selama menjalani tes ini?

Narasumber: Sejauh ini, umumnya positif sih. Banyak kandidat yang merasa tes ini menarik dan menantang karena mereka bisa ngerasa kayak lagi main game atau simulasi nyata. Plus, mereka

juga bisa dapat feedback langsung dari AI tentang area mana yang kuat dan mana yang perlu diperbaiki, jadi itu nambah nilai buat pengalaman mereka juga.

Pewawancara: Jadi kandidat bisa langsung dapat manfaat dari proses rekrutmen ya. Ada cerita menarik dari kandidat yang dapat feedback terus berhasil ningkatin soft skills mereka?

Narasumber: Ada beberapa kandidat yang balik lagi setelah dapat feedback dan mereka cerita kalo mereka bener-bener nerapin saran-saran dari AI. Misalnya, ada yang ikut kursus komunikasi atau lebih aktif dalam kegiatan kerja sama tim di tempat kerja mereka sekarang. Terus, pas mereka ikut lagi proses rekrutmen di perusahaan lain, performa mereka jadi jauh lebih baik. Jadi, feedback dari AI bener-bener ngebantu mereka buat berkembang.

Pewawancara: Terus menurut kamu pribadi nih as a Recruiter, dari tahapan-tahapan yang udah kalian lakuin, ada masalah etika yang muncul gak sih?

Narasumber: Ya, ada beberapa isu etika yang muncul dalam penggunaan AI dalam rekrutmen. Salah satunya adalah bias algoritma lalu juga ketergantungan yang berlebihan pada AI. Meskipun AI dirancang buat objektif, data yang dipake buat melatih AI bisa punya bias yang bikin hasil akhirnya juga bias. Misalnya, kalau data latihnya lebih banyak dari kandidat dengan latar belakang tertentu, AI bisa cenderung lebih pilih kandidat dengan latar belakang yang sama.

Pewawancara: Tentang bias algoritma, bisa kasih contoh spesifik gimana bias algoritma ini bisa muncul dalam proses rekrutmen?

Narasumber: Tentu. Contohnya, misalkan kita pake data historis dari perusahaan yang mayoritas karyawannya lulusan universitas tertentu atau punya latar belakang tertentu. Kalau AI dilatih dengan data ini, dia bisa jadi cenderung lebih memilih kandidat dengan latar belakang yang sama karena menganggap mereka lebih sukses berdasarkan data historis. Padahal, ini bisa ngebuat kandidat dari universitas atau latar belakang lain jadi terdiskriminasi, meskipun mereka juga punya kualifikasi yang sama baiknya.

Pewawancara: Wah, jadi kayak ada kecenderungan buat nge-clone profil kandidat yang udah ada ya. Ada contoh spesifik lain nggak selain latar belakang pendidikan?

Narasumber: Iya, betul. Contoh lain bisa muncul dari gender bias. Misalnya, kalau data historis menunjukkan lebih banyak pria yang berhasil di posisi tertentu, AI bisa jadi cenderung lebih memilih pria daripada wanita untuk posisi yang sama. Ini bisa terjadi walaupun kandidat wanita punya kualifikasi yang setara atau bahkan lebih baik. Bias ini bisa merugikan kandidat wanita dan memperkuat ketidaksetaraan gender di tempat kerja.

Pewawancara: Jadi bener-bener bisa memperkuat bias yang udah ada ya. Kalo dari pengalaman kamu sendiri, pernah nemuin bias lain dalam proses rekrutmen dengan AI?

Narasumber: Pernah juga ada kasus bias geografis. Misalnya, kalau data menunjukkan lebih banyak karyawan sukses dari daerah perkotaan, AI bisa jadi cenderung lebih memilih kandidat

dari daerah perkotaan daripada dari pedesaan, meskipun kandidat dari pedesaan juga punya potensi yang sama. Ini bisa ngebuat kesempatan jadi nggak adil buat kandidat dari daerah tertentu.

Pewawancara: Menarik banget. Jadi gimana langkah-langkah konkret yang tim kamu lakuin buat ngatasi bias-bias ini?

Narasumber: Kami biasanya mulai dengan audit algoritma secara berkala buat ngecek apakah ada bias yang muncul. Selain itu, kami juga pake dataset yang lebih beragam buat ngelatih AI. Kami juga kadang ngajak konsultan eksternal buat bantu ngevaluasi dan ngasih rekomendasi buat ngeurangi bias. Kami juga ngasih pelatihan ke tim rekrutmen tentang kesadaran bias dan cara ngatasinya.

Pewawancara: Bagus banget ada audit dan pelatihan. Apa ada contoh langkah spesifik yang udah kalian lakuin yang menurut kamu paling efektif buat ngurangin bias?

Narasumber: Salah satu langkah yang paling efektif adalah diversifikasi dataset. Kami pastiin bahwa data yang kami pake buat ngelatih AI mencakup berbagai latar belakang, gender, pendidikan, dan geografis. Kami juga nambahin langkah manual dalam proses rekrutmen, jadi meskipun AI udah nge-screening kandidat, tetap ada sentuhan manusia buat nge-review dan pastiin nggak ada bias yang muncul. Misalnya, kami punya panel evaluasi yang terdiri dari berbagai latar belakang buat nge-review hasil screening dari AI.

Pewawancara: Jadi tetap ada campur tangan manusia ya buat memastikan keadilan. Bagaimana kandidat merespons upaya kalian dalam mengatasi bias ini?

Narasumber: Kandidat umumnya merespons positif, terutama ketika mereka tau bahwa kami berusaha sebaik mungkin buat ngurangin bias. Transparansi dalam proses rekrutmen juga membantu kandidat merasa lebih nyaman dan percaya diri. Kami juga ngasih mereka kesempatan buat ngasih feedback tentang proses rekrutmen, dan itu jadi bahan evaluasi buat kami buat terus ningkatin sistem yang ada.

Pewawancara: Selain masalah bias, ada nggak sih concern lain yang menurut kamu penting diperhatikan saat pakai AI dalam rekrutmen?

Narasumber: Ada beberapa concern lain yang penting diperhatikan. Salah satunya adalah masalah transparansi. Kadang-kadang, kandidat nggak tahu atau nggak paham gimana AI menilai mereka. Mereka bisa frustrasi kalau nggak ada penjelasan jelas kenapa mereka nggak lolos seleksi.

Pewawancara: Menarik, transparansi ini penting banget ya buat menjaga kepercayaan kandidat. Gimana cara kalian mengatasi masalah transparansi ini?

Narasumber: Kami berusaha se-transparan mungkin dengan ngasih tahu kandidat bahwa AI dipakai dalam proses seleksi. Kami juga kasih feedback yang jelas kalau mereka nggak lolos, jelasin area mana yang bisa mereka tingkatkan. Selain itu, kami kasih penjelasan tentang gimana AI bekerja dan kriteria apa yang dipakai dalam penilaian.

Pewawancara: Biasanya kalian nyampein informasi ini ke kandidat lewat apa?

Narasumber: Informasi ini biasanya kami sampaikan lewat email atau portal aplikasi yang kami pakai. Pas kandidat pertama kali daftar, mereka akan terima notifikasi yang jelasin bahwa AI akan dipakai dalam proses seleksi dan gimana data mereka akan diproses. Kami juga menyediakan FAQ di situs kami yang jawab pertanyaan umum tentang penggunaan AI dalam rekrutmen.

Pewawancara: Kalian juga kasih penjelasan tentang gimana AI membuat keputusan dalam setiap tahap rekrutmen?

Narasumber: Iya, betul. Kami berusaha jelasin sejelas mungkin kriteria yang dipakai AI untuk nyaring dan menilai kandidat. Misalnya, kami jelasin bahwa AI akan evaluasi CV berdasarkan kata kunci tertentu yang relevan dengan posisi yang dilamar, serta gimana chatbot kami ngumpulin informasi dari kandidat di tahap awal. Kami juga jelasin bahwa hasil dari penilaian AI cuma salah satu faktor yang dipertimbangkan, dan keputusan akhir tetap di tangan tim rekrutmen.

Pewawancara: Gimana biasanya kandidat merespons penjelasan ini? Apakah mereka merasa lebih tenang dan percaya diri dengan prosesnya?

Narasumber: Sebagian besar kandidat merespons positif. Mereka merasa lebih tenang dan percaya diri karena mereka tahu apa yang diharapkan dan gimana prosesnya berjalan. Transparansi ini juga bantu mereka merasa lebih dihargai dan diperlakukan dengan adil, karena mereka tahu bahwa keputusan yang diambil berdasarkan kriteria yang jelas dan objektif.

Pewawancara: Ada tantangan yang kalian hadapi dalam menjaga transparansi ini?

Narasumber: Tantangan utamanya adalah memastikan bahwa informasi yang kami kasih mudah dipahami oleh semua kandidat, terutama mereka yang mungkin nggak terbiasa dengan teknologi AI. Kami berusaha untuk pakai bahasa yang sederhana dan mudah dipahami dalam semua komunikasi kami. Selain itu, kami juga harus terus update informasi ini seiring dengan perkembangan teknologi dan perubahan dalam proses rekrutmen kami.

Pewawancara: Gimana cara kalian memastikan bahwa informasi yang diberikan selalu up-to-date?

Narasumber: Kami punya tim khusus yang bertanggung jawab untuk mengelola dan memperbarui informasi terkait proses rekrutmen dan penggunaan AI. Tim ini bekerja sama dengan departemen IT dan tim rekrutmen untuk memastikan bahwa semua informasi yang diberikan kepada kandidat selalu akurat dan relevan. Kami juga rutin mengadakan pelatihan dan workshop untuk tim rekrutmen agar mereka selalu up-to-date dengan teknologi dan proses terbaru.

Pewawancara: Itu bagus sekali. Ada concern lain yang perlu diperhatikan selain transparansi?

Narasumber: Ada juga concern tentang keamanan data. Mengingat AI butuh banyak data pribadi buat bisa bekerja dengan baik, ini bisa jadi masalah kalau data tersebut nggak dikelola dengan

aman. Data breach atau penyalahgunaan data pribadi bisa berdampak buruk bagi perusahaan dan kandidat.

Pewawancara: Keamanan data memang krusial. Langkah konkret apa yang kalian ambil untuk memastikan data kandidat aman?

Narasumber: Kami pakai enkripsi tingkat tinggi untuk melindungi data pribadi kandidat. Selain itu, kami batasi akses ke data hanya untuk personel yang berwenang dan melakukan audit keamanan secara berkala. Kami juga mematuhi regulasi privasi data yang berlaku dan selalu memperbarui kebijakan privasi kami sesuai dengan perubahan regulasi.

Pewawancara: Tadi kamu sebut tentang ketergantungan yang berlebihan pada AI sebagai concern. Bisa jelaskan lebih detail, dari perspektif kamu sebagai recruiter, bagaimana ketergantungan ini bisa berdampak negatif pada proses rekrutmen?

Narasumber: Tentu. Terlalu bergantung pada AI bisa bikin proses rekrutmen jadi terlalu kaku dan kurang personal. Misalnya, AI memang bisa menilai keterampilan teknis dari CV dan tes online, tapi AI nggak bisa menangkap nuansa kepribadian, motivasi, atau nilai-nilai yang dipegang oleh kandidat. Hal-hal ini biasanya baru kelihatan lewat interaksi langsung dengan manusia, seperti dalam wawancara tatap muka.

Pewawancara: Menurut kamu, kurangnya sentuhan personal ini bisa mempengaruhi pengalaman kandidat gimana?

Narasumber: Kandidat bisa merasa nggak dihargai atau cuma dianggap angka dalam sistem. Mereka mungkin merasa prosesnya nggak adil kalau nggak dapat kesempatan buat menunjukkan potensi mereka secara langsung. Selain itu, kurangnya interaksi manusia bisa bikin kandidat merasa nggak ada keterlibatan emosional atau dukungan dari perusahaan, yang bisa mengurangi minat mereka buat bergabung.

Pewawancara: Bisa kasih contoh konkret dari pengalamanmu, di mana ketergantungan pada AI ini mengakibatkan masalah?

Narasumber: Ada satu kasus di mana seorang kandidat dengan kualifikasi teknis yang sangat baik nggak lolos seleksi awal karena hasil penilaian AI yang rendah dalam soft skills. Tapi, waktu kami akhirnya melakukan wawancara tatap muka karena rekomendasi dari sumber internal, ternyata kandidat tersebut punya kepribadian yang sangat cocok dengan budaya perusahaan dan kemampuan komunikasi yang baik. Ini menunjukkan bahwa AI nggak selalu bisa menangkap semua aspek penting dari seorang kandidat.

Pewawancara: Apa langkah-langkah yang kalian ambil untuk mengurangi ketergantungan yang berlebihan pada AI dan memastikan proses rekrutmen tetap humanis?

Narasumber: Kami pastikan meskipun AI membantu dalam screening awal, keputusan akhir selalu dibuat oleh tim rekrutmen manusia. Kami juga berusaha tetap berinteraksi langsung dengan kandidat, misalnya lewat wawancara tatap muka atau video call. Selain itu, kami libatkan panel

yang terdiri dari berbagai latar belakang buat evaluasi hasil screening dari AI dan memastikan ada perspektif manusia dalam setiap tahap proses rekrutmen.

Pewawancara: Menurut kamu, gimana keseimbangan yang ideal antara penggunaan AI dan interaksi manusia dalam rekrutmen?

Narasumber: Keseimbangan ideal adalah ketika AI dipakai untuk mempercepat dan mempermudah proses administratif, seperti penyaringan CV dan penilaian awal, sementara interaksi manusia digunakan untuk penilaian yang lebih mendalam dan kompleks, seperti wawancara dan penilaian kepribadian. Dengan begitu, kita bisa dapet manfaat efisiensi dari AI tanpa kehilangan sentuhan personal yang sangat penting dalam rekrutmen.

Pewawancara: Okeyyy, makasih banyak buat penjelasannya yang mendalam dan informatif ini. Sebelum kita akhiri, ada hal lain nggak yang menurut kamu penting buat dibahas tapi belum sempat kita obrolin?

Narasumber: Sebenarnya ada satu hal lagi yang penting, yaitu soal dampak AI buat pelatihan dan pengembangan karyawan. AI nggak cuma berguna buat rekrutmen, tapi juga bisa dipakai buat ngembangin keterampilan karyawan yang udah ada. Misalnya, AI bisa menganalisis performa karyawan dan kasih rekomendasi pelatihan yang sesuai buat mereka. Jadi, perusahaan bisa lebih efektif dalam ngelola dan ngembangin sumber daya manusianya.

Pewawancara: Eh, emang bisa gitu dipakai buat pelatihan juga? Gimana caranya?

Narasumber: AI bisa menganalisis data performa karyawan, kayak hasil kerja, feedback dari atasan, dan penilaian keterampilan. Berdasarkan data ini, AI bisa ngidentifikasi area yang perlu ditingkatkan dan ngasih rekomendasi pelatihan yang sesuai. Misalnya, kalau seorang karyawan kurang dalam keterampilan komunikasi, AI bisa merekomendasikan kursus komunikasi atau pelatihan public speaking.

Pewawancara: Wah, jadi AI juga bisa bantu dalam pengembangan karir karyawan ya. Ada lagi yang mau kamu tambahkan?

Narasumber: Iya, betul. Selain itu, penting juga buat terus mantau dan evaluasi efektivitas penggunaan AI dalam semua aspek ini, termasuk rekrutmen dan pengembangan karyawan. Jadi, kita bisa terus perbaiki dan pastiin teknologi ini benar-benar memberi manfaat yang maksimal.

Pewawancara: Oke noted. Makasih banyak ya!

P4

Pewawancara: Halo. Gimana kabarnya?

Narasumber: Halo! Kabar baik, terima kasih. Senang bisa ngobrol bareng.

Pewawancara: Aku juga senang. Btw, wawancara ini bakalan direkam buat transkripsi dan analisis. Kamu oke dengan ini, Ko?

Narasumber: Iya, nggak masalah kok.

Pewawancara: Oke, untuk mulai nih, bisa cerita sedikit tentang peranmu dan pengalamanmu pake AI dalam rekrutmen?

Narasumber: Tentu. Jadi, aku ini Talent Acquisition Specialist di perusahaan manufaktur besar di Surabaya. Udah sekitar empat tahun ini kami pake AI dalam proses rekrutmen. Biasanya kami pake AI buat nyaring CV, melakukan penilaian awal, dan juga buat melakukan automated interviews.

Pewawancara: Menarik. Bisa kamu jelaskan contoh penggunaan automated interviews di rekrutmen, Ko?

Narasumber: Tentu. Jadi, kandidat akan menerima undangan automated interviews melalui email. Mereka akan diminta untuk merekam jawaban mereka terhadap beberapa pertanyaan yang sudah disiapkan sebelumnya. Misalnya, pertanyaan tentang pengalaman kerja mereka, bagaimana mereka menangani situasi tertentu di tempat kerja, atau alasan mereka melamar di perusahaan kami. AI kemudian akan menganalisis rekaman ini dan memberikan penilaian berdasarkan berbagai faktor seperti bahasa tubuh, ekspresi wajah, dan nada suara.

Pewawancara: Wah, dari kemarin yang aku interview, mereka pakai CV screening dan chatbot, tapi Ko Biyan sudah pakai automated interviews?

Narasumber: Iya, benar. Kami merasa bahwa automated interviews bisa memberikan penilaian yang lebih mendalam dibandingkan hanya screening CV atau menggunakan chatbot. Dengan automated interviews, AI bisa menganalisis lebih banyak aspek dari kandidat, seperti bahasa tubuh, ekspresi wajah, dan nada suara, yang semuanya bisa memberikan gambaran lebih lengkap tentang karakter dan kemampuan kandidat.

Pewawancara: Bisa lebih detail tentang proses dan teknologi yang digunakan, Ko?

Narasumber: Tentu. Pertama, kandidat akan masuk ke platform automated interviews yang kami gunakan. Platform ini biasanya berbasis web, jadi kandidat tidak perlu mengunduh aplikasi khusus. Setelah login, mereka akan diberikan petunjuk singkat tentang cara menggunakan platform dan tips untuk mendapatkan hasil terbaik. Misalnya, mereka akan diarahkan untuk memastikan pencahayaan yang baik, memilih tempat yang tenang, dan berpakaian rapi seperti dalam wawancara tatap muka.

Pewawancara: Apa yang terjadi setelah kandidat memulai automated interviews?

Narasumber: Setelah memulai, kandidat akan melihat serangkaian pertanyaan yang muncul di layar satu per satu. Pertanyaan-pertanyaan ini biasanya mencakup topik-topik seperti pengalaman kerja, keterampilan teknis, cara menangani situasi tertentu, dan motivasi mereka

melamar di perusahaan kami. Mereka akan punya waktu terbatas untuk menjawab setiap pertanyaan, biasanya sekitar dua hingga tiga menit per pertanyaan. Jawaban mereka direkam dan otomatis disimpan di sistem. Setelah sesi rekaman selesai, AI akan mulai menganalisis jawaban-jawaban tersebut. Proses analisis ini melibatkan evaluasi berbagai aspek, seperti bagaimana kandidat menjawab pertanyaan, seberapa jelas dan koheren mereka berbicara, serta bahasa tubuh dan ekspresi wajah mereka selama wawancara. AI kemudian memberikan skor atau penilaian berdasarkan kriteria yang telah ditentukan sebelumnya.

Pewawancara: Bagaimana AI menganalisis jawaban dari kandidat, Ko?

Narasumber: AI yang kami gunakan menganalisis setiap rekaman berdasarkan algoritma yang sudah dilatih untuk mendeteksi berbagai elemen. Misalnya, AI akan memperhatikan mikro-ekspresi wajah yang menunjukkan emosi tertentu, postur tubuh yang menandakan kepercayaan diri atau kegugupan, dan nada suara yang dapat mengindikasikan tingkat kejujuran dan kemampuan komunikasi. Analisis ini dilakukan dengan menggunakan teknologi pembelajaran mesin yang terus diperbarui dengan data terbaru untuk meningkatkan akurasi. AI juga dapat mengenali pola-pola bicara yang mungkin menunjukkan tingkat pengetahuan teknis atau cara berpikir kritis kandidat.

Pewawancara: Seberapa akurat AI dalam menganalisis automated interviews ini, Ko?

Narasumber: AI yang kami gunakan sudah melalui proses pelatihan yang cukup panjang dengan data dari ribuan wawancara. Ini memungkinkan AI untuk mengenali pola-pola tertentu yang sering terkait dengan kualitas kandidat yang baik, seperti kepercayaan diri, kejujuran, dan kemampuan komunikasi. Namun, AI tidak 100% sempurna. Oleh karena itu, hasil analisis AI selalu dikombinasikan dengan penilaian dari tim rekrutmen manusia untuk memastikan hasil yang lebih akurat dan adil. Misalnya, AI mungkin mendeteksi seseorang yang sangat percaya diri, tetapi tim rekrutmen manusia akan melihat keseluruhan profil dan memastikan tidak ada bias atau kesalahan dalam penilaian.

Pewawancara: Apa keuntungan utama dari penggunaan automated interviews ini, Ko?

Narasumber: Salah satu keuntungan utama adalah efisiensi. Proses ini memungkinkan kami untuk menghemat banyak waktu dalam tahap awal seleksi, terutama jika kami menerima banyak aplikasi untuk satu posisi. Selain itu, ini juga memberikan kesempatan bagi kandidat yang tinggal jauh dari kantor untuk mengikuti wawancara tanpa harus datang langsung. Ini bisa sangat membantu dalam menarik talenta dari berbagai lokasi. Selain itu, automated interviews ini bisa dilakukan kapan saja, memberikan fleksibilitas bagi kandidat untuk memilih waktu yang paling nyaman bagi mereka. Keuntungan lainnya adalah konsistensi dalam penilaian. Dengan AI, kami bisa memastikan bahwa semua kandidat dinilai dengan kriteria yang sama tanpa adanya pengaruh subjektivitas manusia yang mungkin terjadi.

Pewawancara: Bagaimana reaksi kandidat terhadap proses ini, Ko?

Narasumber: Ada beragam reaksi. Beberapa kandidat merasa nyaman karena mereka bisa melakukan wawancara kapan saja dan dari mana saja. Mereka menghargai fleksibilitas ini,

terutama jika mereka memiliki jadwal yang sibuk atau tinggal di lokasi yang jauh. Namun, ada juga yang merasa kurang nyaman karena kurangnya interaksi manusia. Mereka merasa prosesnya jadi terasa kurang personal dan menakutkan berbicara di depan kamera tanpa ada orang di sana. Kami selalu berusaha untuk memberikan informasi dan panduan yang jelas untuk membantu mereka merasa lebih nyaman dan siap. Misalnya, kami memberikan tips tentang cara berbicara di depan kamera, menjaga kontak mata, dan berbicara dengan jelas.

Pewawancara: Apakah ada fitur khusus dalam platform ini yang membantu kandidat merasa lebih nyaman, Ko?

Narasumber: Ya, platform ini menyediakan latihan wawancara di mana kandidat bisa mencoba menjawab beberapa pertanyaan simulasi sebelum memulai automated interviews yang sebenarnya. Ini membantu mereka terbiasa dengan format dan merasa lebih percaya diri. Selain itu, kami juga menyediakan panduan tentang bagaimana cara mempersiapkan diri untuk automated interviews, seperti tips teknis dan cara menjawab pertanyaan dengan efektif. Kami juga memberikan kesempatan untuk interaksi langsung dengan tim rekrutmen manusia di tahap-tahap berikutnya untuk menambah sentuhan personal dalam prosesnya. Misalnya, setelah automated interviews, kandidat yang lolos akan dijadwalkan untuk wawancara langsung dengan tim rekrutmen kami.

Pewawancara: Apakah ada langkah lanjutan setelah automated interviews ini, Ko?

Narasumber: Setelah automated interviews, hasil analisis AI akan ditinjau oleh tim rekrutmen kami. Jika kandidat lolos tahap ini, mereka akan diundang untuk wawancara lanjutan dengan tim rekrutmen manusia. Ini bisa berupa wawancara tatap muka atau wawancara video langsung, tergantung pada situasi dan lokasi kandidat. Kami juga melakukan penilaian keterampilan tambahan jika diperlukan, seperti tes teknis atau studi kasus, untuk mendapatkan gambaran yang lebih lengkap tentang kemampuan dan kecocokan kandidat dengan posisi yang dilamar. Tujuan utama kami adalah memastikan bahwa setiap kandidat yang maju ke tahap berikutnya benar-benar sesuai dengan kebutuhan dan budaya perusahaan kami.

Pewawancara: Oh iya, Ko, tahapan dari awal rekrutmen sampai ke automated interview itu apa aja sih?

Narasumber: Pertama, kami mulai dengan memposting lowongan pekerjaan di berbagai platform, seperti situs karir, LinkedIn, dan portal pekerjaan lainnya. Setelah itu, kami menerima dan mengumpulkan CV dari para pelamar. Proses berikutnya adalah screening CV dengan bantuan AI untuk menyaring kandidat yang memenuhi kualifikasi dasar. Kandidat yang lolos screening CV akan diberi undangan untuk mengikuti tes keterampilan atau penilaian awal lainnya, yang juga bisa dilakukan secara online. Setelah itu, kandidat yang lolos tahap ini akan diundang untuk melakukan automated interviews. Di sini, mereka akan menjawab serangkaian pertanyaan yang sudah disiapkan dan direkam oleh sistem. Setelah automated interviews, hasilnya akan dianalisis oleh AI dan ditinjau oleh tim rekrutmen. Kandidat yang lolos tahap ini akan diundang untuk wawancara lanjutan dengan tim rekrutmen manusia, baik secara tatap muka atau melalui video call. Tahap akhir adalah pengecekan referensi dan penawaran kerja bagi kandidat yang terpilih. Jadi, tahapan rekrutmennya mulai dari posting lowongan, menerima CV,

screening CV, tes keterampilan, automated interviews, wawancara lanjutan, hingga pengecekan referensi dan penawaran kerja.

Pewawancara: Oh ada tes keterampilan atau penilaian awal juga ya Ko? Itu kayak gimana prosesnya?

Narasumber: Iya, betul. Jadi, setelah screening CV, kami biasanya mengundang kandidat yang memenuhi kualifikasi dasar untuk mengikuti tes keterampilan atau penilaian awal lainnya. Tes ini bisa bervariasi tergantung pada posisi yang dilamar. Misalnya, untuk posisi teknis, kami mungkin memberikan tes coding atau tes teknis lainnya yang relevan dengan pekerjaan tersebut. Tes ini biasanya dilakukan secara online, jadi kandidat bisa mengerjakannya dari mana saja. Selain tes teknis, kami juga bisa memberikan tes psikometrik untuk mengukur kemampuan kognitif, kepribadian, dan keterampilan interpersonal kandidat. Hasil dari tes ini akan membantu kami mendapatkan gambaran yang lebih lengkap tentang kemampuan dan kecocokan kandidat dengan posisi yang dilamar sebelum mereka melangkah ke tahap automated interviews.

Pewawancara: Boleh jelasin gak mengenai tes psikometrik? Itu pakai AI juga kah, Ko?

Narasumber: Tentu. Tes psikometrik adalah tes yang dirancang untuk mengukur berbagai aspek dari kepribadian, kemampuan kognitif, dan keterampilan interpersonal seorang kandidat. Tes ini bisa mencakup berbagai jenis soal, mulai dari soal logika dan penalaran, tes kepribadian, hingga simulasi situasi kerja. Tes psikometrik ini membantu kami memahami bagaimana kandidat berpikir, bagaimana mereka berinteraksi dengan orang lain, dan bagaimana mereka akan cocok dengan budaya kerja perusahaan.

Pewawancara: Jadi, tes psikometrik ini mencakup banyak aspek ya, Ko?

Narasumber: Betul. Tes psikometrik ini sangat komprehensif. Misalnya, ada bagian yang mengukur kemampuan verbal dan numerik kandidat, ada juga yang mengukur kemampuan berpikir kritis dan pemecahan masalah. Selain itu, ada juga bagian yang mengukur kepribadian kandidat, seperti bagaimana mereka menangani stres, bagaimana mereka berinteraksi dalam tim, dan bagaimana gaya kepemimpinan mereka. Semua ini memberikan gambaran yang lebih lengkap tentang kandidat dan membantu kami menentukan apakah mereka cocok dengan posisi yang dilamar.

Pewawancara: Apa tes psikometrik ini juga menggunakan AI dalam prosesnya, Ko?

Narasumber: Iya, benar. Kami menggunakan AI dalam proses analisis hasil tes psikometrik. AI membantu kami menganalisis pola jawaban kandidat dan membandingkannya dengan profil kandidat yang sukses di perusahaan kami. Dengan bantuan AI, kami bisa mendapatkan hasil yang lebih cepat dan akurat. Selain itu, AI juga membantu mengurangi bias dalam penilaian, karena semua kandidat dinilai berdasarkan kriteria yang sama dan data yang objektif.

Pewawancara: Wah, menarik banget. Jadi, AI benar-benar membantu dari awal sampai akhir proses rekrutmen ya, Ko?

Narasumber: Iya, benar. AI membantu kami di setiap tahap, mulai dari screening CV, tes keterampilan, tes psikometrik, hingga automated interviews. Dengan bantuan AI, proses rekrutmen jadi lebih efisien, objektif, dan akurat. Kami bisa menghemat waktu dan sumber daya, serta memastikan bahwa kami mendapatkan kandidat terbaik untuk setiap posisi.

Pewawancara: Menurut Koko sebagai seorang recruiter, ada gak ethical issue yang Koko temui di dalam proses rekrutmen?

Narasumber: Oh iya, ada beberapa sih. Salah satunya adalah soal privasi data. Kita kan butuh banyak data pribadi buat proses rekrutmen, jadi penting banget buat memastikan data itu aman dan gak disalahgunakan. Kalau data kandidat bocor atau disalahgunakan, itu bisa merusak reputasi perusahaan dan bikin kandidat jadi gak percaya lagi sama kita. Terus, soal bias dalam AI juga penting. Walaupun AI bisa bantu mengurangi bias manusia, kalau data latihannya gak beragam, bisa jadi malah memperkuat bias yang ada. Misalnya, AI bisa secara tidak sengaja lebih memilih kandidat dari latar belakang tertentu karena data latihannya lebih banyak dari situ. Makanya, kami harus terus memantau dan mengkalibrasi alat AI kami buat memastikan adil dan akurat.

Selain itu, ada juga isu transparansi. Kandidat perlu tahu gimana data mereka digunakan dan gimana keputusan dibuat. Kami berusaha buat se-transparan mungkin dengan ngasih penjelasan jelas ke kandidat tentang proses ini. Mereka harus tahu bahwa AI digunakan dalam proses penilaian dan gimana AI bekerja. Misalnya, setelah automated interviews, kami kasih feedback ke kandidat tentang hasilnya dan kenapa mereka lolos atau tidak.

Ada juga concern tentang dehumanisasi proses rekrutmen. Kandidat bisa merasa kurang diperhatikan atau diabaikan karena interaksi mereka lebih banyak dengan mesin daripada dengan manusia. Kami mencoba mengatasi ini dengan memastikan ada sentuhan manusia di setiap tahap penting, seperti wawancara lanjutan dan feedback personal.

Dan yang gak kalah penting adalah soal keadilan dalam akses teknologi. Gak semua kandidat punya akses yang sama ke teknologi yang dibutuhkan buat mengikuti proses rekrutmen online. Misalnya, ada yang mungkin gak punya koneksi internet yang bagus atau perangkat yang memadai. Kami harus memastikan bahwa proses rekrutmen kami inklusif dan adil bagi semua kandidat, termasuk dengan menyediakan alternatif atau bantuan teknis jika diperlukan.

Pewawancara: Apakah ada hal lain yang belum kita bahas dalam wawancara ini, Ko?

Narasumber: Mungkin satu hal lagi yang penting adalah bagaimana kita terus belajar dan beradaptasi dengan teknologi baru dalam rekrutmen. Dunia teknologi terus berkembang, dan sebagai recruiter, kami harus selalu update dengan perkembangan terbaru untuk memastikan bahwa proses rekrutmen kami tetap efektif dan efisien. Misalnya, tren penggunaan AI dalam rekrutmen masih terus berkembang, dan kami harus siap untuk mengadopsi teknologi baru yang bisa membantu kami mendapatkan kandidat terbaik. Selain itu, penting juga untuk terus mendapatkan feedback dari kandidat dan tim rekrutmen untuk memperbaiki proses kami ke depannya.

Pewawancara: Wah, banyak juga ya, Ko, isu etis yang harus diperhatikan. Terima kasih banyak atas penjelasannya. Ini sangat membantu untuk memahami tantangan dalam rekrutmen dengan teknologi AI.

Narasumber: Sama-sama, senang bisa berbagi. Semoga informasi ini bermanfaat untuk kamu dan tim.

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Interviewer

Hi, can you briefly describe your professional background and type of roles you typically play for?

Interviewee

Well, right now I'm doing more as a researcher and also project officer. The kind of job positions that I was looking for right now, and of course in the researcher positions, and also involving with the project management and such. But actually, if you are asking about the recruitment that I experienced, they are using AI tools. Mostly I experienced it after my undergraduate degree, where I am looking for roles mostly for management trainee or graduate development programs.

Interviewer

Have you had experience with the AI recruitment tools? Like CV screening, video interview, or chatbot for application queries? If so, can you describe this experience? Yes, I have.

Interviewee

Most of the experiences are with big companies like multinational companies, and also I think recently with local startups as well. Describe the experience so far, were all pleasant. It was, I think, first of all, time efficient, and also the tools I think really helped me in making the process fun, especially during the written test. From the applicant's positions, I can sense that I felt less pressured when doing the written test that are assisted by AI tools compared to the traditional one. It doesn't feel the pressure, which was much more less, and also they can conduct it in a more fun way, because there are a lot of tests that they end up gamifying. So it was fun. Overall, all in all, the experience was, I think, mostly positive.

Interviewer

Can you describe your overall experience using these tools? And what aspect of the process did you find positive or negative?

Interviewee

I think as what I have mentioned before, so far mostly positive, because I really like how the situation is becoming somehow less pressured and less anxious for the applicant's side. The negative one, well, this is my assumption, but I think for the personality test, maybe it can go more too subjective, because I think personality tests should capture someone's full potential, right? So the problem with using them as AI tools, which I'm also not sure whether the final decision-making is by the tool solely or still reviewed by their HR or human capital team. But yeah, that particular test is the part where I feel like maybe the judgment can go a little bit too subjective.

Interviewer

Can you recall a specific instance where the AI tools were used in your recruitment process? And please describe what happened and how you felt about it.

Interviewee

Okay. So, in the past, because mostly the experience is what I really followed until before the interview user stage, when I was looking for a management trainee program, right? So usually, what I experienced, starting from the beginning, including the resume screening and such, what I find is very helpful in that step, which is being able to upload your resume, and it will automatically fill in all the data that needs to be filled. It's really helpful, especially when we are applying in several jobs at a time. After that, usually there are some that directly direct you to a personality test. And I think there was even a personality test that wasn't just once. So, after the resume, there's a personality test, and in the next test, there's one that starts with the aptitude test. But after that, there's another personality test. And then, I think Danone and Loreal already had an AI interview. So, that's the personality test. At that time, it was interesting that Danone and Astra also had one, I think. So, after we did the personality test, the results came out immediately. But in the results, they didn't tell us if we passed or not, but they told us what our potential was. Some even gave suggestions, like, these are the future positions that are suitable for you. That's really helpful. And then, after the personality test, there were some insights that I think are quite unique, and I don't think you can get it if you use traditional tools. And then, here it is. After that, the written test, I think nothing really special, except it was being done on a computer. Oh, and that's what impressed me the most, how the atmosphere is becoming less pressured and anxious. And then, what I really liked at the time was from Shell. Because actually, in my opinion, the test was quite difficult. But I don't know why, I mean, I don't know how, but they did the gamification with their tools, and it turned out to be really enjoyable. Even until the test was finished, I didn't feel like, okay, it turns out that the test was quite substantial. That's it. After that, I forgot what the company was at the time, but there was someone who kind of asked for another personality test, or I guess it's more like an attitude test, I guess. And then, from there, I think it was Danon and Laurel, after that, there was an interview, what was it called? AI interview, right? Video interviews. And usually, in the video interviews, there were about two or three questions, from the general ones, about why we applied here, and so on. Then there was a specific question on the roles, but there was also a question about our opinion on a certain issue, which I guess, each candidate can get a different topic or issue. So far, that's what I've experienced, the recruitment using the AI tools.

Interviewer

But what's interesting is that they gave recommendations for work and personality. How was that?

Interviewee

I forgot, actually, they used a certain theory for the test, because there must be something like MBTI. I forgot the name of the method, but it was really funny. They gave us the visualizations, how strong we were in what aspect, and the positions that would suit us, like more managerial or more analytical.

Interviewer

It was very interesting indeed. Which company was that?

Interviewee

As far as I remember, one of them was Astra. Astra is also a multinational, right?

Interviewer

Yes. How user-friendly did you find in the AI recruitment tools? I think it was user-friendly in terms of UI and UX.

Interviewee

So far, everything was pretty user-friendly. It was really easy to use the instructions. Mostly the instructions were really clear. But for the first time, it was a bit difficult for me to navigate when I had Astra, when I was in a written test, which was like a basic competency test, I guess. They had a bit of a problem, like they didn't know when the next button was, or if it was still an example, or if it had already started. I was a bit confused with some of the questions when I was with Astra. But overall, everything was really easy. I mean, the UI and UX were really easy. But one of the problems that I ever faced was, at that time, my laptop's webcam couldn't turn on, so the test couldn't be done. At that time, the test was really time-limited. I don't know if this applies to all the recruitment process utilizing AI tools or not. But usually, there must be a certain computer spec, right? And it was quite complicated, especially because sometimes our internet speed wasn't that advanced. And the problem is, usually we were given time to test our computer first, whether it's going to work or not. But at that time, I had an experience where I had to finish the test on the same day, with a time limit of just a few hours.

Interviewer

So, it was quite stressful. So, that's the accessibility issue and difficulties. Did you feel that the AI tools used in your recruitment process were fair and unbiased? And can you provide the example where you felt the AI tools, whether it's either fair or biased? Did I feel the process were fair and unbiased?

Interviewee

I think for most of the substantial tests, I felt like it can be more unbiased and more fair. But again, for me personally, when it comes to the things that are asking our personalities, the attitude aspects of the applicants, I believe there were parts that were biased. I don't think I can provide an exact example because I think from the positions of applicants, we can only do the test and just get the results right. But yeah, if there is any that I can point out where I feel that it's quite biased, that's the personality test part. If the final decision is on the AI tools hand, then it will be very biased. And

Interviewer

how transparent the process were you informed about the use of AI in the recruitment process and how it will impact your application? I think so far,

Interviewee

from all the companies that I've applied to that use AI tools, they are pretty transparent on the process. And the use of AI in the beginning must have been communicated first. Even sometimes

before we are sending the resume to the system, the system has already explained what it will be like. But I think there are some that don't really explain where the AI tools are used and what the phases are for. There are some that don't explain it in detail. But mostly, they are always explaining it well.

Interviewer

And how it would impact your application?

Interviewee

I don't know if this is a real example. I mean, a quite relevant example or not. But I think there was a time when I was asked a question that was quite a personal aspect. But they also explained that don't worry, it's not going to affect their decisions on whether they are going to recruit me or not. I just forgot what the question was. But it was a personal question.

Interviewer

Were you provided with feedback from the AI tools? And if so, was it clear and helpful? I think it was from the previous test.

Interviewee

It was really clear and very helpful. It was really nice on how they genuinely helping you to know your personality. Not just a test to see if you fit in or not. And I think it was especially helpful especially when you didn't pass the next step. At least you can know where you want to apply. But it can also be a barrier to the bias because that's what makes the decision. That's the question. I don't know. From my side as an applicant, until now, I never really knew if they still read the internal process or not. Or if the result is like this.

For example, let's say if you use MBTI, ENFJ, and so on. They just want you to know that you can only apply for a certain personality combination. And for me, to be very biased. If it's just like that. Or if I've done a personality test and the result is only a percentage. So, it's quite weird. If your result is 80% out of 100%, then what's the other 100%? I think that's really biased when it comes to qualitative things, you select quantitatively.

Interviewer

If you encounter an issue with this AI tool, were there a clear way to report it or seek assistance? And did you feel that there was a human oversight in this recruitment process?

Interviewee

The assistance is always there. So far, at least, when we are doing the test, there's always some kind of question mark and that indicates the help button if we face any issues or troubles. And even, when we get an email or a link to the test, they also put the contact of the person who is responsible to help us if we encounter any issues. And I've experienced that we can really chat with people in real time and they will get reply to you very fast. It was a good conduct, in my opinion, at that time. Human oversight. I think, I couldn't recall which exactly of my experience where I really feel the human oversight. But, in my opinion, all in all, in general, I think it's always there. Because, no matter how automated the system is, AI is still in the training. I mean, it depends on the person who designs it. Like, how well they can

train, etc. The kind of data given to AI also comes from humans, right? So, I think there will always be that factor.

Interviewer

Were you informed how your data will be used and stored by the tools? And did you have any concern regarding the privacy and security of your data?

Interviewee

I think I will always have that kind of concern. Especially, we are in the situation, and I think especially in Indonesia, we haven't really touched and even put those kinds of regulations in discussions, right?. So, for me, I will always have that kind of concern regarding my privacy and security of data. But, fortunately, for all of the recruitment processes that I have experienced, the companies were always transparent about that, about how they are going to use my data, about how they are storing my data, and they even exactly say how many days they will retain my data. And then, even if they are going to put my data in their talent pool, I will get the email, the consent email, to confirm whether I am, do I want to put my data in their talent pool or not. So far, I have no alarming experiences regarding that, but the concern will always be there, I think.

Interviewer

Actually, what are the things that are asked in the data? What kind of privacy is it? What makes you concerned?

Interviewee

First, in my opinion, like what is already clear, like address, phone number, even there are, if it's local, they usually ask very specific questions, right? Like our family background, right? If it's multinational, I don't think they ask that much. That's it. Maybe, sometimes I do worry about the personality test too, because in my opinion, maybe, when you have my address and such, and then you also have my personality, then you are going to really find out me as a person, right? But, I don't know. As for the test data, so far, I don't think I have ever found a company that is clearly state, even our test of results won't be like what? How are they using it? So far, before the resume, they always talk like that. But, there is a multinational company that uses one platform, and it turns out, of course, the AI tools can't be used only by one company, right? So, if we have tested using that tool, we will be recorded. The test results are there. I don't know if we apply for different positions in different companies, will it be updated or not?

Interviewer

So, for the improvement and suggestion, based on your experience, what improvement would you suggest for AI-driven recruitment tools to enhance their fairness, transparency, and overall candidate experience?

Interviewee

I would say, on the human thing, maybe if they are trying to touch that part, also done by AI tools, I think they really need to design a tool where it can sense the human aspects to their best of ability. Maybe it will be related to how the AI tool being developed and trained and such, I guess. But, I think I would still consider for such, or they combine it like, okay, for example,

conducting an AI tool, you get the results, but I hope that the recruitment team will still discuss on the results and also considering other aspects before they are going to tell the final decisions to the applicants. The transparency, I hope all the companies will be really open with the process, and also explain the process for what, why we asked that, and what are they going to find out from that.

Interviewer

Do you have any recommendation for companies using AI in their recruitment process?

Interviewee

I think those kind of recommendations are the same. I think it would be nice if they also applied it to their internal process, not only for looking for the candidates, but also to make the process within their team more efficient and effective.

Interviewer

How do you see the future of AI in recruitment, and what potential benefits and challenges do you anticipate? I think in the future, the tools will become more common. It will become

Interviewee

the common practice, I guess, in the world of HR and human capital. The potential benefits, I can see on how, one of the best benefits of using AI tools, of course, in terms of the cost of time, right? I think if a company can have a faster recruitment process, then they also can have multiple job openings throughout the years, which will also give more opportunity to the candidates. Hopefully, there will be more job openings for the public. The challenges, I think the biggest one would be about the regulations. And also, the regulations regarding the data privacy and security. Maybe if we really put in Indonesia, how to... It's about the accessibility. As we know, I think not everyone has such a gadget that meets the specifications.

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Interviewer

Hello, can you tell us about your experience with AI?

Interviewee

I can, so at that time I participated in a recruitment at McKinsey in the consulting field and I got a recruitment process using AI gamification. Then the second thing is also maybe some of the companies that I applied to, especially large companies and the number of candidates was tens of thousands. With the distance between applying and the announcement of passing the class selection is fast, I'm sure it must have used screening from AI, it was CV screening. So for the experience of using AI itself, the first is from McKinsey gamification and the second is from CV screening.

Interviewer

Okay, then if CV screening you think like because there are too many applicants then finally they decided to use AI to make their work easier. So the view of AI here is like a decision support system, so it's like how do we make decisions but on the one hand it's more about supporting humans. Okay, if for example from a gamification perspective what is it like, can you tell me?

Interviewer

The story means the flow. Yes, what's the flow?

Interviewee

The first flow is that recruitment is sent by email, an invitation for recruitment is sent, then when we click on it we will be redirected to a website, their gaming website. So, on the website, we register the participant's name, then the password and email like that and when you first enter, it's immediately like the instructions are explained first. The instructions are explained, like in this game, what do we have to do, what is the objective, then what do we have to pay attention to, only when there are instructions like that, we can start to explore on our own, like from the first things that we want to do, like that. - I think with temperatures like this, for example, if the ecosystem in the forest is to remain alive, that's what animals have to be there. It's more like we maintain the food chain in the ecosystem so that it continues like that.

Interviewer

Can you tell me? What is the actual purpose of that?

Interviewee

The aim is so that in the environment, from the forest to the river, the ecosystem continues to function, so we are told to maintain the actual food chain.

Interviewer

OK, your role there as?

Interviewee

It is possible that here AI is used, as it chooses what the ecosystem is called or which animals should be in that location, which animals and plants should be in that location so that the food chain continues.

Interviewer

OK, that means you are making decisions based on the stories of the forest and all the ecosystems that work. Yes, it is true. So what do you think is AI support or the role of AI in the gamification process?

Interviewee

Of course, AI's role is like being able to see the time I need to decide something, like of course when choosing animals and choosing plants, there's time like that. So you can see that when making a decision, whether I am slow or fast in thinking.

Interviewer

OK, sorry for interrupting, what this means is that here you are not necessarily sure that in this gamification there is a role for AI in it, but you are speculating that it could be that by looking at the length of time each decision-making process is carried out, there is a role for AI in that. Even though they don't really tell you the truth, you can speculate that it's impossible, with so many people, they would be sorting manually to see each one. OK, so actually you are still recruiting

people who are taking part in this recruitment process, and one of the processes has to be gamification. I already told you about what gamification is, of course there must be a role for AI, this is computer-assisted, so to see what each candidate's decision is. Oh, I see. OK, so can you tell me or not, were they ever transparent with regards to oh, OK, this process was all carried out using AI, or indeed they weren't like that, what does that mean in this case, yes, you have received an announcement that you have passed to the next stage or you were explained that this stage uses AI, for example. This stage in the recruitment process uses AI and then you are declared to have passed because you scored so and so or for example, can you tell me or not?

Interviewee

It didn't happen that after the gamification there was absolutely no feedback that was explained like that, whether where our weaknesses were or where our strengths were, but maybe actually, I've been involved in other recruitments where like the recruitment was from Kraft, so in Kraft it was like playing games, too, like how much How quickly we click on certain buttons, like how fast we are, for example calculating and something like that and I don't know whether that includes AI or not, but in Kraft, they give feedback from each step, for example, what kind of calculation it is. Profits and losses, for example, if it's like us, it makes sense to calculate it, it's like being given feedback, like that feedback, but in short, like in analyzing profits, you're already pretty good at this and that, but it's just like template feedback that's already provided. What they have set is the threshold, so if for example you get the output within that threshold, what's that, but actually it's not unique, for example, hi Devrina, for example, what percentage do you have, and then you are short of that, for example, points or you missed a coin at the third corner? for example like that. Actually there is, actually it's like maybe it's specific too because it's like they explain, for example, I'm not quick enough in choosing the items, so they have feedback like that, if it's krafted, the previous one is good and there's no manufacturing at all. evaluation.

Interviewer

Oh, there's no evaluation, so you're still explaining whether it's true that there's AI or not, only if it's krafted, because the evaluation is in a personalized form and can provide that much detail, yes, but that's true, so for example, you told me in part oh. I chose the item at the beginning a long time ago and it's true there, right?

Interviewee

Yes, I really feel like that, like I'm not being careful, for example, like on the count of three you have to press the right button or on the correct count, it's the one on the left, well, like after that, there's feedback like that, if you're not fast enough, you're not careful enough or something like that. As for the Kraft one, of course, compared to the Makensi one, I prefer the Kraft one because it gives transparent feedback.

Interviewer

Can you tell us about what you felt when you got feedback on gamification during the recruitment process at Craft?

Interviewee

OK, so the recruitment process is quite unique, right? At that time I didn't feel like taking a test at all. And each stage was very short. It was like playing a game for a while, like testing speed and

accuracy. And each stage was given a lesson. feedback like that. So it's like a review of how we did the previous test. Every time I see the feedback, I feel like Oh yeah, that's right, I did it a little too fast or not as if I wasn't careful enough in my clicking, so it's like I can give you a reflection. and you can give me something like a rating about me when I do something, what kind of bag is it like from crafts, so I can be more like I can improve, oh maybe in the future I will have to be faster like that or not be more detailed in making decisions. , that's what comes from craft, because and for feedback, it's also immediate feedback, once the first stage is completed, it's immediate feedback and then progress to the second stage. After the second stage, immediate feedback again before going to the third, so The feedback is immediate, fast, so I don't forget the steps you've gone through

Interviewer

okay, so before moving to the next stage, you immediately get feedback about what you did before that stage, so that means the feedback is real time and personalized too, that means yes, that's right, okay, so for example, that's the position you've never been in. That means, yes, compared to gamification which you think uses AI, it's not like that, whereas in this craft you get new things like that, yes, what you explained is that there is feedback, the feedback is personalized and the feedback is also detailed, quite detailed. or what?

Interviewee

What is the feedback really about?

Interviewer

short - short, just like short

Interviewee

-It's short, but it's in the form of points, right?

Interviewer

okay points means okay in short then you can say that you feel that, the first amaze yes, then what else is amaze besides amaze?

Interviewee

It just feels simpler, and less nervous than other tests, right? For example, if the test is generally the first, maybe it's like a direct interview or like being asked questions like that, well in this case it's like they're assessing my decision making or Judging my speed in doing something directly from the bags they give me in small games, and I feel like I enjoy it more and it's like I'm just playing a normal game. So there's no tension. It's like recruitment. The first thing to do is

Interviewer

That's related to the experience in gamification. For example, with the output feedback that you get from the stages you play. That's what you're given. Is it really appropriate or are there things like that? Oh, I don't think so. That's an example. Yes, you took too long to choose an item at the beginning. It's better if you take 10 minutes. You will master the game faster. For example, something like that, or yes, yes, if it's appropriate, it's difficult to match, if it's not suitable, there could be things that don't match the results given, like that.

Interviewer

No, so far, when I played yesterday, it felt the same as what I was doing, whether it was when I was at a certain stage of the game, I felt like I wasn't being careful enough, that's true, the result is that you're not being careful enough to see colors like that, so it's like Oh yeah, that's true. What they do is that every time I click or every time I type, it's immediately like a record and it's immediately interpreted, so there's immediate review feedback, that's how it tends to be.

Interviewer

tends to tend to be right yes tends to be right yes okay like that means that the identification process in gamification uses AI which is quite reliable. That means in the sense that it's like OK, every point is appropriate, there's nothing wrong and it's appropriate, yes. But you were worried or something like that For example, like OK, this is part of gamification But sometimes So you're confused or not? For example, like Oh, let's say Yes, fortunately in your case, that's right, everything is correct, but have you ever thought about worrying? If, for example, we were judged by something that wasn't like that, you know?

Interviewee

No, no, because I also think the results are quite accurate, the same as the recruitment stages and the test stages. What do you mean by worry, it means more if the craft one is really clear, but the mechanical one is the game, there's no feedback at all, like I've finished doing it, it's like I've just been shown the natural ecosystem, it's like I've put in any animals, it's just like I'm recapping it, I'm just recapping it like that, but it's not explained that in making a decision it's like it's not suitable, it's like it's not suitable to be here with the humidity level. That's all, with that height, it's like you don't get reviews like that and don't personalize it because there's no feedback at all, that's the case if the vacancy is different from the craft one like that.

Interviewer

Do you think it's fair for them to use the process above to assess your abilities or evaluate your performance in the game?

Interviewee

In my opinion, even though I enjoy playing it because it's like playing a normal game, but on the one hand, I feel like it's not fair enough because there are definitely a lot of applications. When playing this game, that's the mode on our laptop. It doesn't automatically turn on the camera. Sometimes I like to have a test. If we open the test, that's how our camera is active, right? Aka we're being supervised, that's true. It's like we're working on it. Is there anyone else to help? But what I experienced from craft and mechanics is that it's not at all like there's no feature that allows my camera to turn on. So It's like, even though I'm doing it fairly, I feel like I'm afraid. What if there's another candidate who might be just ordinary but he's helped by his parents. Helped by a better candidate. Helped by other people around him who are smarter. That's not fair. By measuring the level of speed. We measure our decision making without looking directly. That doesn't seem fair, I think that's where it's at, okay.

Interviewer

For example, in the process you think is not fair, what should be improved? From the stages of the process in the recruitment process

Interviewee

Maybe to make it fairer, even though the gamification is done at home using their own devices, but maybe it would be better if the test was carried out simultaneously at a certain hour. When it was carried out simultaneously, our camera's webcam was on and it seemed to appear like a box. What is it? Our camera is like that, so we feel like Oh yeah, that means we're being watched, Oh, it's being recorded, so we both feel OK, we can't use other people or we can't have anyone helping next to us. That'll make me feel more secure. I'll feel safer. Because other people are also doing it, right? That's independent and fair. Maybe in the future it can be like that

Interviewer

OK, according to you, the Recruitment post process overall is like that, yes. Overall, the recruitment process with AI actually makes it easier for the HRD department to screen, right? Or on the one hand, it actually makes it more difficult for the applicants.

Interviewee

In my opinion, of course it makes things easier for companies because of course they need it quickly, right? For example, there are a lot of applications, especially for candidates. We also feel that it's okay because it's simple and it still seems unique. It feels like recruitment but it's like it's no longer a test. But yes, it's possible. What's less interesting is that it's like there's a lack of supervision and in my opinion you can't assess a person's capabilities and competence just based on small choices from the gamification like that. Because you can see someone's decision making, of course it has to be from an in-depth interview, interaction with HR, seeing what the decision maker's experience is like, what the impact is, and what the obstacles are and the path to achieving something, it will be better captured. Interview, deep interviews with recruiters, but if for example from gamification, okay from both sides it feels like it's both fast, but whether it can accurately represent the skills of the candidate is not certain, especially since it's very short - all the stages are short, and only once It works like that, so maybe the accuracy is a bit biased, actually, but if you want speed, it's really okay with this AI.

Interviewer

From the perspective of the speed of using AI, one of the breakthroughs means a breakthrough in the recruitment process, whereas according to you, the use of AI requires attention to aspects of accuracy in data retrieval, yes, in the assessment of the applicant, it's okay, from the data security side, that's also possible. I've touched on it a little in relation to fairness and data security, which is an important thing and not many people have considered or taken this into consideration. Is that what you think from the points above, for example related to fairness, transparency of data privacy, is there anything else that can actually be done? On the other hand, the aspect of speed and accuracy of using AI has been improved. Are there other aspects that can be improved in this recruitment process?

Interviewee

Maybe the access that I can recommend is possible for companies even though this may be difficult to implement, namely, even though you have used technology and AI, don't make 100% decisions

or judgments about a candidate based on the test results. Maybe you can also match the test results with your CV, for example. Then also match them again with their educational background and the suitability of the skills they have, experience with the suitability of the job they are applying for. So don't just rely 100% on technology, but also try to continue participating in the judgment process for each candidate so that more accurate and not just concerned with speed. Maybe something like that can be improved. OK

Interviewer

Thank you for taking the time to be online. Thank you

Interviewee

You're welcome

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Interviewer

Can you briefly describe your professional background and type of roles you typically apply for?

Interviewee

OK, so maybe to describe a little, the professional background is in the realm of business consulting, especially in human resource consulting, and educationally the concentration taken is in the realm of people in management or human capital. So, the types of roles that are usually taken involve human resource officers or management trainees whose concentration is in human resources.

Interviewer

OK, have you had any experience with AI recruitment tools like CV screening, video interviews, or chatbots for application queries? If so, can you describe? Describe these experiences.

Interviewee

OK, so whether you have or not... You could say that you have when you are applying at a company where for the resume screening they use AI to analyze what points are appropriate to their position. Then in the second stage there is also a video interview. Where we don't discuss the video interview directly with the person, but more about the persona of the company or the AI in this company. Well, during the resume screening process, it's not that different from how we usually apply, but the difference is really visible when you enter in the second stage or in a video interview because usually we talk a lot or talk with people directly, but in this sequence it changes where we ask questions that have been provided. Later, after we send our answers in the form of a video, there is a persona displayed on the website. This is what shows that they are proclaiming their company in the form of not actually being a real person, so it really gives us a hint that they are talking to people even though they are not real people.

Interviewer

OK, so what is the overall experience of using these recruitment tools? Like what? So what aspects of the process do you find positive or negative?

Interviewee

The overall experience, to be honest, was really positive. Because we know that the more we keep up with the times, it's also difficult for us to determine what competencies we should have in a position, or to know what kind of person is suitable for the position we're applying for. In the past, before AI existed, that's for sure. The emphasis is very subjective, even though there are levels of competence that have been included, it is still subjective. Well, but when there is an implementation of AI, it is more objective, regarding the content... even when we answer in interviews, they will take objective points, not because let's say we graduated from all kinds of things, but rather those with hands-on experience. How do you apply here? So overall it's positive, actually, when the recruitment process uses AI, what can you say or when you find out it's carried out by AI, honestly, I don't expect it because usually when I apply, most companies in Indonesia still using real people or checking one by one or just checking for 8 seconds, but when you know that using AI, frankly, I feel more secure and more confident if the results are not artificial, so the recruitment results are really fair, right? When we meet the competency requirements Yes, we will be accepted, but if not, we won't be accepted. So we will be more confident as we apply for work. It will be fairer.

Interviewee

It's fairer if you make it user friendly in recruitment tools that use AI, what do you do? So does it seem like there are any issues about that?

Interviewee

I will give you my personal view. Before I knew about AI, I was also quite interested. When I looked at the user, what the User UI was like. Actually, it wasn't really difficult because it was similar to the models. There are several applications or examples of what I like. play games or open some applications that are just familiar, so it's really friendly. In my opinion, if there are any issues or difficulties encountered, there's nothing significant, because it's actually more engaging for us. In fact, we'd rather explore it again, so there's nothing to cause ambiguity. Overall, it's very user-friendly to use.

Interviewer

What do you mean, what can you learn from here?

Interviewee

That's right, usually when we are at several recruitment companies, if we've had an interview, that's it - that's all it looks like. We can't explore anything on the menu. But last week they weren't ready to just make a video, record it, send it, it wasn't like that. But there are indeed steps that are closer to gamification if I say so. But the basics are that AI is really driven. Just to make us more used to it, more comfortable using it, there is an approach to gamification too.

Interviewer

Continuing to talk about ethical concerns, Do you feel that the AI tools used in your recruitment process are fair? And, biased? Earlier it was said to be fair because they saw it from the CV. Is there anything else besides that?

Interviewee

If apart from the CV, yes, it looks fair when I interpret the video interview answers, because yes, although I don't know what the exact results are, I just think that with IAI users, the results of our video interviews or our recordings are certain. The IAI will analyze the points. -What are the points that align with the needs of the position? Isn't that right if we're honest? Now there are lots of HR recruiters or talent acquirers who, when carrying out an interview, ask a lot of questions, just determining whether it's OK or not, it's just based on where they studied or, for example, what experience they had in the past. Who have they worked with before? So it's not really objective in my opinion. So it's fairer. Using IAI is like that because of the subjectivity of the human beings who recruit, right?

Interviewer

After that, for transparency, how transparent was the process, like were you informed about the use of AI in the recruitment process that you carry out and how it will impact your application

Interviewee

To be honest, we were informed at the beginning, even in the email sent to us, it was explained that the recruitment sequence would use AI fully, so it would minimize individual involvement, so from there, they would inform us about what we would do and from this AI would look into everything from us, they had informed us from the beginning and when If we know like that, we'll be better, I said again, yes, it's more fun because we know it will be done fairly.

Interviewer

But isn't the same feedback provided by this tool? Like the answers from those who were interviewed earlier, some of them were able to get answers from the interview, or some were not. In your own experience, did you get any feedback from the tool?

Interviewee

You get feedback. So, especially after the video interview, that's where they give insight. For example, if you are asked a question like that, How to excel more. When it's like that, you'll be told the points. Yes, it's not even immediate. We're done straight away. We'll be informed straight away. No, but as far as I remember, there's a delay. 2-3 days, they just give you insights like that. Based on what they analyzed. What kind of recommendations do you have? There's feedback. What kind of feedback should you answer? For example, the missing keyword isn't mentioned. Or what, even though it should be aligned based on experience, but it's not mentioned. So, stick with it. There's also something missing from the AI analysis

Interviewer

According to you, even though you've aligned it with the answer, eh, I mean the same as this experience. But because of the missing keyword, you don't think that's fair or not?

Interviewee

I think it's fair because that's why we as applicants also have to prepare. I mean it's also part of the risk when we apply. When we discuss something and don't mention it. Yes, it's the same, for example. We have experience as consultants. Say you've succeeded in working on a company or creating an efficiency of 500 million or 1 billion. That's it, but when we explain it, we just say that we succeeded in making efficiency. Without mentioning the mean figure, that's too much.

For example, the company just looked at it. Oh, there's this. The efficiency experience is just how much, we don't know. In the end, because we rejected it, that's a risk for us and It's not the company's fault because we don't mention the exact amount, for example, that's it. So keep it fair

Interviewer

If you encounter an issue with AI tools Was there clear way To report it or seek assistance And did you feel that There was Human oversight in the process

Interviewee

When there is an error, they are there, so in the email, there is also a complaint email or a complaint contact that can be contacted. And that, if I remember first, is in the form of a WA number. Suppose there is an error or, for example, the AI is frisk or something like that is not correct, that's how it is. There is There is a way for us to report it to seek help as well. Then, for example, there is human oversight, yes, I think it is, but more like I don't feel it, it hinders AI performance optimally, so it's like AI is still a system that needs to be monitored. For example, it's a breakdown. There still has to be someone to fix it. Except now. As far as I know, for recruitment, there is no AI that can improve itself, so there will still be Oversight from other people.

Interviewer

Then when talking about data privacy, are you informed about how your data will be used and stored by the tools or not?

Interviewee

The data is told that the result data will be kept with them for the next 6 months. So if within those 6 months there is another position that matches the answer we have given to this AI, then we can be reached to apply there, or continue the selection process in the new position, not in the old position, so you will also be told how many months it will be removed, and they will also recommend suitability, actually it is more suitable to apply where.

Interviewer

do you have any concerns regarding the privacy and security of your data?

Interviewee

Yes, not too much for me personally, because in my opinion the data that is given is still data or privacy that is related to the same thing when we apply for a job, so there's nothing too personal, but more like, yes, personal in a professional context but not personal, family life or anything like that. , no, so I don't think fine furniture is an issue that is too concerning for your data privacy

Interviewer

based on your experience what improvements would you suggest for the tools to enhance their fairness, transparency and overall candidate experience?

Interviewee

In my opinion, this suggestion can apply in Indonesia, but I doubt whether this will apply in the country or not, because I think the use of AI is based on the form when we open the platform of all kinds, that's enough, especially for devices that don't really support it. For example, if the RAM is limited or for example, the speed of the laptop or device is not that fast, I really feel it, honestly because there are also friends of mine who are in the same process, complaining that there are several problems related to the interview process. The problem is with the device, and they also said in the email that there are minimum requirements for devices that can be used. If it's below that or pressing the same, it could be quite disturbing for us in terms of what the applicant's experience or the candidate's experience is like, so that's what I think. What needs to be suggested is optimization, so it can reach more, not just good devices, minimalist devices or light devices can still be like that, because it's fair enough, it should be really helpful, as long as it's not burdensome in any way. That's all the device, I think

Interviewer

you have any recommendation for companies using AI in their recruitment process?

Interviewee

It means? what kind of recommendations? recommendations for companies to use AI or AI?

Interviewer

Recommendations for companies that are using AI in their recruitment

Interviewee

If that's the case, AI is actually suitable when used for Gen Z and below. I say that because millennials are already having quite a hard time. With their experience using AI in recruitment, it's like it's even smoother. Just how it's presented. So people from across generations will also be able to learn. the curve is so fast Using this AI Yes

Interviewer

That's right. Then how do you see You're the future of AI in recruitment And what are the potential benefits and challenges that you anticipate?

Interviewee

Potential benefits? That will offer something that is really fairer, something that is based on objectivity, not subjectivity, but the challenge is, yes, we know that currently the development of rival AI outside of AI recruitment is also quite massive, so it seems like the possible challenge in the future is how this AI can be more careful in analyzing something that is conveyed authentically compared to something that is actually made by a competing AI, because that will be a concern, yes, we know now that in the scope of educational work, all kinds of things, sometimes the answers made by AI are already human-like, they will It's really more tricky when we want to guess whether this is actually an authentic human being or not, so it's like using chat GPT and so on because a lot of us are interviewing, using CHATGPT in real time, that's the effect.

Interviewer

Do you have any additional comments or thoughts on this topic that we haven't covered yet, that we haven't talked about yet

Interviewee

For AI, yes, perhaps this AI must also be combined with what I have had experience regarding the readiness of our competencies related to the metaverse. Yes, it is very closely related to AI. In my opinion, Indonesia is not yet very ready for the AI use ecosystem, so actually before The company is jumping there, what if it is also accompanied by efforts from educational institutions to prepare their people in that direction because that will be crucial to be able to find it. To be able to feel the gap between the results of tertiary education and what the cover requires. So it must be there is a synergy from the company Let's say in the form of CSR, perhaps to be able to develop their competence in the AI domain or on websites 3.0, 4.0 and so on. That's all the discussion from me.

Interviewer

Okay, thanks for your time

Interviewee

You're welcome

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Interviewer

Halo Ibu, can you briefly describe your professional background and type of roles you typically apply for?

Interviewee

My professional background, right now I'm working in an institute but my experience I have a couple experience in applying in job using AI recruitment. As far as I remember I apply to Danone and Unilever maybe I believe they are using AI but for my previous job, the latest job it's not using AI it's all by human, by HR themselves. I typically apply for, after I graduated from undergraduate university I apply for management training mostly.

Interviewer

Have you had any experience with AI-driven recruitment tools like CV screening, video interview with AI or chatbot for application queries? If so, can you describe these experiences?

Interviewee

I believe I have, like I said before, it's my experience with Danone and Unilever. For video interviews, I have not experienced those type of interviews but for resume screening I believe there are a few multinational company that using AI-based resume screening but for local company I don't think they use AI for resume screening and for chatbots there are also a couple companies that using the chatbots but I can't remember the company, where the company from.

Interviewer

So, can you describe your overall experience using these recruitment tools?

Interviewee

From my experience as far as I can remember the experience is very, it's between fun and also tiring because in my experience for the personality test there's a lot of like questions and the questions tends to be, I don't know, kind of repetitive. But for another type of test it's like there's a lot of, some types of games I think, there's a lot of pictures, animations that for the personality test. But the questions, the questions part like, the questions tend to be repetitive. I believe it's because maybe using AI the more data they have it's more accurate but it's a long test. It takes about three hours I think for the personality test itself.

Interviewer

The other experience?

Interviewee

That's all I can remember.

Interviewer

Or maybe the experience with the CV screening or etc?

Interviewee

The CV screening?

Interviewer

Or the video interview?

Interviewee

No, I haven't experienced the video interview.

Interviewer

Okay. And what aspect of the process did you find positive or negative?

Interviewee

The positive part is using AI the result is fast. Sometimes I get the result exactly after I finish my test. Sometimes it's like two or three days after the test. So it's very fast. And negative impact, like I said it's a lot of questions but it's also fun but there are repetitive questions in my experience. And also I think the recruitment test and the decision making is not possible using only AI. So I don't really like after I get my test I got the result that I did not pass. I believe that it still needs the HR, the person, the human to evaluate the test and then give me the result.

Interviewer

Can you recall a specific instance where the AI tools was used in your recruitment process? Please describe what happened and how you felt about it.

Interviewee

What do you mean?

Interviewer

I don't know. Specific instance? Which one? The candidate experience and can you recall a specific instance? Yes, that's what I want to know. Oh, you mean the overall question? Yes. Can you recall a specific instance?

Interviewee

Should I start from the beginning? If you look at the space, usually there is a space from LinkedIn or some kind of recruitment page like LinkedIn. For LinkedIn, there is an Easy Apply and there is a need to be referred to the website. If I apply, it will be referred to the website. From the website, there will be a specific link for the career again to enter the initial data, like the initial administration test. For those who use AI, the difference is when we upload the CV, it will be automatically filled in. We just need to fill in a few more parts or we directly input our LinkedIn. It takes the data from LinkedIn itself, so it's already there. It also facilitates the recruitment process, the data filling process for the initial stage. But of course, there are other data that need to be entered. After that, if you pass the first screening, then there is an email, then we enter the previous test. Maybe it's a personal test. In that test, maybe it's AI, but usually at the beginning there is an agreement form. We read first what the results of the test will be used for, what the results will be like, then about the agreement, then it goes into the test.

Interviewer

How do you feel about it?

Interviewee

It's faster for several stages, but also like I said earlier, if it's in the test, it's also more interesting. So, what I experienced is that they give scenarios, then based on the scenarios, we will take a decision. Also, some of the questions are open questions, so it's not an option. Maybe in HR, it's easier to do the screening if you use AI. If it's a person, maybe it takes time. Then there are also some, a lot of pictures, a lot of visuals that make the test more interactive, fun.

Interviewer

How user-friendly did you find the AI recruitment tools? Did you experience? How user-friendly?

Interviewee

If we use AI, of course it's user-friendly, but if we talk in Indonesia, of course it needs the internet. So, of course it's segmented, who can join recruitment is like this, which is online-based. But if from the interface, everything is very easy. Because usually those who use AI also have a lot of multinational companies, so the instructions are very clear.

Interviewer

Were there any accessibility issues or difficulties you encountered?

Interviewee

In my experience, I don't think so. All the instructions are clear. Before the test, it's usually given time to read the instructions. From my experience, the test is not fixed in time. For example, given time from this time to this time. But each of us start at what time, and then calculate from there. So, the interface is very easy, and the description is also clear.

Interviewer

Did you feel that the AI tools used in your recruitment process were fair and unbiased?

Interviewee

Fair and unbiased, in my opinion, there is always bias, there is always unfairness. If a person has a human error, of course the AI also has an AI error. Especially because, I don't know how AI works, but it definitely needs a lot of input data. Then there must be historical data, and there must be data training. So, in my opinion, if it hasn't been sustained, hasn't received a lot of input data, it's definitely not accurate. So, just like what I said earlier, from the results, especially the personality test. From the results, the results come out, in my opinion, it's not fair. There still needs to be a perspective from the human to analyze the test results. Because the AI can't analyze all the aspects that humans combine. From the CV, then the test results, of course there needs to be decision making, it can't be done by the AI. So, if the test results come out, it's not fair. The decision making needs to be done by the human.

Interviewer

So, for now, do you think the AI used by the company is still biased?

Interviewee

There must be bias, I don't say everything is biased, but there must be bias. Yes, then also the data training, everything is also formed by people who input. So, it must be like the indicators, the indicators are correct or not, it must be included by people too. Then it's processed in the system, it can't be unbiased. But with AI, it may reduce biases from those who are only human.

Interviewer

Can you provide the example where you felt the AI tools were either fair or biased? Examples.

Interviewee

Examples, fair or biased. If it's fair, maybe like before, if the data is well-trained. How? Fair and unbiased.

Interviewer

It was either fair or biased. Fair, for example, how?

Interviewee

Here it's fair and unbiased.

Interviewer

Fair and unbiased. Can you provide the example where you felt the AI tools were either fair or biased?

Interviewee

If it's fair, maybe like before, I told you, there must be a human aspect to analyze the AI results. Then if it's biased, I don't know. From what we can screen, then what the results are based on. But if it's based on, for example, the CV that came in, then it's analyzed. If it's based on the average, for example, there must be more women than men. Is it in the algorithm that will affect

if there are more women? Or it will affect, for example, race also comes in, for example, more of this. If it uses historical data and average data. Because the data training is independent. So how much data is used, how often is the data training, it must affect whether it's biased or unbiased.

Interviewer

That's what I think. And how transparent was the process where you informed about the use of the AI in the recruitment process? And how it will impact your application?

Interviewee

In my experience, they, like before, the form of agreement at the beginning, before the test. Of course, it was delivered only for the interest of recruitment or for internal company data. Then it will also be delivered if the data will not be disseminated. Before the test, it always has to be checked and that's quite important in my opinion. Because now there is a lot of data leakage. But in fact, the term of agreement is not always safe. No one knows where the data is. Even so, we just check it. Then usually it is also stated that it will be saved for later when we apply again. The data that we can choose, for example, whether we want to use it again or we want to test it again. So it's for company database.

Interviewer

And were you provided with the feedback from these tools? And if so, was it clear and helpful?

Interviewee

Using AI is usually always replayed. So maybe if it's from the company itself, it's like an automatic system. This is also one of the benefits if it's a system-based like this. So there's always feedback, the test results, or at least they have a replay. Unfortunately, usually if we don't pass the selection, it's quite helpful. So there's no time to wait too long. Then you don't have to follow back again. Pull up, follow up, follow up again about the test results. So far, if the record is using a system from the company itself, if using AI, there's always feedback and it's quite helpful.

Interviewer

And if you encounter an issue with the AI tools, was there a clear way to report it or seek assistance?

Interviewee

Okay, in my recruitment process, as far as I remember, in the interface, there's always a sign, like a sign of help, an exclamation mark at the left or right corner. I've also tested that if we're out or the connection is disconnected, it will automatically connect again, but in the section that we were in. So it's quite convenient, so you don't have to repeat it or even eliminate it. But the assistance is also like the chatbots, so it doesn't go directly to the person.

Interviewer

Did you feel that there was a human oversight in the AI process? It means no, it's just like AI chatbots. So in the recruitment, it's purely AI.

Interviewee

Because as I said earlier, the recruitment is not fixed from what time to what time, but we are given, for example, a duration of 3 hours. Like we want to start at what time that day, we can. So I don't think it's possible if there's a person standing by at the link, so it's still chatbots.

Interviewer

That's in which company?

Interviewee

I forgot, if there's no non-unilever, but I've applied for a few more.

Interviewer

Yes, all of them.

Interviewee

During the pandemic.

Interviewer

And for the data privacy, were you informed about how your data will be used and stored by the AI tools? And did you have any concern regarding the privacy and security of your data?

Interviewee

Hmm, like I said earlier, it's in the terms of agreement. The company is used for the database. Then for the internal use of the company. So far, for the data that I apply to the company, there's no concern whatsoever. Because in my opinion, some companies that use AI are quite eligible.

Interviewer

Data privacy is not a problem, right?

Interviewee

Not yet.

Interviewer

I think you have to repeat what I said. I think there are still a lot of questions that are not answered. Okay. So, based on your experience, what improvement would you suggest for AI-driven recruitment to enhance the fairness, transparency, and overall candidate experience?

Interviewee

For improvement?

Interviewer

Yes.

Interviewee

For improvement, like I said earlier, the decision-making has to be human. So AI is one of the tools for decision-making. This is not the final stage of acceptance or not. But even in every process, there still needs to be human touch. There's a human opinion in every decision. Then

earlier for the training data, maybe it was lost. We can't just run the training data. Then maybe, like I said earlier, there are a lot of factors that we can't just rely on the machine. In Indonesia, the recruitment process, if we look at it from Sabang to Merauke, it's very diverse. Everything is different, the background is different. So there are a few things that still need analysis from the experts. That's why we have a psychologist, in SBM, PKM, who has expertise in analyzing human resources. Then maybe AI can also reduce bias, but it doesn't cover the possibility of errors. So there still needs to be maintenance on a regular basis so that it is still accurate. Because like earlier, if he took historical data, I also understand. If you look at historical data, he will find one pattern, then this pattern is what he keeps using. So it can't be like that. I mean, human individuals are all different, and their backgrounds are all different. So it's like you can't use one pattern.

Interviewer

Do you have any recommendation for companies using AI in their recruitment process?

Interviewee

Maybe it's similar to what I said earlier, data training is the most important thing in AI. Then the use of data, it must be explained what data is being used by the employees. Then, of course, it is also important to reply to the results of each recruitment stage.

Interviewer

Okay, and for the future perspective, how do you see the future of AI in recruitment, and what the potential benefits and challenges do you anticipate?

Interviewee

For the future, it will definitely develop. Maybe it won't just be in the recruitment process, but also for daily life in the office. In the office, there will definitely be more AI for data collection and so on. The benefits will probably be faster, then all the processes will be neater, and the range will be wider. But the challenge earlier, so it might affect the pattern I mentioned earlier. There will be one pattern that is more to this side.

Interviewer

Do you have any additional comments or thoughts on this topic that we haven't covered? Any additional thoughts?

Interviewee

Maybe for the development of AI in recruitment, it must also be balanced with the SDM. So, it's not just the AI that is constantly enhanced in training, but the people also need annual training. Annual training on how to use AI so that it is not dependent. Like I said earlier, AI is a tool, not a decision maker. So, it's not just a tool, but of course people also need continuous training.

Interviewer

Okay, thank you.