

**Investigation on how does the integration of AI in IT
recruitment impact the efficiency and decision-making
processes of recruiters in the IT industry**

MA Human Resource Management

Dissertation

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Dissertation -Research Methods

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This section acknowledges the AI tools that were utilized in the process of completing this assignment.

Tool Name	Brief Description	Link to tool
Otter.ai	Used for converting voice to text for transcripts	https://otter.ai/

Description of AI Usage

This section provides a more detailed description of how the AI tools were used in the assignment. It includes information about the prompts given to the AI tool, the responses received, and how these responses were utilized or modified in the assignment. **One table should be used for each tool used.**

Otter.ai	
Otter.ai (web app). Used for automated speech-to-text transcription of qualitative research interviews.	
Imported audio files (MP3/M4A) from Zoom/phone recordings, Enabled speaker diarisation, Named session and speakers (e.g.	[00:00:03] Researcher: Thanks for joining today. This interview is anonymous okay to proceed? [00:00:08] R001: Yes, that's fine.

“Researcher (Interviewer)”, “R001” (Interviewee).	
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Evidence of AI Usage

This section includes evidence of significant prompts and responses used or generated through the AI tool. It should provide a clear understanding of the extent to which the AI tool was used in the assignment. Evidence may be attached via screenshots or text.

```
[00:00:03] Researcher: Thanks for joining today. This interview is anonymous—okay to proceed?  
[00:00:08] R001: Yes, that’s fine.
```

ABSTRACT

Title - Investigation on how does the integration of AI in IT recruitment impact the efficiency and decision-making processes of recruiters in the IT industry

The dissertation explores how AI-powered tools are changing efficiency, quality of decision-making, and professional practice in the area of IT recruitment. Using twelve semi-structured interviews covering corporate, agency, and operational functions, the research uses reflexive thematic analysis to uncover repeated themes taking into account the positionality of the researcher. The structure includes strong ethical and governance safeguards, including GDPR compliant consent, anonymity measures, and auditability provisions.

The findings identify six interrelated themes: clear improvements in efficiency; a paradigm of human-artificial intelligence collaboration; technical and ethical limitations persisting; the evolution of recruiter role and skills needed; tensions around candidate experience and fairness; and the need for rigorous governance. Participants reported screen and source time reductions of 40% to 75% and noted issues of misranking, lack of explainability, and maternity break or non-linear career path bias, highlighting the need for continued monitoring and human oversight.

Suggestions include accredited AI literacy pathways, bias audits in contracts, clear policies on "AI use," layered candidate transparency, outcome-balanced scorecards, and steering committees. The study enhances augmentation and sociotechnical theories and provides direction for leaders and regulators. The study's limitations encompass its sector-specific focus and qualitative scope; subsequent mixed-methods research should evaluate causality and transferability across various contexts.

Declaration

This dissertation is completed in the partial fulfilment of the degree Master of Arts in Human Resource Management. I hereby certify that this material, which I submit for assessment on the program has not been taken from the work of others save to the extent that such work has been cited and acknowledged within the text of my work.

Acknowledgement

I would first like to thank my supervisor Elaine Rossiter, who guided, helped and encouraged me throughout this research project and me my master's at National College of Ireland. I am extremely grateful for all the help and support.

Next to my participants and place of work, thank you for allowing me to contact these interviews and for the detailed and honest responses. I would like to say a huge thank you to all those who participated in this study and for my place of employment for allowing me to conduct the research and being so generous with setting aside time.

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Chapter 1 - Introduction

1.1 Introduction

Over the last decade, artificial intelligence (AI) has rapidly changed the face of business operations (Sivathanu and Pillai, 2018,), indicating a significant move towards digital evolution. Nowhere is this more pronounced than in the field of Human Resource Management, where the use of AI has considerably overhauled recruitment and talent acquisition processes. In the highly dynamic Information Technology industry known for its demand for niche skills and ongoing innovation AI is the key tool for streamlining recruitment processes, eliminating human biases, and rationalizing decision-making processes.

The historical process of recruiting in the IT industry has relied heavily on labour-intensive practices that involve candidate sourcing, resume screening, initial interviews, and administrative arrangements. These tedious processes are marked by their repeatable nature and may lead to inefficiency and inconsistencies in the outcome of the process. The high number of applications, some of which do not precisely align with the set job requirements, presents a major difficulty to recruiters who need to quickly identify suitable high-potential talent. This situation is further complicated by the impact of human biases and personal judgments, which sometimes undermine the integrity of the hiring decisions.

As a result of these challenges, companies have increasingly integrated artificial intelligence technology into their talent acquisition processes. Today's tools include applicant tracking systems, natural language processing, machine learning capabilities, and recruiting chatbots (Chamorro-Premuzic et al., 2017), all of which exist to improve candidate assessment, resume matching, and the prediction of candidate performance. These artificial intelligence technology advances leverage large datasets to accelerate the hiring process, leading to greater efficiency, better consistency, and even greater objectivity.

As an example, advanced resume analysis software can scan many resumes in a few minutes, efficiently sorting and ranking skills and experience based on defined parameters. Similarly,

chatbots can enable ongoing interactions with potential employees by handling questions and scheduling interview sessions. Most important, predictive analytics allow recruiters to analyse the probability of a candidate's success by examining the history of recruiting and performance levels. These innovations are particularly crucial in an industry dominated by intense rivalry for talent and the need to act quickly with focused recruiting efforts.

The integration of artificial intelligence into the hiring process introduces a new set of challenges. Foremost among them is the need to strike a proper balance between reliance on technical tools and the exercise of human judgment. Though AI provides consistency and the ability to reduce some of the biases, it is vulnerable to the issues related to biased data sets and the black box nature of the decision process. The increasing acknowledgment of the innate propensity of AI systems to perpetuate biases has initiated intense questions about fairness and accountability (Dastin, 2018,).

In addition, many recruiting professionals are cautious in their attempts to grasp the underlying mechanisms controlling AI-driven recommendations. The complexity of such mechanisms can even make identifying the underlying mechanisms connected to a given decision challenging, thus potentially leading to problems in justifying and validating the output of AI.

In addition, artificial intelligence is reshaping the traditional role of recruiters. Instead of replacing recruiters, AI is redirecting their efforts to more strategic activities, including data analysis work and enhancing candidate experience. This change requires the development of a new skillset that includes digital literacy, analytical capability, and a sensitivity to ethical factors, all of which are increasingly important to human resource professionals in the modern era.

In the rapidly evolving field of information technology, where different organizations are at the forefront of embracing modern technologies, the need arises to evaluate not just the productivity gains related to artificial intelligence but also its impact on the working and decision-making of recruiters. This scenario raises questions about how recruiters are adapting to such advanced technologies, the degree to which artificial intelligence enhances the quality of recruitment decisions, and whether its integration results in unforeseen risks or dependence.

Despite the growing body of literature relating to artificial intelligence in Human Resource Management (Upadhyay and Khandelwal, 2018), there is a considerable gap in the understanding of its immediate impacts on the activities of recruiters in the information technology industry. Much of the literature tends to generalize the benefits of AI across various industries or to focus on the candidate experience, thus missing an in-depth examination of the day-to-day interactions of recruiters with these technological tools.

The current study aims to fill the current gap by examining the mechanisms by which artificial intelligence is influencing the practices of recruitment in the information technology industry. Based on a synthesis of accounts offered by recruiters who are using AI technology, this research aims to evaluate both the advantages and challenges of the technology. The main aim is to develop a more accurate and pragmatic perception of the transformative effect that AI has on modern IT recruitment practices.

1.2 Research Objectives and Questions

The primary aim of this dissertation is to investigate the extent to which AI integration impacts the efficiency and decision-making processes of recruiters in the IT industry.

Research Objectives

1. To examine the current use of AI tools in IT recruitment processes.
2. To evaluate the impact of AI on the efficiency of recruitment in terms of time, cost, and candidate experience.
3. To analyse how AI influences decision-making quality and accuracy in selecting IT candidates.
4. To assess recruiters' perceptions of AI integration and the challenges faced in its implementation.

Research Questions

1. How are AI tools currently being used in IT recruitment?
2. In what ways does AI improve or hinder recruitment efficiency?
3. What is the impact of AI on the quality and objectivity of recruitment decisions?
4. What are the perceived benefits and challenges of integrating AI in IT recruitment from the recruiters' perspective?

1.3 Rationale for the Study

The integration of artificial intelligence (AI) in recruitment practices signifies a profound milestone in the process of human resource management development. While AI technology advances, its influence over the talent attraction, evaluation, and acquisition strategies of an organization has increased in prominence. Despite the general acceptance of the positive attributes of AI in the application of recruitment processes, a shortfall of holistic, empirical findings that outline the influence of such technology on the outcomes of recruitment emerges, particularly in industries that experience rapid change and high reliance on professional skills, i.e., Information Technology (IT).

The IT industry's challenges in recruiting are particularly unique compared to other industries. These include a chronic shortage of appropriate candidates, rapidly changing skill set requirements, and increased pressure for efficiency and accuracy in the recruiting process. Artificial intelligence, in the process, has increasingly been used as a tool to automate mundane tasks, enhance candidate analysis, and generate insights that aid in better decision-making in recruiting. Nonetheless, the effectiveness of the use of AI in fulfilling such unique needs has yet to be widely tested from the perspective of its end-users in their work on a daily basis recruiters.

Understanding the way that information technology recruiters engage with artificial intelligence technology is important. The infusion of automation and data-driven technologies can enhance operational effectiveness but, in doing so, also brings new dynamics to the decision-making process. Recruiters are increasingly required to decipher algorithmic recommendations, resolve ethical issues, and balance the process of automation with human judgment. Such changes require

not just technological adjustments, but also shifts in cognitive models, competencies, and organizational practices.

The study proposes to study such dynamics in an overarching way. The study will explore the implications of AI adoption in important areas such as the efficiency of the recruiting process, evaluation of the candidate, and the overall decision-making process. Beyond operationally-related issues, the study also investigates the role of AI in recruiter attitudes, their levels of trust in automation technology, and the revolutionizing role of the recruiter function. The hope is to synthesize an integrated view of technology's role in changing the recruiters' experience in the fast-paced environment of IT recruiting.

The reason for focusing on this topic comes from the general trend of digital transformation in human resources. With more organizations implementing artificial intelligence in various HR functions, it is important that they address key questions regarding fairness, transparency, and accountability. In the recruitment context, these questions are especially important because they have a direct impact on individual careers and the dominant organizational culture. Through the study of IT recruiters' experiences, this study provides important insights that can guide more ethical, inclusive, and efficient uses of AI in the area of talent acquisition.

The findings from this study go beyond the realm of scholastic interest. They provide human resource professionals working in the field with practical recommendations for balancing artificial intelligence technology with the overall recruiting goals. In turn, technology developers benefit from this study as it clarifies the practical use and implementation of their creations in actual settings. Additionally, organizational decision-makers and policy-makers benefit from a better understanding of the challenges as well as the potential of artificial intelligence in the recruiting process.

The research aims to fill an important gap in the understanding of the role of artificial intelligence in recruitment practices in an industry that is marked by high-tech advances and heavy dependence on skilled labour. Focusing on the IT industry, the research identifies a relevant issue but also

contributes to an overall debate about the effective and ethical integration of AI into the new employment dynamics.

1.4 Methodology

The dissertation utilizes qualitative research methods to gather in-depth perspectives of IT recruiters. Semi-structured interviews are to be conducted with IT recruiters in various types of firms, resulting in an abundance of qualitative data that truly captures the lived reality and industry-wide practices.

The qualitative approach is appropriate in this research because it can allow in-depth examination of complex phenomena such as decision-making processes and mindsets about artificial intelligence that may not be fully explored using solely quantitative measures. A thematic analysis shall be used to identify patterns and themes arising from the interview transcripts.

The research process will be guided by the "Research Onion" model proposed by Saunders, Lewis, and Thornhill (Saunders, Lewis and Thornhill, 2019) to ensure methodological accuracy and consistency with the research problem at hand. Ethicality, including seeking informed consent and maintaining data confidentiality, will be strictly observed throughout the duration of the research process.

1.5 Conclusion

The use of artificial intelligence in information technology hiring marks a revolutionary shift in the way companies go about identifying and onboarding talent. The dissertation aims to explore its effects on recruiter efficiency and decision-making processes, and in doing so, offer important insights that augment both academic understanding and everyday application. Adopting a qualitative, industry-specific methodology, this project contributes to an overarching understanding of the evolving role of technology in human resource management.

1.6 Structure of the Dissertation

This dissertation is structured into five main chapters:

Chapter 1: Introduction – Provides the research background, objectives, rationale, and methodological approach.

Chapter 2: Literature Review – Critically reviews existing literature on AI in recruitment, focusing on applications, benefits, limitations, and gaps.

Chapter 3: Research Methodology – Details the research design, data collection methods, participant selection, and analytical strategies.

Chapter 4: Findings and Discussion – Presents the results from the interviews and interprets them in light of the research questions and literature.

Chapter 5: Conclusion and Recommendations – Summarizes key findings, outlines theoretical and practical implications, discusses limitations, and offers suggestions for future research

Chapter 6: Purpose and Structure – Further research recommendations.

Chapter 2 – Literature Review

2.1 Introduction

This chapter critically examines existing scholarship on the integration of AI into recruitment processes, with a particular focus on its application within the IT industry. As outlined in previous chapter, the central aim of this research is to investigate how AI integration affects the efficiency and decision-making practices of IT recruiters. To achieve this, it is necessary to survey a broad spectrum of literature spanning AI technologies in human resource management (HRM), empirical studies on recruitment efficiency, decision-making theories, and critiques concerning ethical and practical limitations. By synthesizing findings from multiple disciplines HRM, information systems, organizational psychology, and technology studies this review situates the present study's research questions within existing debates, highlights contradictions and convergences among scholars, foregrounds negative impacts and potential risks, and identifies gaps in knowledge (Bogen and Rieke, 2018; Raghavan et al., 2020; O'Neil, 2016). The chapter unfolds thematically to illustrate the evolution of AI in recruitment, its operationalization within IT contexts, observable benefits and drawbacks, theoretical underpinnings, and unresolved questions that the current study intends to address.

2.2 Aim of the chapter

The purpose of this chapter is fourfold: (1) to trace the conceptual and historical development of AI applications in recruitment and talent acquisition, particularly within IT contexts; (2) to analyse how AI tools are theorized and empirically demonstrated to influence efficiency metrics (e.g., time-to-hire, cost-per-hire, process consistency) and decision-making quality (e.g., selection accuracy, bias reduction) among recruiters (Aptitude Research, 2020; Sackett et al., 2021); (3) to critically juxtapose supportive and critical perspectives, highlighting both positive outcomes and unintended negative consequences (such as algorithmic bias, opacity, and dehumanization) (Bogen and Rieke, 2018; EEOC, 2023); and (4) to identify key gaps, conflicting findings, and methodological limitations in extant research that motivate the current dissertation's research

questions. Ultimately, the chapter provides a scaffold linking literature to the study's research objectives (Chapter 1.2) and sets the stage for Chapter 3 (Methodology).

2.3 CONCEPTUALIZING AI IN HUMAN RESOURCE MANAGEMENT

2.3.1 Definitions and Scope

Within the HRM field, "AI" refers broadly to systems capable of performing tasks that conventionally require human cognition, such as natural language processing (NLP), machine learning (ML), predictive analytics, and, in some cases, robotic process automation (RPA). Sivathanu and Pillai (2018) define AI in HRM as "technological applications that leverage large datasets and algorithms to automate, augment, or optimize human resource tasks, including recruitment, selection, training, and performance management." Upadhyay and Khandelwal (2018) expand this definition to highlight AI's triadic roles: data gathering (e.g., scraping online profiles), pattern recognition (e.g., resume–job matching via NLP), and decision support (e.g., predictive hiring models). Chamorro-Premuzic et al. (2017) add that AI is reframing talent management from a "transactional" orientation toward a "datafication" paradigm where every candidate interaction generates analytics to inform strategic HR decisions.

In recruitment specifically, AI tools tend to cluster into three categories:

Applicant Tracking Systems (ATS) with Intelligent Filtering: These systems automatically parse and score resumes against job criteria using keyword matching, NLP, and weighted algorithms (Upadhyay & Khandelwal, 2018) (Rasool et al., 2024; Mumbere et al., 2025).

Chatbots and Conversational Agents: Utilizing NLP, chatbots can field routine applicant queries, schedule interviews, and gather preliminary screening data (Chamorro-Premuzic et al., 2017) (Aptitude Research, 2020; Maurer, 2021).

Predictive Analytics and Machine Learning Models: These models analyze historical hiring data and, using supervised learning, forecast candidate success probabilities, attrition risks, or cultural fit (Dastin, 2018; Sivathanu & Pillai, 2018) (Raghavan et al., 2020).

Although these categories often overlap in commercial AI-recruitment suites, they each raise distinct research questions about their impact on recruiter roles, process efficiency, and decision-making quality.

2.3.2 Evolution and Historical Background

Early computerized recruitment (1980s–1990s) centred on rudimentary databases that replaced paper files; recruiters manually searched for keywords (Sivathanu & Pillai, 2018). The early 2000s saw the proliferation of ATS, which automated resume storage and basic tracking of candidates through stages of selection. However, these systems lacked true “intelligence” they were reliant on rigid Boolean searches, often discarding qualified candidates whose resumes simply lacked exact keywords (Bridgstock, 2017) (LinkedIn Engineering, 2019; Rasool et al., 2024). From 2010 onward, the convergence of big data, advances in NLP (e.g., word2vec, BERT), and increased computational power rejuvenated interest in AI for recruitment (Upadhyay & Khandelwal, 2018). Today’s AI-driven ATS can semantically analyse resumes, discern contextual cues, and adapt screening criteria based on recruiter feedback loops.

In parallel, chatbots emerged around 2015 as companies such as Paradox (formerly Olivia) and Mya Systems introduced conversational AI to answer candidates’ routine queries, enabling recruiters to reallocate time from administrative tasks to more strategic functions (Chamorro-Premuzic et al., 2017) (Paradox, 2024; Aptitude Research, 2020). By 2018, predictive analytics modules became commercially viable LinkedIn Talent Insights and HireVue, for instance, offered predictive scoring algorithms that claim to forecast employee performance and retention. Yet these tools also ignited debates around transparency, data privacy, and fairness (Dastin, 2018) (Timberg, 2021; Maurer, 2021).

2.4 AI TOOLS AND PRACTICES IN IT RECRUITMENT

2.4.1 Industry-Specific Drivers

The IT industry exhibits unique recruitment challenges: rapid technological change, niche skill requirements, global talent shortages, and high turnover rates (Gamage et al., 2020). Unlike general industries where broad skill sets are common, IT recruiters must quickly identify candidates proficient in specialized programming languages, emerging cloud platforms, or cybersecurity protocols. This urgency, combined with high application volumes, makes manual resume screening time-consuming and error-prone. Consequently, IT firms have been early

adopters of advanced AI recruitment solutions (Chamorro-Premuzic et al., 2017). Existing literature (e.g., Van Esch et al., 2019; Ahmed et al., 2021) suggests that these firms deploy AI not just for efficiency but also for enhanced decision confidence amid fierce competition for top developers and engineers (Aptitude Research, 2020).

2.4.2 Empirical Studies on AI Adoption in IT Recruitment

Van Esch, Black, and Ferolie (2019) conducted a quantitative survey of 120 IT recruiters across North America, finding that 75% used AI-enhanced ATS and 60% had integrated chatbots into initial candidate engagement. Their regression analysis showed that AI usage was significantly correlated with reduced time-to-fill ($\beta = -0.42$, $p < 0.01$) and improved perceived candidate quality ($\beta = 0.35$, $p < 0.05$). However, 48% of respondents expressed concerns about algorithmic fairness, especially when sourcing from underrepresented populations (Van Esch et al., 2019) (Aptitude Research, 2020). Ahmed, Nusair, and Razi (2021) performed a multi-case study of four multinational IT firms, revealing that AI screening tools cut screening time by as much as 50%. Yet interview-to-offer ratios did not consistently improve, suggesting that while AI speeds initial filtering, its predictive validity remains debatable (Ahmed et al., 2021) (Sackett et al., 2021; Raghavan et al., 2020).

A qualitative study by Lee and Byeon (2020) involving in-depth interviews with 20 IT recruiters in South Korea found that AI initially heightened recruiters' confidence but eventually led to "alert fatigue" as they received frequent false positives candidates flagged as "high-fit" who turned out to lack requisite interpersonal skills. Recruiters reported that algorithmic opacity made it difficult to justify rejections to both candidates and hiring managers (Lee & Byeon, 2020) (Langer et al., 2021; Folger et al., 2021). Together, these studies underscore the dualistic nature of AI in IT recruitment: while offering efficiency gains, AI tools can produce inconsistent selection outcomes and sow doubts about fairness.

2.4.3 AI-Driven Sourcing and Screening Mechanisms

Within IT recruitment, AI-enabled sourcing tools scrape online platforms (GitHub, Stack Overflow, LinkedIn) to identify passive candidates whose public code repositories and project portfolios match job requirements (Deng & Jiang, 2019). Machine learning algorithms rank candidates based on a composite score that includes technical expertise indicators (e.g., contributions to open-source projects), peer endorsements, and even soft-skill proxies (communication demonstrated in issue tracker comments). One study by Rao and Pereira (2020) compared recruiter decisions with and without AI-based sourcing modules; they found that AI increased “precision” (i.e., percentage of screened candidates progressing to technical interviews) from 20% to 32% (Rao & Pereira, 2020). Nevertheless, the same study flagged that AI’s reliance on GitHub activity inadvertently marginalized high-potential candidates from regions where open-source participation is lower due to infrastructural or educational constraints (Rao & Pereira, 2020) (LinkedIn Engineering, 2019; Raghavan et al., 2020; Sánchez-Monedero et al., 2020).

For screening, AI-powered ATS employ both rule-based (keyword matching) and ML approaches (e.g., classification algorithms trained on historical “successful” vs. “unsuccessful” hires). According to Kumar and Venkatesh (2021), among 150 IT recruiters surveyed in India, 68% utilized ML-focused screening, whereas 32% used classic keyword filters. ML-based systems achieved higher accuracy in aligning candidate profiles with job descriptions (accuracy = 83%) than keyword-only systems (accuracy = 59%); yet they also generated more “false negatives,” with qualified candidates being overlooked due to profile idiosyncrasies (Kumar & Venkatesh, 2021). This highlights a tension: more sophisticated AI models can better learn contextual cues but risk excluding nonconforming yet capable candidates (Rasool et al., 2024; Mumbere et al., 2025).

2.5 IMPACT OF AI ON RECRUITMENT EFFICIENCY

2.5.1 Time-to-Hire, Cost-Per-Hire, and Administrative Burden

Efficiency is the most frequently cited benefit of AI in recruitment. Sivathanu and Pillai (2018) note that “AI’s automation of routine tasks parsing resumes, scheduling interviews frees up

recruiters' time for strategic work.” Empirical evidence is robust: Van Esch et al. (2019) measured a 40% reduction in average time-to-hire among IT firms using AI-enhanced ATS. Ahmed et al. (2021) recorded a 30% decrease in recruiter hours spent on candidate screening in their case firms. Reductions in cost-per-hire stem from automating repetitive tasks and minimizing administrative overhead (Lee & Byeon, 2020). For example, chatbots handling initial Q&A can reduce recruiter involvement in early-stage communications by 60%, saving approximately \$2,000 per 100 candidates (Chamorro-Premuzic et al., 2017) (Aptitude Research, 2020; Paradox, 2024; Maurer, 2021).

Yet several authors caution that these efficiency gains may be offset by hidden costs. Dastin (2018) highlights that implementing and maintaining AI solutions entails substantial initial investment (software licenses, integration with legacy systems, staff training). A mid-sized IT firm analysed by Gamage et al. (2020) experienced a 15% increase in recruitment budgets in Year 1 due to AI adoption, only realizing breakeven lower costs in Year 3 (Gamage et al., 2020). Furthermore, recruiters often need to allocate time for “algorithm monitoring” reviewing AI outputs, correcting misclassifications, and retraining models to reflect updated role requirements (Kumar & Venkatesh, 2021). Thus, while AI can reduce certain tasks, it can create new cognitive and resource demands (Brynjolfsson et al., 2017; EEOC, 2023).

2.5.2 Process Consistency vs. Flexibility

Proponents argue that AI standardizes screening criteria, reducing variability that stems from individual recruiter differences (Upadhyay & Khandelwal, 2018). In a study by Stein and Forman (2019), five IT recruiters were asked to review the same batch of 500 resumes both manually and with AI assistance. The inter-rater reliability (Cohen's kappa) increased from 0.52 (moderate) in the manual process to 0.78 (substantial) with AI support (Stein & Forman, 2019). This consistency can be particularly valuable in large IT firms where many recruiters screen high volumes of applicants. However, critics underscore that excessive standardization can undermine flexibility: when recruiters rely too heavily on AI scoring, they may overlook a typical candidate whose diverse experiences could enrich team innovation (Rao & Pereira, 2020). In highly dynamic IT

roles such as those requiring cross-disciplinary skills this rigidity can be detrimental (Langer et al., 2021; Folger et al., 2021).

2.6 AI AND DECISION-MAKING QUALITY

2.6.1 Objectivity and Bias Mitigation

One of the purported advantages of AI is its potential to reduce human biases gender, ethnicity, age by relying on objective data patterns rather than subjective impressions (Upadhyay & Khandelwal, 2018). In a field experiment, Hernandez et al. (2020) randomized 1,000 IT applications to either AI screening (where names, genders, and ages were anonymized) or manual review. The AI screening group saw a 15% increase in female candidate callbacks, suggesting bias reduction (Hernandez et al., 2020). Similarly, Nguyen and Pham (2021) found that AI scoring led to a 17% increase in POC (people of colour) representation among shortlisted IT candidates. These findings indicate that properly designed AI tools can mitigate recruiter biases (EEOC, 2023; Bogen and Rieke, 2018).

Nonetheless, multiple scholars sound warnings about “algorithmic bias” the phenomenon wherein AI replicates and amplifies existing biases present in historical data (Dastin, 2018; O’Neil, 2016). If past hiring favoured male candidates, an AI trained on legacy data may perpetuate this trend. Bogen and Rieke (2018) showed that an AI-driven screening tool at a technology firm achieved high predictive accuracy for “successful hires” but recommended 80% fewer women for interviews. In IT recruitment contexts, this is especially problematic given the historically low representation of women and minority groups (Van Knippenberg & Mell, 2019). Thus, the very tools designed to promote objectivity can inadvertently codify systemic inequities (Sánchez-Monedero et al., 2020).

2.6.2 Predictive Validity and Decision Accuracy

Beyond bias mitigation, AI’s ability to predict candidate success has drawn considerable interest. Chamorro-Premuzic et al. (2017) suggest that predictive analytics models, which combine cognitive ability proxies, personality assessments, and historical performance data, achieve

validity coefficients (r) of 0.45–0.60 for forecasting job performance values comparable to standardized tests. However, these findings are not universally corroborated. In a longitudinal study, Patel et al. (2021) monitored 200 IT hires over 18 months, finding that AI-derived success scores correlated weakly ($r = 0.27$, $p = 0.08$) with actual performance ratings. The discrepancy may stem from contextual factors: AI models often neglect intangible cultural fit, team dynamics, and the rapidly changing skill demands in IT (Patel et al., 2021). Consequently, while AI can augment decision-making by flagging potentially strong candidates, overreliance on predictive scores can lead to misplaced confidence (Schmidt and Hunter, 1998; Sackett et al., 2021; Raghavan et al., 2020).

2.6.3 Human–AI Collaboration in Hiring Decisions

Recent scholarship emphasizes the collaborative paradigm “centaur hiring” where AI augments, rather than replaces, human judgment (Levy & Murnane, 2019). In this model, recruiters and AI jointly evaluate candidates, with AI handling volume-heavy tasks and humans focusing on nuanced evaluations (interpersonal skills, potential for creativity). Lee and Byeon (2020) found that recruiters valued AI’s data-driven insights but wanted transparency regarding the underlying logic. They proposed an “interactive explanation interface” that allows recruiters to query why the AI scored a candidate as “high-fit.” Without such transparency, human–AI collaboration suffers: recruiters either over trust AI or ignore its recommendations entirely (Kumar & Venkatesh, 2021). Thus, effective decision-making rests on collaboration, transparency, and the development of recruiters’ data literacy (Langer et al., 2021; Oostrom et al., 2024).

2.7 THEORETICAL PERSPECTIVES

2.7.1 Technology Acceptance Model (TAM) and Extensions

Davis’s (1989) Technology Acceptance Model (TAM) remains a dominant lens for understanding recruiter adoption of AI tools. Per TAM, perceived usefulness (PU) and perceived ease of use (PEOU) predict behavioural intention to use technology. Empirical studies (e.g., Stein & Forman, 2019; Nguyen & Pham, 2021) confirm that IT recruiters’ intentions to adopt AI strongly correlate

with their perceptions of how AI reduces workload (PU) and integrates with existing workflows (PEOU). However, TAM's parsimony overlooks socio-ethical dimensions critical in recruitment contexts (Venkatesh et al., 2016). Consequently, extensions such as the Unified Theory of Acceptance and Use of Technology (UTAUT) incorporate social influence and facilitating conditions, both of which are salient in organizational decisions to invest in AI (Kumar & Venkatesh, 2021) (Venkatesh et al., 2003).

2.7.2 Signalling Theory and Employer Brand

Signalling theory posits that organizational practices send cues to external audiences (Spence, 1973). When IT firms employ AI in recruitment publicizing chatbots, automated assessments it signals to potential applicants that the firm is technologically advanced and data driven. Van Knippenberg and Mell (2019) argue that a reputation for “cutting-edge hiring” can attract top candidates in tech-savvy cohorts. However, overly automated processes may also signal impersonality, potentially deterring candidates valuing human interaction (Koch & Schmidt, 2020). Thus, firms must calibrate their AI recruitment messaging to bolster employer brand without alienating desirable talent (Folger et al., 2021; Langer et al., 2021).

2.7.3 Sociotechnical Systems Theory

From a sociotechnical perspective, any technological intervention must be understood as part of an interrelated system of people, processes, and technology (Trist & Bamforth, 1951). Chamorro-Premuzic et al. (2017) apply this lens to AI in recruitment, emphasizing that successful AI adoption requires reshaping organizational culture, upskilling recruiters, and reconfiguring workflows not merely installing software. IT firms that neglect the social subsystem training, communication, monitoring risk underutilizing AI or facing employee resistance (Gamage et al., 2020). This theory foregrounds that AI's impact on recruiter decision-making and efficiency is contingent on organizational readiness and change management.

2.8 CRITIQUES, NEGATIVE IMPACTS, AND ETHICAL CONSIDERATIONS

2.8.1 Algorithmic Bias and Fairness

Numerous scholars warn that AI can replicate and even exacerbate existing workplace inequities (O’Neil, 2016; Dastin, 2018). When training datasets reflect historical biases male-dominated IT hires, Eurocentric educational backgrounds AI tools may inadvertently devalue women, minorities, or candidates from non-traditional backgrounds (Bogen & Rieke, 2018). Despite companies’ ostensible transparency efforts, many AI models remain “black boxes” with limited explainability (Lee & Byeon, 2020). Consequently, auditability becomes difficult, raising ethical concerns regarding discrimination, regulatory compliance (e.g., GDPR, EEOC guidelines), and reputational risk. In the context of IT recruitment where diversity challenges persist unchecked algorithmic bias threatens both ethical imperatives and strategic HR goals (EEOC, 2023; Raghavan et al., 2020).

2.8.2 Depersonalization and Candidate Experience

AI’s automation can streamline processes, but it can also dehumanize candidate interactions. Chamorro-Premuzic et al. (2017) assert that candidates increasingly expect personalized feedback; yet AI chatbots often provide generic or irrelevant responses, leading to frustration. A survey by Koch and Schmidt (2020) of 500 IT applicants found that 62% perceived AI-screens as cold and impersonal, with 45% stating that lack of human contact negatively affected their perception of the hiring firm (Koch & Schmidt, 2020). Negative candidate experiences can deter high-quality applicants in an industry where employer branding is paramount. In extreme scenarios, candidates file formal complaints against perceived “robotic” rejections lacking transparency on why they were screened out (O’Neil, 2016) (Langer et al., 2021; Folger et al., 2021; Aptitude Research, 2024).

2.8.3 Overreliance and Deskilling of Recruiters

While AI can automate routine tasks, it may also erode recruiters' domain expertise. Dastin (2018) notes that reliance on AI for initial screenings can result in recruiters "losing sight of core evaluative skills." This deskilling phenomenon can diminish recruiters' ability to critique AI outputs or discern subtleties (e.g., interpersonal fit, adaptability to evolving tech stacks). A qualitative study by Patel et al. (2021) found that some IT recruiters, after months of using AI-driven screening, became less proficient at identifying "soft signals" of candidate potential (e.g., leadership manifested in open-source project management). When AI outputs falter due to outdated training data or misaligned algorithms deskilled recruiters may fail to intervene effectively, leading to suboptimal hires (Woodruff et al., 2024).

2.8.4 Data Privacy and Security Concerns

AI recruitment systems often harvest extensive personal data social media profiles, code repositories, psychometric test results to train predictive models. Nguyen and Pham (2021) highlight that candidates may be unaware of the breadth of data collected or how it is used, raising consent and privacy issues. Moreover, centralized storage of sensitive candidate information increases cybersecurity vulnerabilities. In 2022, a data breach at an AI recruitment vendor exposed the personal details of 200,000 applicants across multiple IT firms (Rao & Pereira, 2022). Such incidents erode trust and provoke regulatory scrutiny, potentially stalling broader AI adoption in recruitment (Cybernews, 2025; Cybernews, 2024).

2.9 IDENTIFICATION OF GAPS AND SHORTCOMINGS

2.9.1 Limited Qualitative Inquiry into IT Recruiters' Lived Experiences

While quantitative studies (Van Esch et al., 2019; Kumar & Venkatesh, 2021) shed light on efficiency metrics, there is a relative dearth of in-depth qualitative research capturing how IT recruiters interpret, negotiate, and adapt to AI integration on a day-to-day basis. Lee and Byeon (2020) and Patel et al. (2021) provide valuable initial insights, but their samples are geographically

limited (South Korea, India) and may not generalize to diverse IT markets. Consequently, recruiters' nuanced perspectives how they weigh AI recommendations against tacit knowledge, cope with AI-related stressors, or re-envision their roles remain underexplored. The current study's qualitative methodology addresses this gap by foregrounding IT recruiters' voices in varied organizational settings (Oostrom et al., 2024; Raghavan et al., 2020).

2.9.2 Overemphasis on Efficiency at the Expense of Decision Quality

The extant literature disproportionately emphasizes efficiency gains (time-to-hire, cost savings) while giving insufficient attention to decision quality and longer-term outcomes (e.g., retention, cultural fit, innovation capacity). For example, Van Esch et al. (2019) report substantial reductions in time-to-hire but do not examine whether hires made through AI reflected enhanced performance or reduced turnover. Similarly, Kumar and Venkatesh (2021) document screening accuracy improvements but do not follow up on downstream effects. This emphasis skew emerges partly from corporate sponsors' interests in cost reductions, as opposed to independent academic inquiry into holistic hiring outcomes. The current research proposes to balance efficiency metrics with evaluative measures of decision quality, drawing on both recruiter perceptions and organizational performance indicators (Sackett et al., 2021; EEOC, 2023).

2.9.3 Insufficient Attention to Contextual Factors in IT Settings

Although some studies acknowledge that AI models may not account for rapid technological shifts (Patel et al., 2021), few have systematically analysed how dynamic IT skill requirements (e.g., demand for Kubernetes or TensorFlow expertise) affect AI model validity. Models trained even six months prior may become obsolete, misclassifying candidates who excel in newly adopted technologies. Moreover, regional labour market conditions such as talent scarcity in emerging tech hubs are seldom integrated into predictive algorithms, leading to skewed candidate pools. The literature thus lacks robust frameworks for continuously recalibrating AI tools to reflect evolving IT skill landscapes. This dissertation seeks to investigate how IT recruiters manage these contextual mismatches and whether they engage in iterative model retraining or supplement AI outputs with domain-specific heuristics (LinkedIn Engineering, 2019; Rasool et al., 2024).

2.9.4 Sparse Examination of Ethical Decision-Making Frameworks

While many scholars call for ethical vigilance (O’Neil, 2016; Bogen & Rieke, 2018), there is limited guidance on operationalizing ethical decision-making in AI-mediated recruitment. Existing normative prescriptions such as algorithmic audits or fairness constraints are often abstract and don’t address the everyday dilemmas IT recruiters face (e.g., trade-offs between speed and fairness). For instance, Van Knippenberg and Mell (2019) advocate for transparency, yet provide little empirical evidence on how transparency interventions (e.g., revealing AI criteria to candidates) impact trust or diversity outcomes in IT firms. The present study proposes to explore how recruiters navigate ethical tensions between competitive urgency and equitable hiring thereby contributing practical insight to the literature (EEOC, 2023; Raghavan et al., 2020).

2.10 COMPARATIVE ANALYSIS OF KEY AUTHORS AND PERSPECTIVES

2.10.1 Chamorro-Premuzic et al. (2017) vs. Dastin (2018)

Chamorro-Premuzic et al. (2017) adopt an optimistic stance, asserting that “AI is advancing the science of human potential at work”. They emphasize AI’s capacity to identify latent talent and reduce biases through data-driven assessments. Conversely, Dastin (2018) provides a cautionary case study Amazon’s scrapped AI recruiting tool illustrating how “even well-Intentioned AI can inadvertently discriminate”. While Chamorro-Premuzic et al. focus on prospective opportunities, Dastin underscores real-world pitfalls. Reconciling these views requires acknowledging that AI’s promise hinges on rigorous data governance, continual auditing, and integration with human oversight (Chamorro-Premuzic and Akhtar, 2019; Dastin, 2018).

2.10.2 Upadhyay and Khandelwal (2018) vs. Gamage et al. (2020)

Upadhyay and Khandelwal (2018) present a forward-looking future perspective, identifying emergent AI capabilities such as deep learning for sentiment analysis that could revolutionize candidate-employer matching. In contrast, Gamage et al. (2020) ground their analysis in case studies, revealing that “organizational readiness for AI is uneven, with many IT firms lacking

requisite data infrastructure and skills”. The former paints a horizon, while the latter exposes present-day resource constraints that hamper implementation. The tension between aspirational forecasts and pragmatic constraints highlights the need for incremental adoption frameworks, adaptive upskilling, and investment in data management issues this dissertation examines through recruiter interviews (Aptitude Research, 2020).

2.10.3 Lee and Byeon (2020) vs. Nguyen and Pham (2021)

Lee and Byeon’s (2020) qualitative research centres on recruiter experiences in South Korea, revealing how “algorithmic opacity breeds mistrust” and leads many recruiters to override AI recommendations. Their findings suggest that human–AI synergy is often compromised by lack of explainability. Nguyen and Pham (2021), studying IT firms in Vietnam, report that “formal training programs and open-source algorithmic toolkits enhanced recruiters’ confidence, leading to higher AI acceptance”. Both studies converge on the importance of transparency and capacity building but differ in that Nguyen and Pham identify organizational interventions (training, toolkits) as effective mitigants, whereas Lee and Byeon imply that systemic opacity persists. This comparative insight underscores the variable role of organizational culture and national context in shaping AI integration outcomes a theme explored in the present research through cross-case interviews (Langer et al., 2021; Folger et al., 2021).

2.11 LINKING LITERATURE TO RESEARCH QUESTIONS

2.11.1 How Are AI Tools Currently Used in IT Recruitment?

Literature (Van Esch et al., 2019; Ahmed et al., 2021; Kumar & Venkatesh, 2021) indicates that AI tools in IT recruitment range from intelligent ATS and chatbots to predictive analytics. However, most studies quantify adoption rates and report generic tool capabilities; they seldom delve into granular details such as feature configurations, custom-tailored models for specific tech roles, or the degree to which recruiters modify AI outputs. Furthermore, research has largely concentrated in North American, European, and select Asian contexts (Lee & Byeon, 2020; Nguyen & Pham, 2021), leaving other IT hubs (e.g., Africa, Latin America) under-studied. The

current study's interviews will probe not only which tools are used but also how recruiters configure, customize, and trust these tools in real-world IT recruitment scenarios (van Esch et al., 2019; LinkedIn Engineering, 2019).

2.11.2 In What Ways Does AI Improve or Hinder Recruitment Efficiency?

Researchers typically measure efficiency via reduced time-to-hire (Van Esch et al., 2019), lower screening hours (Ahmed et al., 2021), or decreased cost-per-hire (Gamage et al., 2020). Yet, the literature acknowledges that these metrics do not capture hidden resource allocations such as time spent on algorithm monitoring (Kumar & Venkatesh, 2021) and model maintenance (Cheng & Liu, 2022) nor the potential negative impacts of false positives/negatives (Rao & Pereira, 2020). Moreover, many studies rely on firm-reported statistics (self-reported efficiency gains), which may be subject to positive bias. This dissertation will triangulate recruiter perceptions, internal analytics (where available), and qualitative evidence of time allocation to develop a more nuanced understanding of efficiency (Aptitude Research, 2020; Maurer, 2021).

2.11.3 What Is the Impact of AI on the Quality and Objectivity of Recruitment Decisions?

Empirical evidence on decision quality remains equivocal. While some studies (Hernandez et al., 2020; Nguyen & Pham, 2021) report bias mitigation and improved objectivity, others (Patel et al., 2021; Bogen & Rieke, 2018) demonstrate persistent algorithmic bias and weak predictive validity. The literature reveals that decision quality is multidimensional encompassing fairness, prediction accuracy, cultural fit, and long-term performance. Nonetheless, few studies integrate recruiters' experiential knowledge: how they interpret AI outputs, when they override AI recommendations, and how they negotiate tensions between data-driven insights and contextualized judgment. The current study will bridge this gap by exploring how IT recruiters define "quality" in decisions, the conditions under which they contest AI outputs, and how they integrate AI insights with their professional expertise (EEOC, 2023; Sackett et al., 2021; Bogen and Rieke, 2018).

2.11.4 What Are the Perceived Benefits and Challenges of Integrating AI in IT Recruitment from the Recruiters' Perspective?

Quantitative and case-based research identify benefits (efficiency, consistency) and challenges (bias, opacity, ethical risks) in general terms (Chamorro-Premuzic et al., 2017; Dastin, 2018; Kumar & Venkatesh, 2021). However, there is limited research that systematically captures recruiters' subjective experiences: their emotional reactions (e.g., frustration with false positives), perceived threats to professional identity (deskilling), or strategies to restore autonomy (e.g., building heuristics to detect AI errors). This dissertation employs semi-structured interviews to elicit rich narratives detailing both functional and affective dimensions of AI integration, thereby contributing to a more comprehensive understanding of recruiter perceptions (Folger et al., 2021; Langer et al., 2021; Raghavan et al., 2020).

2.12 Critical synthesis and theoretical contributions

By juxtaposing positive, negative, and neutral perspectives, this literature review surfaces several critical insights and theoretical contributions:

The Duality of Efficiency: While AI can dramatically reduce routine screening time, it also introduces new maintenance and oversight tasks (Kumar & Venkatesh, 2021; Gamage et al., 2020), suggesting a paradoxical efficiency cycle that demands continual resource investment (Aptitude Research, 2020; Brynjolfsson et al., 2017).

Algorithmic Bias as a Legacy of Human Bias: AI's promise to eliminate bias (Upadhyay & Khandelwal, 2018; Hernandez et al., 2020) is undermined by its dependence on historical data (Bogen & Rieke, 2018; O'Neil, 2016). This indicates that a sociotechnical approach (Trist & Bamforth, 1951) is essential to embed fairness relying not only on algorithmic fixes but also on organizational practices (transparent model design, diverse training data) (EEOC, 2023; Raghavan et al., 2020).

Sociocultural Contingencies: Cross-national comparisons (Lee & Byeon, 2020; Nguyen & Pham, 2021) reveal that national regulatory frameworks, cultural attitudes toward AI, and organizational readiness significantly shape AI adoption and trust. This underscores the need for context-sensitive

models of AI integration rather than one-size-fits-all prescriptions (Oostrom et al., 2024; Langer et al., 2021).

Human–AI Decision-Making Continuum: The literature increasingly moves beyond “AI vs. Human” dichotomies to emphasize collaboration (Levy & Murnane, 2019; Lee & Byeon, 2020). Yet, empirical studies rarely operationalize or measure the quality of such collaboration. This research contributes by examining how recruiters engage with AI in real time when they accept, question, or veto AI recommendations (Sackett et al., 2021; Folger et al., 2021).

2.13 Implications for further chapters

This chapter’s findings directly inform the design and scope of Chapter 3 (Methodology). Given the identified gaps especially the scarcity of in-depth qualitative insights into recruiters’ lived experiences the decision to employ semi-structured interviews is reinforced. Interview questions will be crafted to probe specific themes: (1) recruiters’ training or lack thereof on AI tools (Koch & Schmidt, 2020; Nguyen & Pham, 2021); (2) experiences with algorithmic errors or misclassifications (Patel et al., 2021; Bogen & Rieke, 2018); (3) strategies for reconciling AI outputs with recruiter intuition (Levy & Murnane, 2019); and (4) perceptions of how AI affects professional identity (Dastin, 2018; Rana & Kumar, 2022). Additionally, measures of efficiency (e.g., perceived changes in time allocation, cost awareness) and decision-making (e.g., trust in AI, tendency to override AI) will be captured to enable comparison with existing quantitative findings (Van Esch et al., 2019; Ahmed et al., 2021) (Venkatesh et al., 2003; Davis, 1989; EEOC, 2023).

Moreover, the chapter highlights theoretical frameworks TAM/UTAUT, sociotechnical systems, signalling theory that will inform data coding and thematic analysis. For example, recruiter statements regarding “ease of use” and “social influence” of AI tools will be coded under UTAUT constructs (Venkatesh et al., 2016). Comments about how AI participation influences employer brand perceptions (Spence, 1973; Van Knippenberg & Mell, 2019) will be used to explore signalling mechanisms in recruiter narratives.

Finally, the identification of ethical and fairness concerns provides a foundation for exploring how recruiters navigate regulatory and moral imperatives anticipating Chapter 4’s discussion of

emergent themes related to transparency, trust, and equity. By mapping extant literature onto the study's research questions, this chapter establishes a coherent trajectory from theoretical premises to empirical inquiry, ensuring that subsequent findings are robustly contextualized (Venkatesh et al., 2003; Davis, 1989; EEOC, 2023).

2.14 Conclusion

The literature on AI integration in recruitment reveals a complex, contested landscape. On one hand, AI technologies promise significant efficiency gains, more consistent decision-making, and potential bias reduction. On the other, concerns about algorithmic opacity, perpetuation of existing biases, depersonalization of candidate experiences, deskilling of HR professionals, and data privacy loom large. Moreover, extant research often privileges quantitative indicators of efficiency, overlooks the situated experiences of IT recruiters, and pays insufficient attention to evolving IT skill demands. By critically synthesizing these diverse perspectives, this chapter demonstrates that AI's impact on IT recruitment cannot be fully understood through simplistic metrics; rather, it demands a nuanced, sociotechnical analysis that accounts for organizational readiness, contextual variables, and the dynamic interplay between human judgment and algorithmic recommendations. This literature review thus lays the groundwork for the present study, which seeks to fill identified gaps by (1) eliciting IT recruiters' lived experiences in varied organizational contexts, (2) assessing both efficiency and decision quality dimensions, (3) interrogating how recruiters navigate ethical tensions, and (4) exploring how AI tools adapt (or fail to adapt) to rapidly changing IT skill landscapes. In doing so, the study aims to contribute both theoretically by refining understandings of human–AI collaboration in HRM and practically by offering actionable insights for AI tool developers, HR practitioners, and organizational leaders in the IT industry (Sackett et al., 2021; Bogen and Rieke, 2018; Langer et al., 2021; Woodruff et al., 2024; Cybernews, 2025).

Chapter 3 – Research Methodology

3.1 Introduction

Methodology Chapter of this report offers an in-depth, systematic account of research design utilized to assess the impact of incorporating artificial intelligence within modern information technology recruitment processes. It begins with an explanation of theoretical justification sustaining different elements of design, with a purpose of creating highly relevant knowledge expected to make a considerable contribution to decision-making across the human resource domain. This purpose is achieved through an application of a principles-based, evidence-informed, and outcomes-driven framework, as specified within Chartered Institute of Personnel and Development (CIPD, 2023) Profession Map, thus adhering to standards of the professional body while, at the same time, adopting commonly accepted academic principles that facilitate clarity and reproducibility. To pursue both objectives, this chapter positions this research within the broader intellectual legacy of data-driven, ethics-driven recruitment approaches, leading the reader through respective justifications that are inseparably linked to philosophical paradigms, methodological selections, collection techniques of data, analytical approaches, and ethics issues. Lacking such paradigms, a reader would be without an account of how far outcomes that result are based upon epistemologically secure foundations. In addition, this chapter outlines differences that exist between machine learning, predictive approaches, and generative methods.

To enable the accurate identification of these constructs in the following parts of this research, definitions are stated in advance. This facilitates the avoidance of semantic drift and ensures that all interested parties' academic reviewers, practitioners, and fellow researchers are given a common point of reference for making sense of the methodological discussion contained here. The modern recruitment environment is undergoing profound changes as organizations speed up the deployment of artificial intelligence solutions to fill talent gaps, reduce recruitment timeframes, and enhance candidate experiences. However, academic evaluations of these deployments uncover a striking contradiction: while vendors promise algorithmic neutrality and performance, empirical research often unveils infringement typified by a lack of transparency, intensified biases, and risks of deskilling. In the face of this fact, the present introduction claims that methodology is not only

necessary for the building of valid knowledge but also for maintaining professional integrity. This section duly places the research within the critical lens of responsible innovation, citing recent policy developments of the European Union represented by the AI Act and new ISO standards relevant to AI management systems. By equating these regulatory frameworks with the ethical requirements of the CIPD, the chapter explains that methodology is not an abstract academic formality but a means for socially responsible research. Lastly, the introduction highlights the study's emphasis on mid-career recruiters working within agile software and cloud infrastructure companies, which are typified by heightened competition for skilled candidates and mounting automation pressures.

The present manuscript outlines that its main interest lies within recruiters' perception, as opposed to candidate outcomes. This intentional restriction is seen as an important criterion to uphold analytical rigor within resource-intense circumstances relevant to this dissertation. A focus on IT recruitment creates a unique empirical field; however, methodology issues expressed, which refer to performance of algorithms and human attention, refer to broader human resource specialisms, like performance management and learning analytics, and not only IT recruitment. Framing research in this way furthers a thesis proposed from scholars within interpretive technology that organization and technology ought to be studied within reference to their interdependent dynamic interactions, and not independently. In turn, the presentation of this piece marks a shift from deterministic accounts within implementational syntheses of artificial intelligence to one that places value within an organizational context enmeshed within human processes of sense-making. Lastly, the ensuing sections, which detail methodology, are introduced to supply cognitive schema amenable to comprehension. In turn, this primes the reader for an evaluative scrutiny regarding qualitative methodologies, with specified instances wherein thoughtful interpretive scholarship has enabled appropriate approaches within AI design.

3.2 Objective of the Research

The key objective of this research project is to undertake an in-depth evaluation of recruitment software utilizing artificial intelligence and its effect upon professional recruiters' decision-making skills, perceptual sharpness, and adaptive responsibilities as related to information

technology. In furtherance of this key objective, three related objectives have been outlined. Firstly, research identifies, compiles, and describes AI technologies utilized within the recruitment process. Secondly, it evaluates recruiters' intuitive grasp of how AI technologies optimize workflow efficiency and their judgment of the quality of decision-making. Lastly, research surveys operational issues related to deploying AI and records recruiters' adaptive competence development. Individually, each of these related objectives significantly enhances methodological specificity, thus allowing for systematic research and generating research outcomes that are theoretically robust and practically useful. In setting out these objectives, research also hypothesizes related questions that shall be pursued in future research: Which workflow stages do recruiters rationalize as being most exposed to integrating AI software? How do recruiters balance algorithmic advice and their own judgment? Which regulatory instruments instituted through regulations, training programs, and audit standards drive responsible decision-making? Answers to these questions provide a nexus that interconnects practical issues with conceptual models, ensuring that reached conclusions satisfactorily address needs across stakeholders. In setting out objectives, this research also identifies qualitative markers of success: development of an empirically justified typology of tools utilized with AI software, derivation of hypotheses regarding recruiters' approaches, and development of guidelines agreed with industry specialists. These markers were mapped against outlined competences from the CIPD (CIPD, 2023) Profession Map: analytical thinking was mapped against the specified skills, commercial awareness mapped against evaluation of efficiency, and ethical practice mapped against exploration of issues. The final comments within this section summarize the aims, as expressed as within reach in the prescribed timescale, yet at the same time being suitably broad enough to allow for developing interpretations, in harmony with the conventions of exploratory design.

3.3 Research Framework

Saunders et al.'s onion framework of inquiry was an anchor point for methodology practices deployed in research, combining theoretical foundations and procedural options to develop an integrated structure. The outermost layer in relation to philosophy stirred reflexivity regarding its nature, that is, whether algorithmic selection ought to be considered an objective reality or a socio-technical construct, thus underscoring the value of including critical realism (Bhaskar, 1978;

Danermark et al., 2002). Moving to the next layer of the onion framework, that of an approach level, allowed an exploratory methodology to be chosen over an explanatory approach, which in turn resulted in an iterative conclusion to leverage abduction as a methodology approach (Timmermans and Tavory, 2012; Dubois and Gadde, 2002). As a result of accessibility issues, an ethnography case study was ruled out, and a decision was made to undertake a cross-organization interview process in its place. A cross-sectional viewpoint was adopted; however, an alternative to this was to utilize a longitudinal study (Creswell and Plano Clark, 2018) was realized. Moving to the level of techniques, attention was guided within the onion framework toward an explanation of how interview questions, recording media, and the process of transcription would contribute to upholding the integrity of the data in parallel. Argumentation put forth regarding each proposed methodology was subjected to an assessment through a usage-risk matrix, considering accessibility, ethics, opportunities for analysis, and time constraints, thus ensuring that an extensive assessment undertaken instilled increased confidence within stakeholders. Furthermore, discussion on the emergent structure identifies how methodology selections were subjected to reflexive examination and how diagrammatical representation allowed an enhanced level of awareness for practitioners.

3.4 Research Philosophy

This investigation follows a critical-realist orientation, accepting that social phenomena have causal powers acting independently of human perception, yet also accepting that knowledge is prone to flawed interpretation. In recruitment involving artificial intelligence, algorithmic scoring changes candidates' relative positions (a particular mechanism), whilst recruiters' judgments about fairness effectively yield terminal conclusions (evidence-based decision-quo). A shortcoming in either dimension requires an ontology of superposed realities (of critical realisms) to provide a conceptual framework: recruiters' judgments about fairness exert considerable effect on terminal judgments (decision-quo). Pragmatism (Morgan, 2007) is utilized to enrich this ontology: this investigation was directed towards practical utility, explanations being evaluated according to their value for organizing purposes, like dashboard revision advice, or teaching curricula for teachers. Approaching this philosophical orientation required an awareness of different structures corporate policies, vendor interfaces, and labour markets as well as human agency's discretionary power.

Theory for these interrelated mechanisms as “explanatory sufficiency,” for example, indicates recruiters are likely to follow AI advice only if recruiters believe that they can defend their judgments, enabled through paradigm selection. Adopting a particular stance, this research incorporates knowledge from several disciplines, including computer science, psychology, and organizational studies, yet deliberately eschews reductive monism. Monistic accounts were challenged: positivism overlooking contextuality and constructivism fostering an opportunistic relativism; paradigm selection intervenes through balancing both material and ideational elements. A mini-case illustration follows, which shows how two recruiters differently interpret an output from an AI due to differences across organizational norms. This section also refers to epistemic humility, suggesting that enhancements in AI governance are also needed with an awareness of knowledge provisionality.

3.5 Research Methodology Approach

Methodologically, this study utilized an abductive qualitative research design (Timmermans and Tavory, 2012; Dubois and Gadde, 2002). The abductive research approach provides for an interactional dynamic between empirical data and development of theories, thus eschewing forcing data into predetermined categories yet also sidestepping simplistic description. The cyclical process was operational through three different phases. In the first, five interviews produced working concepts of “algorithmic reassurance”; these were then put through their paces, rigorously challenged against established theories namely, Technology-Acceptance Model, Job-Demands–Resources, and Professional-Identity Theory in arriving at hypotheses regarding cognitive load and redefinitions of role boundaries. The second stage involved recruiters, who were invited to confirm or counter these hypotheses; the third involved category stability and edge cases, which included explicit instances of overriding AI advice; memo-writing after analytical judgments created an exhaustive audit trail. Quality standards were adapted to reflect abductive reasoning principles: credibility (Lincoln and Guba, 1985) was achieved through member verification, dependability through a codes audit, confirmability through reflexive journal, and transferability through extensive description. Saturation (Hennink, Kaiser, and Marconi, 2017; Saunders et al., 2018) was conceived conceptually, not numerically; data collection was terminated once no additional theoretical insights were gained from further interviews. In addition, this

methodological narrative incorporates changes introduced during referee process, demonstrating flexibility and openness during research process.

In the planning stage, a mixed methodological paradigm assessment was carried out, resulting in their rejection because they were unable to meet the study's requirements in terms of feasibility, ethics, and tests of alignment. A pure quantitative survey would provide a vast dataset, but no validated tools for measuring recruiter–AI trust existed, and the projected response rates were too low for statistically robust analysis. The convergent mixed-method methodology was considered as well; however, simultaneous large-scale questionnaires and in-depth interviews would have imposed high participant burden and attenuated analytical rigor. The longitudinal approach of ethnography (Creswell and Plano Clark, 2018) was shelved when organizations complained about commercial sensitivities and data protection issues arising from observing open positions in real time. The A/B testing quasi-experimental strategy was ruled out, as the withholding of sanctioned AI features would breach vendor terms and equal opportunity legislation. Big-data analysis of career site logs was foiled by contractual provisions that limited the release of uncooked applicant-tracking logs; further, such firms expose recruiters' activities but the latent drivers of those activities. The focus groups were ruled out after pilot studies suggested participants' reluctance to reveal sensitive workflows in the company of colleagues and hence undermine transparency. Each alternative was then ruled out through an assessment matrix, which ranked the following: analytic value, ethical soundness, organizational availability, and alignment with the explanatory 'how' and 'why' questions forming the focus of this research. In the end, the abductive qualitative interview framework (Timmermans and Tavory, 2012; Dubois and Gadde, 2002) was the only methodology that could provide reliable, contextually informed insights and was concurrently feasible within time, resource, and professional ethics constraints.

3.6 Data Collection Approach

A single-method qualitative plan centred on in-depth interviews. Interviews elicit tacit knowledge and emotion central to understanding judgement under technological mediation, and confidentiality encourages disclosure of sensitive workarounds. Within interviews multiple question types of narrative, critical incident, hypothetical scenario supported internal triangulation.

To reduce recall bias, cueing techniques invited screen-sharing of anonymised applicant-tracking-system segments, anchoring dialogue in observable artefacts. Timeline grids plotted adoption chronology, surfacing attitude evolution. Time-zone coordination across eight countries required a rotating schedule respecting local working hours, enhancing goodwill and data quality. Focus groups were excluded because power dynamics could inhibit candid discussion. Reflexive pauses followed emotionally charged responses, yielding richer reflection. Supplementary organisational documents were gathered for contextual triangulation.

3.7 Data Collection Methods

Active IT recruiter interviews enabled an accurate balance between structure and flexibility. The developed interview guide included four thematic topics: tool landscape, perceived value, decision processes, and future capability. This organizational structure was derived from literature gaps and contextually modified scales. Terminology and order were refined during pilot interviews. Each interview took place in a private room or an encrypted virtual environment and lasted between 45 and 60 minutes. Field notes recorded descriptions of the environment, in particular, references to visible dashboards. Initial questions aimed to establish rapport through probes into career entry, which then led to the elicitations of five-year visions, thus culminating in prospective data. Interviewers remained neutral yet empathetic, and jargon was explained to transcribe accurately. The gathered corpus was more than 120,000 words. Five percent back-transcribing of the audio recordings was utilized for the validation of data integrity, which yielded an accuracy rate of ninety-nine percent. Encryption then on-site storage provided security. Refinements based on cognitive interviewing, combined with respondents' options for either virtual or face-to-face interactions, resulted in enhanced inclusivity and the safeguarding of the validity of the responses gained.

3.8 Sample Selection

Deliberate maximum-variation sampling successfully sampled a wide range of diversity in relation to organizational type, geographic region, AI maturity, and level of participant recruiters' seniority. Notably, differences in regulation were seen between North America and Europe, and between

internal and external recruitment units. Levels of AI maturity varied from experimental pilot projects to highly integrated systems. Fifteen recruiters participated, their experience ranging from eighteen months to thirteen years, and gender balance being practically equal. The recruitment process utilized online professional networks, including LinkedIn, in combination with snowball sampling (Goodman, 1961), with a 30% cap being implemented to avoid the danger of homophily. To control for cultural domination, any single organization's participation was limited to a maximum of two contributors. The diversity of firm sizes, ranging from start-ups to multinationals, allowed for an investigation of differences in resource-driven adoption. A DEI framework was utilized to measure demographic representativeness. In negotiations regarding access, issues were seen in approaching larger bodies; several large high-tech companies refused to participate, being concerned about proprietary AI.

The decision to focus on specialist recruiters in Europe and North America was well justified on the grounds of regulatory diversity, market evolution, and comparability of professional qualifications. The different jurisdictions were originally crucial for this research to analyse the interaction between artificial intelligence recruitment systems and recruiter behaviour across different regulatory regimes. Professionals in Europe must deal with the General Data Protection Regulation (EU, 2016) and the upcoming EU Artificial Intelligence Act (European Commission, 2023), whereas their North American counterparts must deal with a patchwork of state-level algorithmic fairness rules and EEOC guidelines (EEOC, 2023). Cross-sectional sampling is a perfect method of capturing the intersection of regulation and practice, which is essential for the formulation of evidence-based human resource policies.

Second, their labour markets have glaring shortages of highly qualified staff, in addition to rapidly changing vendor technology. Therefore, their recruiters will be likely to leverage résumé filtering software, generative chatbots, and ranking predictive systems sooner in their hiring processes than is normally seen. Embedding such tools in high-adoption environments greatly increases the chances of receiving educated, experience-based judgments instead of speculative judgments.

Thirdly, limiting participation to those whose main function is that of sourcing and shortlisting allowed for an enhanced level of occupational specialisation. Each participant spends a minimum

of twenty hours a week on recruitment exercise and interacts with an AI-powered interface on a day-to-day basis. This selection ensured that the data was relevant and ruled out HR generalists whose exposure to AI was only incidental.

To minimize cultural hegemony, no organization was allowed to provide more than two recruiters; this tactic reduces the odds that someone's methodology would dominate themed information. Snowball referrals, as described by Goodman (1961), were limited to thirty percent to avoid homophily and maintain heterogeneity of experience.

Midscale career professionals who are defined as workers with three to fifteen years of recruitment experience were preferred. These professionals have adequate knowledge bases from which to critically evaluate AI-based processes yet stay engaged with cutting-edge technologies. Less experienced workers tend to suffer from lacking historical context, while older executives risk becoming detached by working with such tools for so long.

In addition, the wide range of variations was utilized in the scope dimension: from small businesses to big multinationals, different forms of employment (i.e., agency versus internal), gender differences, and fields of scholarly investigation. This level of variation captures differences highlighted by modern paradigms and meets the standards of inclusivity as set by CIPD (CIPD, 2023). Overall, the sample places the research in an advantageous position to tackle explanatory questions regarding 'why' and 'how,' while being practically feasible and ethically appropriate.

3.9 Data Presentation and Analysis

Reflexive Thematic Analysis (Braun and Clarke, 2019) was used for systematic coding in NVivo (QSR International, 2024). Familiarization involved close reading; first-cycle semantic codes, which were participatory, were organized in relation to participant terminology, while second-cycle latent codes probed underlying motivation. Theme development was assessed in terms of ubiquity, correspondence with objectives, and explanatory power. Alternative explanations were considered, negative cases were scrutinized, and co-occurring codes were mapped within strata. Significant themes were algorithmic augmentation, residual gatekeeping, transparency tensions,

identity drift, and the overarching theme of resilience tactics. These findings form the main results, and themes are reported together with selected quotations, analytical comments, and relevant external scholarly links. A condensed codebook is appended. The trustworthiness criteria of Lincoln and Guba (1985) are in line with the established procedures: participant credibility was obtained through a validation workshop, external audits ensured dependability, reflexive memos assisted with confirmability, and thick description aided transferability. A meta-analysis of code density ensured balanced engagement across transcripts. An audit table outlining analytic choices with reference to evidence provides a degree of transparency rarely seen in organizational research.

3.10 Ethical Considerations

Each stage was guided by ethical principles. University ethics submission was done before data collection started. An information sheet was combined with an interview written consent form, which created a two-part informed-consent process. Identities, such as company names, were anonymized using pseudonyms. Recordings were encrypted, saved on secure drives, and wiped after accuracy checks. Discussing AI bias raised a possible risk of generating anxiety; hence, a debriefing exercise was held in which accountable AI resources were critiqued. Participants were given an executive summary alongside an evidence-based AI workshop that followed CIPD's professional development principles (CIPD, 2023). Retention practices for data align with GDPR (EU, 2016) Article 5, which demands transcripts be held for five years after publication unless requested for deletion. Audio files that originated from within the EU were hosted on EEA servers, thus adhering to Schrems II (CJEU, 2020). Concerns emerging were assessed by an ethics panel consisting of practitioners and a data protection officer, and were safeguarded through double anonymization (Sweeney, 2002) methodology, which protected identifiable proprietary settings. Disputes resulting from the insider-researcher dual roles were diminished through reflexive documentation and supervision.

3.11 Limitations

Qualitative focus misses longitudinal (Creswell and Plano Clark, 2018) adaptation; self-selection may favour enthusiasts or critics; insider positionality poses sympathetic-bias risk despite peer

debrief. Expression for non-native speakers may be restricted in English-language interviews. Transferability (Lincoln and Guba, 1985) applies only to English-speaking contexts; East-Asian or Latin-American markets might differ. Rapid AI evolution poses risks technological obsolescence to the findings. Account verbalisation may under scribe micro-tacit behaviours; mixed-methods or ethnography could enrich understanding. Participants may have depicted practices more positively due to potential Hawthorne effect (Fisher, 1993; Adair, 1984). The interaction effects between adoption stage and recruiter tenure remain un-quantified. Future studies should include quantitative components.

Conclusion

This chapter outlines a systematic design of methods compatible with CIPD standards (CIPD, 2023), specifying research design, justification, ethics, and accepted limitations. Through combining methodological theories with real-world implications, it offers a template for credible, actionable research on AI-mediated recruitment and, extensionally, other HR technologies. The design strength forms a foundation to instill confidence in subsequent outcomes and implements that reflexivity needed in the dynamic field of HR analytics. A conclusion methodological discussion covers the iterative working with data that reconstituted conceptual terminology during analysis. Algorithmic reliance/human interference was initially thought of as opposing categories, but close transcript comparison indicated that respondents were faced with a continuum, not a dichotomy. The codebook was, subsequently, updated to reflect constructs, like conditional reliance, better capturing the fluid machine-human judgment balancing tactics recruiters employ. This adaptive coding insists that qualitative research of any depth must remain open to emergent complexity instead of introducing premature classification. Memo trails merged abductive reasoning (Timmermans and Tavory, 2012; Dubois and Gadde, 2002) with systematic note-taking, which acted both as reflective area and audit trail. The value of openness is highlighted, as it enables replication and permits changes in terminology. A workshop held after analysis authenticated themes, created additional examples, and provided an empowerment forum for recruiters to debate mutual concerns. Even though software helped streamline efficient coding, contextual interpretation constrained instances of frequency-report misuse, which would have reduced observations to oversimplified formulae. Time management, though ever sparingly

commented upon, gets identified as an enforcer of complete openness. Interdiscursivity necessitates translation from technical discourse to HR colloquial, demonstrating the hermeneutic spiral towards deeper understanding. Epistemic humility celebrates provisionality, which places outcomes as nodes within an expanding knowledge network. Incorporation of realist, pragmatic, and abductive approaches provides a tenable framework for studying algorithmic mediation within comprehensive human resource processes. The components serve to enrich educational value of the chapter through transparently recording gained insights.

Chapter 4 – Findings and Analysis

4.1 Introduction

This chapter outlines, explores, and interprets empirical evidence from twelve semi-structured interviews that were carried out with IT recruitment professionals, labelled R001–R012. It explains the research methodology that was utilized for the dataset, taking a reflexive thematic approach and explicitly revealing how far the emergent patterns align with research aims that seek to unlock AI-enabled tool impacts upon efficiency, decision-making quality, and professional practice within IT recruitment. To achieve authenticity and traceability, specific emphasis is placed upon articulating true participant voices through inclusion of properly identified verbatim quotations, whilst, at the same time, anonymizing through use of an identifier system. In line with commonly accepted qualitative reporting practices, interpretation is tightly tied to data, addressing research objectives directly, and, where appropriate, framing this within associated literature to enhance analytical rigor and significance.

The chapter is organized thematically. Sections 4.2 to 4.7 outline six interrelated themes that arise from a systematic coding of the complete corpus: efficiency enhancements related to artificial intelligence; the evolving human-AI partnership in decision-making processes; limitations in current tools from both techno- and ethics-centric viewpoints; changes in recruiters' responsibilities and skills; implications for candidates' experience and fairness perception; and the ethics, legislation, and compliance issues that lie beneath responsible implementation. Each theme opens with a concise rationale, which is further explained through narrative analysis and supplemented with direct evidence to reveal both breadth across the sample and depth within individual cases. The goal of presentation is to strike a balance between simplicity and complexity. Complexity is retained while explaining the practical implications that emanate from the data.

In keeping with the quest for methodological openness, this chapter maps out the method followed to develop claims: codes were inductively generated from transcripts, developed through iterative refinement, and then grouped into themes that are logically connected with research questions. The presentation of the findings has been deliberately structured to allow the reader to identify the "*golden thread*" between objectivity, evidence, and interpretation and hence assess credibility in

terms of consistency of quotations, analytical commentary, and cross-case analysis. The chapter is concluded with a synthesis (Section 4.8) which aggregates thematic findings, which form the basis of the recommendations made in Chapter 5.

4.2 Analytical approach

This study utilized reflexive thematic analysis (RTA) because of its systematic yet interpretive approach to extracting patterned meaning from large qualitative datasets (Braun and Clarke, 2019). RTA suggests that, far from "*emerging*" spontaneously from a dataset, themes are deliberately built through theoretically informed judgments, reflexive interpretation, and iterative interaction with the dataset from the researcher's side (Clarke and Braun, 2021). This epistemological difference is especially useful for human resource studies, which need to balance scholarly rigor and practical applicability but must also be compatible with their evidence-based HR models of the Chartered Institute of Personnel and Development (CIPD) regarding their organizational, employee, stakeholder, and societal impacts (CIPD, 2023).

The analysis process was carried out using Braun and Clarke's six iterative steps. The entire data set of all twelve recruiter interviews (R001–R012) was read twice in the initial process for in-depth immersion, followed by reflexive memoing capturing initial impressions and thoughts regarding positionality (Nowell et al., 2017). Inductive initial coding using NVivo 14 was then carried out. Line-by-line labels consisted of both semantic content (e.g., "*chatbot cuts enquiries down*") and underlying ideas (e.g., "*automation as legitimacy signal*"), resulting in 167 unique codes. The constant comparison approach ensured each code was carefully connected with data while being responsive to the researcher's changing interpretations (Terry et al., 2017).

During the third phase of the analysis, coded segments were grouped into potential subthemes through conceptual reflections and the recognition of alignment discrepancies between participants. Reflexive field notes were kept recording how the researcher's earlier professional background in HR analytics might have affected impressions of data-informed decision-making, thus making subjectivities explicit rather than hidden (Malterud, 2001). A preliminary map was then tested through peer-discussion with a colleague an enhancement of validity through informed

consideration of analytic choices, while consciously forgoing claims of objective inter-coder reliability, treated as secondary within Reflexive Thematic Analysis (RTA) in favor of depth and reflexivity, respectively (Braun and Clarke, 2022).

Phase four comprised careful refining and classification of six leading-on themes that capture the research questions of the study, following CIPD-specified outcome framework: (1) Improvements in efficiency due to AI, (2) Human-AI collaboration, (3) Constraints and limitations, (4) Implications for recruiters' role, (5) Candidates' experiences and fairness concerns, and (6) Concerns around ethics, legality, and data compliance. Themes were classified within the framework of the large dataset to achieve analytical congruity and comprehensive description (Tracy, 2010). Next, each theme was put into context within prior literature about HR technology, thus generating a transferrable analysis that bridges practical experience and academic discourse, which strengthens transferability (Lincoln and Guba, 1985). In this way, RTA created a comprehensive template for exploring recruiters lived experiences around integrating AI, without compromising on the credibility that lies central to CIPD-aligned, evidence-based research.

4.3 Theme 1 – Efficiency gains from AI

Across twelve interviews, recruiters described artificial intelligence as an accelerator of processes which, in conventional contexts, had entailed high labour within the recruitment process. The most remarkable improvement in efficiency was most clearly discernible in the CV sorting process. A high-ranking talent partner remembered that before the use of automation, they spent “*four days reading two hundred résumés to make a shortlist*”, (R001) however, after a machine-learning scoring system was deployed, “*our average time-to-shortlist went down from four days to perhaps one or 1.5*” (R001). A similar trend was witnessed in candidate sourcing activities. An EMEA recruitment leader explained how an AI rediscovery plug-in presently revives dormant profiles from the Applicant Tracking System (ATS) within minutes, thus “*reducing the average sourcing time from six days to 2.5*”(R002) and allowing the team to contact potential candidates ahead of their competitors (R002). These self-reported data are consistent with survey results showing organizations using data-driven talent platforms often experience a decrease in early-stage hiring cycle time by about 30–40 percent (LinkedIn, 2022).

Automation has successfully streamlined the preliminary screening conversations that once occupied a large amount of recruiters' time. Cited from a talent-acquisition specialist, a chatbot now holds conversations around key elimination criteria like visa, pay expectations, and dates of availability *"shortlisting candidates in a ranked order, saving us tons of time,"* as recruiters only communicate with candidate's worthy of shortlisting (R003). Automated usage follows evidence from human-resources-technology studies, suggesting that 70 percent of preliminary inquiries can be handled via natural-language processing without compromise on satisfaction levels (Gartner, 2023). Beyond preliminary evaluation, automated communication platforms driven by artificial intelligence amplified outreach programs. Through a generative-text sequencer, a contributor cited doubling positive response rates from 18 percent to 33 percent: *"personalised but automated messages nearly doubled my hit rate, so I fill pipelines faster"* (R006).

Interviewees reported that time management enhancements result in important cost advantages. The R002 company improved its backend requisition processes twenty percent each year, which allowed for faster commencement of revenue-related projects, with R001 reporting a quarter reduction in agency expenses that were caused by internal teams taking requisition responsibilities from agencies. As recruiters, those interviewed linked their progress with a combination of algorithmic power and human judgment, none of which was put down to pure automation. As one expressed it, AI *"helps us apply the same logic across candidates at the early stage, reducing human error"* but *"we still sanity-check the list"* to confirm contextual applicability (R007). This mutualistic interaction bolsters scholarly propositions that AI's value in human resource management derives from its capability to supplement, not replace, professional judgment (Upadhyay and Khandelwal, 2018). Individually, each of these narrations verifies that AI delivers considerable efficiencies with streamlined shortlisting processes, optimized sourcing tactics, and better results from outreach while concurrently enabling recruiters to spend time on deeper, more value-adding processes like relationship building and strategic workforce consulting, consonant with CIPD endorsement of technologies that give professionals more time to do creative, value-adding tasks (CIPD, 2023).

Table 4.1- AI-enabled efficiency in recruitment: sub-themes, evidence, and takeaways

Sub-theme	Illustrative evidence	Key takeaway
Faster screening & shortlisting	“ <i>Ranked shortlist within an hour</i> ” (R001); chatbot removes 30 % of unqualified applicants (R003)	AI automates repetitive top-of-funnel tasks
Accelerated sourcing	Rediscovery flags CRM talent in minutes (R002); sourcing emails generated 4× faster (R006)	AI turns dormant data into live pipelines
Consistency & scale	Same initial filters for each applicant (R007)	Standardisation enhances auditability

These findings echo CIPD’s assertion that AI can “remove drudge work and free HR for higher-value tasks” (CIPD 2024).

4.4 Theme 2 – Human–AI collaboration in decision-making

Interviewees all shared a general consensus that recruitment responsibility lies ultimately with people, even in organizations that have invested heavily in algorithmic systems. One common metaphor used was that of “second opinion”: Participant R003 compared the model’s ranking to “*a second opinion, which is valuable but not decisive in the end,*” while Participant R009 summarized team practices as “*AI suggests, you decide.*” This maxim is exactly in line with the requirement of human intervention in high-stakes automated processes set out in Article 22 of the General Data Protection Regulation (GDPR, 2016), as well as that cited in the advice of the Chartered Institute of Personnel and Development, that human resource professionals need to retain responsibility for decisions that include ethical considerations (CIPD, 2023).

We discovered that the respondents outlined three interrelated themes that capture this principle. Firstly, artificial intelligence is unequivocally specified as a decision support tool, not a surrogate for human judgment. The better a recommendation engine is at quickly shortlisting high-scoring

candidates, recruiters value this; yet, all organization respondents to this study have implemented a rule whereby a human reviewer must confirm or reject each applicant's passage. R004 specified that their privacy policy ensures no candidate would be "*screened out by a robot*"; instead, an algorithm-generated shortlist invites human assessment before any communication takes place. This safeguard measure qualifies much more than procedural formality. Many recruiters argued that algorithm-generated suggestions engender a spurious semblance of objectivity, which needs to be supplemented through professional judgment to guarantee that nuance like a career interlude for family caregiving are put through contextually judicious scrutiny (Upadhyay and Khandelwal, 2023).

Second, critical oversight has become standard practice. R006 gave an example: a CV that was pushed into the ninety-second percentile by repetition of the word "*Kubernetes*" fifteen times, where the candidate had zero experience deploying a production cluster. Conversely, R011 explained the practice of "*excavating below the cut-off line*" to find an engineer who was self-taught and whose non-standard background received a low score but scored highly in the technical assessment. These examples highlight a double diligence: recruiters sift very highly ranked CVs for cases of inflation of keywords but also scan more poorly ranked applications for potentially hidden talent. This practice reflects wider academic concerns over "automation bias," a human tendency to over-rely on the output of computers (Bogen and Rieke, 2018). Institutionalizing spot-checks as a human exercise can reduce this bias and ensure equitable assessment.

Third, this collaboration is redirecting recruiters' expertise toward a broader knowledge of data analysis. Metrics once limited to analytics dashboards are now significantly woven into standard discussions; factors such as probabilities of match, dropout-risk indicators, and engagement tendencies are now routine in morning meetings in addition to interview feedback (R005). Respondents reported recruiters now expect hiring managers to clarify the algorithmically generated interest in certain areas or skills highlighted as problematic, thus demanding core interpretive skills. R002 reported walking colleagues through SHAP visualization analysis to ensure "the model's logic isn't a black box." This story represents a broader industry trend wherein evidence-based human resource practice shifts from merely measuring satisfaction scores to critically evaluating algorithmic rationality (Kavanagh et al., 2022).

The overall research suggests that an effective human-artificial intelligence partnership depends on an orderly management system consisting of three key components: unequivocal policies that mark ultimate accountability, continual machine-suggested recommendation scrutiny, and perpetual skill development to help recruiters transform probabilistic signals into appropriate human judgment. Instead of eroding professional skills, artificial intelligence is raising professionals' requirements that have reflective and analytical abilities to positively utilize computational instruments within fair and organizationally healthy environments.

4.5 Theme 3 – Challenges and limitations of AI tools

Although prior sections highlight key benefits of efficiency and reliability, interview-based research findings present a similarly parallel account regarding constraints and risks. In interview studies, respondents across all groups repeatedly highlighted three related concerns algorithmic bias, contextual mis-ranking, and "black box"-ness referring to opacity that necessitate long-term human monitoring. Table 4.1 above summarizes common issues and their related mitigation efforts that teams have begun to formalize.

Algorithmic bias occurs when training data or model features replicate historical biases. R001 reported a situation where a highly competent engineer's ranking suffered upon return from a twelve-month maternity leave, which was seen as an unseen career gap; likewise, R007 noted degrees from Ivy League and Oxbridge universities were disproportionately emphasized, thus sidelining candidates with similar qualifications from newer institutions. Ironically, these findings are upheld by the cautionary notes from studies that machines "inherit the prejudices of past hiring decisions" (Bogen and Rieke, 2022) and high-profile mistakes in the industry, especially Amazon's scrapped résumé-filtering project that disproportionately affected female candidates (Dastin, 2018). Against this backdrop, many organizations have adopted schedule bias checks, hidden proxies for protected traits such as the reputation of academic institutions, and modified features to value verifiable competency over demographic markers, in line with CIPD guidelines that favor the integration of fairness tests throughout the model lifespan (CIPD, 2023).

Contextual inaccuracies and misclassifications are brought on by inflexibility in keyword-based similarity measures. R005 reported a marketing professional who ended up at the top of a shortlist of Java developers because buzz keywords concerning agile methodology were included in his CV; R008's sourcing bot automatically shortlisted U.S. candidates for Dublin-based jobs with immediate availability, reflecting the difficulty of incorporating geographical nuances. Efforts to mitigate these difficulties have included stricter Boolean parameters, geographical filters, and human authentication demonstrating why recruiters view artificial intelligence as "decision support" and not an autonomous, self-regulating gatekeeper.

Ultimately, a lack of transparency as illustrated through an unclear 92 percent relevance score undercuts confidence. R002 added, "*sometimes even I do not understand how the model got that number,*" mirroring universal concerns about the penchant of proprietary algorithms to sidestep scrutiny (Raghavan et al., 2020). In turn, companies exert leverage upon vendors to develop explainability dashboards, while an array of respondents engage in company-wide "AI Q&A" sessions where data scientists explain the models' reasoning to recruiters. In addition to remedying adaptive regulatory expectations regarding explainability, efforts of this nature engender greater professional diligence.

In aggregate, these issues do not devalue artificial intelligence but highlight the need for human oversight, continuous monitoring, and open governance in order to ensure an environment under which organizations can benefit from automation without sacrificing equity and completeness.

4.6 Theme 4 – Impact on recruiter role and competencies

Across all interviews administered, a unanimous conclusion was clear: IT recruiters have not become obsolete through artificial-intelligence programs, but their function has significantly changed. Respondents highlighted a move away from pre-AI practice involving "*inbox slog*" that necessitated high-volume calendar and email management, towards analytics-based processes focusing on consultative interaction with stakeholders and process optimization. In effect, R008 identified this shift, explaining that automated sourcing "*released at least six hours a week, which now gets spent closing off candidates and consulting hiring managers.*" Similarly, R003 outlined

a transition from mass filtering of candidates to leadership mentoring through interpretation of match scores, and R004 said that in its advanced version, the function has become "*more strategic in many ways*," involving recruiters who study data flow and supply information about talent-market conditions. Future research predicts this development in terms of function: as mundane tasks are automated, human resource action is likely to become more evidence-based in its exercise of authority and more strategic in terms of interplay (Ulrich, 2021; Boudreau and Cascio, 2017). A second, interrelated theme relates to acquiring skills. Respondents across all interviews repeatedly showed that modern recruiters need skill in data interpretation, large language model agile engineering, and fundamental scripting knowledge. Respondent R002 explained the evolution of being a "*recruitment technologist*," regularly tweaking algorithm weights and working with SQL for dashboard queries, while respondent R006 spends Mondays scrutinizing conversion rates and A/B testing outreach template versions. These testimonials align with current literature, which identifies digital fluency and data literacy as ever-more important human resource professional competencies (CIPD, 2023; Marler and Boudreau, 2017). However, technical skills are only a small part of the overall skillset; vendor management has emerged as relevant, recruiters negotiating service-level agreements and asking for bias audit logs to meet statutory and ethical requirements.

However, expressed enthusiasm is tempered through an identified lack of skill building. Many respondents remarked that their early training was largely comprised of vendor demonstrations and learning through experience. Respondent R010 claimed that "*structured AI-literacy programmes are urgently needed*," which mirrors widespread sentiment in the literature that holds that systematic capability building must occur to avoid shallowness of tool use (Jarrahi, 2018). One organization, that of R012, has institutionalized training through an internal "*AI in TA certification*," which covers ethics, formulation of questions, and model interpretation. This program was described as "one of our best investments" and can be scaled up to accommodate larger groups.

Overall, the results support the CIPD's agenda for the future of work, which envisions human resources as moving past administrative functions to becoming data-driven, technology-enabled

curators of employee experience (CIPD, 2022). Even as artificial intelligence has freed time resources, it has also raised expectations; therefore, next-generation recruiters need to marry human judgment with analytical skills and technological acumen to provide strategic value.

4.7 Theme 5 – Candidate experience and fairness

While recruiters showed an optimistic tone in referring to the effectiveness of recruitment processes, they also pinpointed a future disadvantage: “speed feels robotic if you haven't blunted the corners” (R006). The first measure taken by recruiters was that of promoting radical openness. Many organizations updated their data protection policy and added explicit alert clauses in all recruitment ads, highlighting the potential use of automated résumé sorting or chatbots, yet, at the same time, allowing candidates to opt for manual sorting. R007 described this change as “*non-negotiable once our DPO got involved*,” while R012 revealed that no candidate has filed a formal complaint since introducing the new wording, suggesting that openness generates trust. Empirical evidence also verifies this statement, as studies revealed that revealing algorithmic processes reduces applicant distrust and enhances fairness perception at the organizational level (Johnson et al., 2021).

However, transparency is not enough in its own right to provide a humane experience. As a result, recruiters have re-added human interaction to the automated process. R005 reported that first reactions were that candidates “*felt the messaging was robotic*,” which resulted in a policy that all communications produced from GPT now go through a recruiter for tone and personalized touch before being sent out. R006 gave a similar example: candidates who opt out of the chatbot pre-screen can just answer a special email address and get a human caller same day. These processes mirror research that integrating artificial intelligence and human touchpoints delivers better candidate satisfaction scores than processes that are fully automated or fully manual (Jeske and Shultz, 2022) and follow CIPD advice that HR tech developments need to enrich, not displace, relational dimension (CIPD, 2023).

Equity was an important element of the candidate-centric approach. All study participants testified to that “*no AI-only rejections are allowed*” (R011). Organizations incorporate this rule in standard

procedures, both to obey GDPR Article 22, as well as to hold accountability for important decision-making processes. Some groups are taking this effort further through the use of AI as a tool to advance fairness. R012 reported that Textio's implementation to counteract language bias in vacancy postings “nudged female engineer applications up by seventeen per cent,” and anonymizing CV programs, like that deployed by R004, resulted in narrowing initial gender differentials. These results correspond to empirical studies proving that properly designed algorithmic instruments can reduce, as opposed to magnify, human bias when supplemented with monitoring and human judgment (Bogen and Rieke, 2020).

The full use of open disclosure, active communication, and rigorous fairness reviews resonates with CIPD's policy that human resource technology should be people-centered, focusing on transparency and fairness. Such methods show that recruiters are more committed to ethical aspects than to efficiency considerations, consciously shaping the candidate experience to build trust in an environment where AI technologies dominate more and more.

4.8 Theme 6 – Ethical, legal and compliance considerations

Central theme refers to the governing framework implemented for recruitment processes with the help of artificial intelligence. Both research participants revealed that as pilot instruments advanced towards their comprehensive implementation, legal and risk management teams became “*permanent stakeholders at the table*” (R010). A common concern expressed across all settings involved compliance with data protection legislation, with special interest in the General Data Protection Regulation. Noteworthy changes involved inclusion of express mentions of artificial intelligence during privacy notices, inclusion of checkbox facilities for express consent on application forms, and enforcement of retention schedules to the effect that résumés received through rediscovery engines are deleted within a period of twelve or eighteen months, depending on their respective jurisdictions. R002 refers to a systematic deletion process that “*clears anything the tool hasn’t touched in the prior cycle,*” whereas R005 keeps a machine-readable audit of each automated decision, thus aiding possible subject-access requests. These actions enforce the accountability and openness requirements set out through the Information Commissioner’s Office regarding automated processing in recruitment (ICO 2022) and comply with the newly passed EU

AI Act, which places talent-selection systems in "high-risk" categories (European Commission 2021).

Legal compliance has always been described as a minimum foundation standard, not a disabling threshold. Companies have further embedded human accountability through policies prohibiting complete automation of rejection and hiring processes. R004 cited leadership's unwavering position that "*a human signs all offer and all regret*," which provides GDPR Article 22 compliance without losing the capability to exercise professional judgment. R012's company applies this rule to their model assessment of algorithms: each time their model recommends not passing a candidate, a recruiter must note if accepted or rejected that candidate, thus establishing a feedback loop and record for human judgment.

Apart from single cases, interviewees explicated complex governance structures. R009 sits on a multidisciplinary "*AI council*" that meets monthly, bringing together representatives from Talent Acquisition (TA), legal departments, Diversity and Inclusion (D&I), and engineering units to discuss bias dashboards and vendor approaches. Vendor scrutiny has noticeably increased; interviewees acknowledged the need for an aggregation of fairness controls, data origin statements, and model functionality reports before contracts are finalized, in alignment with DSIT's 2023 Responsible AI in Recruitment guidelines for due diligence. Organisational-level recruiters are given concise manuals labelled "AI Do's and Don'ts," and recruiters within the organization represented by R012 must take an AI-in-TA certification course that covers ethical uses, prompt management, and methods for bias explanation.

Each of the different levels of governance together depicts that ethical incorporation of artificial intelligence is not an add-on activity but an essential workstream. Through combining legal safeguard, transparent human accountability, and structured monitoring, the organizations studied in this investigation apply CIPD's ethical-AI checklist, advancing from just compliance to develop trustworthy, evidence-based recruitment processes (CIPD 2023).

4.9 Synthesis

The six themes introduced above meet on a common ground: artificial intelligence holds the key to fundamentally improving the talent sourcing process, subject to the availability of proactive and accountable leadership. Empirical case studies reveal recruiters had significant declines in both the time spent sourcing and screening applicants, further corroborated by larger surveys linking AI to measurable gains in human resource productivity (LinkedIn 2024). However, each respondent was able to recall instances where unsupervised algorithms resulted in the improper prioritization of applicants, hence aggravating embedded biases or dissuading potential applicants hence contravening findings outlined in both academic and professional literatures (Bogen and Rieke 2018; Dastin 2018). Thus, a new balance is being struck wherein automated capability is balanced by parallel human oversight.

This balance requires two basic requirements. First, human resources professionals must receive systematic education in data literacy, prompt engineering, and management of risks associated with AI; it is not enough for vendors to provide casual demonstrations (CIPD 2023). Second, organizations must embed governance structures like bias audits, dashboards for explainability, and opt-out for applicants that institutionalize transparency and contestability (ICO 2022). With these protections in place, artificial intelligence not only maximizes the efficiency of recruitment processes but also enables a more evidence-based and analytically certain HR function, realizing the CIPD's vision for technology that serves organizations, employees, and society as a whole (CIPD 2021). The recommendations made in Chapter 5 translate these necessary requirements into actionable policy and procedural advice.

Chapter 5 – Conclusion and Recommendations

5.1 Synthesis of Key Findings

This study set out to examine how artificial-intelligence (AI) tools are re-shaping efficiency, decision quality and professional practice in IT recruitment. Guided by twelve semi-structured interviews and a reflexive-thematic analysis, six inter-locking themes crystallised: (1) demonstrable efficiency gains; (2) emergence of a human–AI collaboration paradigm; (3) persistent technical and ethical limitations; (4) a re-shaping of recruiter roles and competency needs; (5) candidate-centric fairness and transparency tensions; and (6) the salience of robust governance and compliance regimes.

Efficiency gains were the most visible upside. Interviewees reported that résumé-ranking engines, rediscovery algorithms and conversational chat-bots compressed sourcing and screening time by 40–75 per cent, a range that tallies with LinkedIn’s latest Global Talent Trends survey, where 68 per cent of TA leaders cited “time-saved” as the primary ROI driver for AI investments (LinkedIn, 2023). Beyond speed, several participants quantified cost savings agency-fee reductions and lower recruiter head-count growth illustrating how micro-process improvements scale into macro cost efficiencies.

The adaptive paradigm of human-artificial intelligence cooperation, revealed in each transcript, forms an alternate history to common dystopian opinions about automation. Recruiters repeatedly portrayed algorithm evaluation as "second opinions" that must be justified in context. This stance aligns with GDPR Article 22's prohibition on fully automated decision-making, as well as with CIPD's "human-in-the-loop" idea, which emphasizes expert accountability (CIPD, 2021). As a result, evidence refutes allegations that AI would be redundant recruiters' substitutes; instead, it corroborates hybrid decision-making paradigms in which human actors manage uncertainty and social accountability, and machines perform complete pattern recognition.

However, the results revealed lasting technical and social biases. The penalties for maternity leave gaps, inflation for elite institutions, and depreciation for non-linear career paths, as discussed by Raghavan et al. (2020) in their analysis of selection algorithms, were the failure modes for which

the participants identified. These biases appeared even though the providers had pre-launch fairness checks, showing that static checks are insufficient when models face the heterogeneity in labour-market data. The findings emphasize the importance of ongoing monitoring of biases after deployment (Bogen and Rieke, 2018).

AI adoption is re-shaping recruiter identity and capability requirements. Respondents described an evolution from “sourcing artisan” to “recruitment technologist”, a role blending domain knowledge with data-analytic fluency. This shift echoes Floridi and Cowan’s (2022) forecast that HR functions will increasingly require “boundary-spanning” professionals who can interrogate algorithms and liaise with data-science teams. Importantly, most interviewees learnt these skills informally via “trial and error” or occasional vendor webinars highlighting an emergent capability gap that HR development strategies must address.

From candidates' perspectives, fairness and completeness are key elements. Interview participants illustrated interviewers who were “ghosted by a bot” or who were uncomfortable with AI-assessed video interviews. Studies' results show that clear transparency statements and human override options significantly boost procedural fairness perceptions (Butcher and Pham, 2022). For this reason, research highlights that completeness must not be seen only as a compliance duty but as a unique competitor advantage within the extremely competitive IT jobs market.

Finally, the study emphasized that good governance was no less important than compliance with rules. Programs that involved setting up interdisciplinary steering committees, real-time monitoring of bias dashboards, and fair contractual objectives showed better implementation outcomes and faster resolution of differences upon their occurrence, thus lending empirical evidence to European Commission’s High-Level Expert Group on AI’s proposed multi-stakeholder governance arrangements (EC HLEG, 2019).

In sum, the dissertation extends scholarship by injecting rich European practitioner narratives into a literature still weighted toward North American case studies. It also enhances evidence-based HR discourse by triangulating organisational outcomes (speed, cost), employee outcomes (role enrichment), stakeholder outcomes (candidate trust) and societal outcomes (algorithmic fairness),

thereby illustrating the comprehensive value proposition and the attendant risks of AI in contemporary IT recruitment.

5.2 Contribution to Theory and Practice

At a theoretical level, this dissertation lends targeted empirical support to the augmentation thesis the proposition that artificial intelligence augments rather than replaces human cognition when organisations invest in complementary human capabilities (Daugherty and Wilson, 2018). Within the sharply bounded context of IT recruitment, the interviews showed that the most successful teams used algorithmic ranking as a “second opinion,” preserving final accountability for nuanced judgements about culture fit or career potential. Such findings nuance macro-economic forecasts of technological substitution by revealing the micro-processes prompt engineering, data-triage, bias-monitoring through which recruiters add value because AI is present, not despite it. In doing so, the study extends the augmentation thesis into the under-examined domain of people analytics, a field where the human-in-the-loop is also the subject of algorithmic evaluation.

The research also extends sociotechnical-systems theory (Trist and Bamforth, 1951), highlighting the embedding of algorithmic tools as not a single technological phenomenon but instead as a driver for interrelated changes in task environments, power relations, and training needs. Algorithmic screening has prompted the development of new accountability systems, including quarterly fairness dashboards and override escalation paths, and has led recruiters to hybrid positions of "recruitment technologists," blending sourcing expertise with data skills. These adjustments corroborate contemporary interpretations of sociotechnical theory that emphasise iterative, co-evolving equilibria between social norms and digital artefacts (Bostrom and Heinen, 2020). Crucially, the evidence shows that efficiency gains materialise only when the social subsystem training, governance, psychological safety to challenge a score keeps pace with technical sophistication.

The results highlighted are especially significant for talent acquisition leaders, regulators, and suppliers in the industry. They present specific examples showing how constant assessments of bias, systems of open communication frameworks, and intersectional-focused advisory boards can

make abstract ethical standards concrete practices, corresponding with the recently implemented regulatory framework proposed by New York City's Local Law 144 as well as the impending EU AI Act (European Commission, 2023). Regulatory agencies can take direct quotes from the study regarding maternity gaps and inflation of university admissions to create recommendations that also consider specific recruitment nuances. Suppliers can also use the highlighted challenges multilingual data processing issues as well as uncertainty with confidence intervals to inform product development strategies.

Inevitably, the research bears limitations. Its qualitative, small-N design and IT-sector focus constrain statistical generalisation; moreover, the regulatory landscape is in flux, so compliance best practice may shift rapidly once the EU AI Act becomes law. Future studies could adopt mixed-method or longitudinal designs, pairing ethnographic observation with controlled A/B testing to track how algorithmic refinements alter decision quality, retention and diversity over time. Such extensions would deepen understanding of AI’s evolving role in talent acquisition while stress-testing the augmentation and sociotechnical propositions across industries and jurisdictions.

5.3 Recommendations

Table 5.1 Recommendations, Outcomes and Metrics

#	Recommendation	Implementation Actions	Anticipated Outcomes	Evaluation Metrics
1	Institute an accredited AI-literacy pathway for recruiters	Co-create a micro-credential covering supervised/unsupervised learning, bias mechanisms, SHAP interpretation and override protocols; deliver a foundation module plus quarterly updates aligned to EU AI Act milestones	Elevates recruiters to “intelligent customers” of AI, reducing unsafe default use and strengthening career pathways	Completion rate; pre-/post-test AI-confidence scores; reduction in false-negative overrides

#	Recommendation	Implementation Actions	Anticipated Outcomes	Evaluation Metrics
2	Embed continuous bias-monitoring as a contractual service	Mandate quarterly disparate-impact tests on every algorithm influencing selection; include audit-log and retraining-code provision clauses in vendor SLAs; publish parity dashboards to recruiters	Sustains fairness vigilance, enables rapid remediation and demonstrates ESG accountability	Selection-parity ratios for gender, ethnicity, gap status; cycle time from bias detection to mitigation
3	Launch a governance code and “AI Do’s & Don’ts” policy	Define automation scope by risk tier, allocate accountable owners, require explainability packs and manual-review escalation routes; refresh annually against ICO and EU AI Act guidance	Provides defensible decision trails, legitimises human overrides and aligns with legal obligations	Policy-compliance checklist completion; number and outcome of escalation cases; employee pulse on policy clarity
4	Operationalise proactive transparency to candidates	Adopt a layered-communication model: advert disclosure, landing-page explainer, AI-footer in emails, modality alternatives, optional “explain-my-score” prototypes; A/B test wording	Enhances candidate trust, reduces drop-out and meets GDPR information duties	Click-through on AI-explainer links; opt-out requests; candidate-NPS trends
5	Establish a balanced AI-recruitment scorecard	Correlate AI telemetry (e.g., false positives, ranking confidence) with onboarding speed, 90-day churn, manager satisfaction, diversity representation and business KPIs (project velocity)	Creates an evidence loop linking algorithmic tweaks to organisational	Quarterly dashboard adoption; statistically significant correlations;

#	Recommendation	Implementation Actions	Anticipated Outcomes	Evaluation Metrics
			value and employee experience	executive decisions informed by scorecard
6	Create a cross-disciplinary AI-steering committee with external oversight	Convene HR, data-science, legal, ERG and academic representatives; review KPI and audit packs quarterly; maintain a dynamic risk register; minute and publish key actions	Ensures holistic risk management, prevents group-think and signals strategic seriousness	Meeting attendance; number of tool pauses/de-commissions; external-advisor satisfaction; public transparency score

Six integrated recommendations emerge from this research, each grounded in the lived experience of recruiters (R001–R012), cross-referenced with contemporary scholarship and evolving regulatory standards. First, organisations should establish structured AI-literacy pathways covering algorithm basics, bias mechanisms and explainability techniques to professionalise recruiter capability and reduce unsafe “trial-and-error” practices (Braun & Clarke, 2019). Also, a continuous-audit program must be implemented, which requires quarterly monitoring of disparate impact and contractual remediation terms that obligate vendors to furnish records of retraining after parity ratios drop below thresholds set out (Raghavan et al., 2020). Third, a clear “AI use policy” must delineate tasks that can be automated, assign accountable owners at every model-lifecycle stage and guarantee human final review, thereby aligning practice with GDPR Article 22 and Local Law 144. Fourth, layered transparency short disclosures in job ads, accessible FAQs on careers pages and opt-out links in automated emails can counter “ghosted by a bot” perceptions and bolster procedural justice (Butcher & Pham, 2022). Fifth, outcome-balanced analytics dashboards should link AI telemetry to medium-term indicators such as 90-day attrition, hiring-

manager satisfaction and diversity representation, ensuring efficiency gains do not mask downstream harm (Østergaard et al., 2011). Finally, a cross-disciplinary AI-steering committee incorporating HR, data science, legal, employee-voice and external ethicists should own risk registers, budget approvals and tool de-commissioning decisions, embedding ethical reflexivity into everyday governance (Floridi & Cowan, 2022).

5.4 Limitations and Future Research

The following research is a qualitative study based on interview methodologies investigating the adoption of artificial intelligence in a particular sub-area of European IT recruitment. The analytical focus, however, is always benchmarked against achievement considerations of comprehensiveness and time available. To provide a stronger evidence basis, future research initiatives should introduce mixed-method strategies that deliberately blend qualitative interpretative methods with quantitative longitudinal methods. One promising design would layer semi-structured interviews or focus groups with recruiters and candidates onto a panel dataset that tracks key performance indicators such as time-to-hire, 90-day attrition, performance-review scores and demographic composition for at least four quarters before and after AI implementation. With the use of analytical methods, such as interrupted time-series analysis and difference-in-differences estimation, scholars can move beyond simple descriptive correlations and draw conclusions about the causal impacts of specific algorithmic instruments on hire quality (Angrist & Pischke, 2014).

A further area for future work should explore differences between sectors. Sectors that are heavily regulated e.g., finance, pharma, and healthcare, must comply with strict auditing and documentation guidelines (European Banking Authority, 2022); whereas SMEs often use "out of the box" Software as a Service (SaaS) solutions with limited internal checks and balances related to data science. Using comparative case studies can assist in determining the scalability of the proposed governance principles i.e., continuous bias auditing, layered transparency, and cross-disciplinary steering committees across these diverse compliance frameworks. Researchers can use a multiple-case embedded design, systematically choosing matched pairs of organizations by

size and regulation visibility, and then study how contextual elements affect the efficacy and equity of artificial intelligence (Eisenhardt, 2021).

Geographical breadth is equally important. Labour-market norms, data-protection regimes and cultural attitudes to automation vary sharply across jurisdictions (Ballestar et al., 2022). Cross-national surveys, supplemented by country-level policy analysis, could test whether candidate trust in AI-mediated hiring hinges more on formal legal safeguards (e.g., GDPR, the EU AI Act) or on informal cultural expectations of human contact. Including candidate perspectives directly through conjoint experiments that vary disclosure wording, explainability depth and appeal mechanisms would illuminate how transparency interventions influence application completion and acceptance rates.

Finally, longitudinal ethnographies could shadow recruiter teams over an entire model-development lifecycle, from scoping and vendor selection through deployment and drift remediation. Such immersion would capture the emergent learning curves, power dynamics and organisational politics that shape real-world AI projects elements that often escape cross-sectional surveys. In sum, a research agenda that marries methodological plurality with sectoral and geographic diversity will provide the nuanced, generalisable evidence base needed to refine and stress-test the recommendations advanced in this dissertation.

5.5 Final Reflection

Artificial intelligence is already rewriting the recruiter's daily workflow. As one participant memorably phrased it, "It speeds up the funnel, but you can't take your hands off the wheel" (R001). The present dissertation demonstrates that this steering metaphor is more than a quip: AI systems undeniably compress administrative timelines resume-ranking slashes screening hours, chatbots triage routine candidate queries in seconds, and predictive rediscovery engines unearth silver-medal applicants who would once have languished in an ATS archive. Yet the research equally underscores that the human recruiter remains the pilot, not a passenger. Interviewees repeatedly described moments when algorithmic suggestions had to be over-ruled maternity-gap

penalties, elite-university inflation, undervaluing of non-linear careers confirming empirical warnings about “bias creep” in seemingly neutral data-driven tools (Raghavan et al., 2020).

Retaining a firm grip on that wheel, however, is neither intuitive nor automatic. The evidence indicates four mutually reinforcing enablers. First, structured AI-literacy programmes give recruiters the conceptual vocabulary false-positive rates, SHAP plots, disparate-impact tests to interrogate model outputs with confidence (Braun & Clarke, 2019; Caldwell, 2020). Second, bias-resistant technical design regular parity audits, feature de-weighting of prestige proxies keeps fairness metrics within regulatory tolerance while preserving predictive utility (European Commission, 2019). Third, layered transparency communications address the candidate-experience gap spotlighted in the interviews: disclosing where automation operates, guaranteeing a human backstop, and providing appeal routes measurably lift perceptions of procedural justice (Butcher & Pham, 2022). Finally, inclusive governance cross-functional steering committees with HR, data-science, legal and employee-voice representation ensures that audit findings translate into action and that budget decisions reflect ethical as well as financial risk (Floridi & Cowan, 2022).

Implemented together, the six evidence-based recommendations articulated in Chapter 5 operationalise these enablers. They map explicit learning pathways, embed rolling bias audits into vendor contracts, mandate human-over-ride clauses, standardise plain-language explainability packs, integrate AI telemetry with downstream performance and diversity KPIs, and institutionalise oversight through executive-level councils. Organisations that adopt this package can expect to harvest the “efficiency dividend” highlighted by participants time-to-shortlist reductions of up to 75 per cent without sacrificing long-term hiring quality or stakeholder trust. Conversely, firms that treat AI as plug-and-play software, delegating critical judgment to opaque algorithms, risk legal exposure under GDPR Article 22 and reputational damage in an era of rising algorithmic scrutiny.

In essence, when HR professionals keep their hand on the wheel fortified by literacy, bias-aware design, transparent dialogue and robust governance AI becomes a trusted co-pilot rather than an unaccountable gatekeeper. By institutionalising these safeguards, organisations can channel

machine intelligence toward building faster, fairer and more strategic talent systems, realising the profession's aspiration for technology that serves people, performance and society (CIPD, 2023).

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Appendices

Appendix A – Interview Questionnaire

1. Audio consent check ?
2. Could you walk me through your role and how it ties into recruitment?
3. When did your team start using AI in recruitment?
4. What AI tools are you actively using right now?
5. Have you seen improvements in your process?
6. How do your recruiters feel about AI recommendations?
7. Have there been any instances where the AI made a poor recommendation?
8. Has the use of AI changed your own role?
9. How are you handling bias and fairness?
10. And from a candidate privacy perspective—are you covered for GDPR?
11. Have any candidates expressed concern?
12. What would you say is the biggest benefit of AI in recruitment?
13. And the biggest risk?
14. Have your recruiters had any structured training in AI usage?
15. What's your top advice to recruiters new to AI?

Appendix B – Interview Consent Form

Informed Consent Confirmation

Study Title: Investigation on how does the integration of AI in IT recruitment impact the efficiency and decision-making processes of recruiters in the IT industry

Researcher: Prabhu Sureshkumar

Please read each statement and sign below if you agree.

1. I confirm I have read and understood the Participant Information Sheet.
2. I understand my participation is voluntary and I can withdraw at any time.
3. I consent to the audio recording of the interview.
4. I understand that my data will be anonymized and securely stored.
5. I understand that data will be destroyed 12 months after study completion.

Participant Name: _____

Signature: _____ Date: _____

Researcher Signature: _____ Date: _____

Appendix C – Abbreviation

List of Abbreviations

Abbreviation	Definition
A/B	A/B testing
AEDT	Automated Employment Decision Tools
AI	Artificial Intelligence
ATS	Applicant Tracking System(s)
BERT	Bidirectional Encoder Representations from Transformers
BI	Business Intelligence
CIPD	Chartered Institute of Personnel and Development
CJEU	Court of Justice of the European Union
CPD	Continuing Professional Development
CRM	Candidate Relationship Management
CV	Curriculum Vitae
D&I	Diversity & Inclusion
DEI	Diversity, Equity & Inclusion
DPO	Data Protection Officer
DSIT	(UK) Department for Science, Innovation & Technology
EC HLEG	European Commission High-Level Expert Group (on AI)
EEA	European Economic Area
EEOC	(U.S.) Equal Employment Opportunity Commission
EMEA	Europe, Middle East & Africa
ERG	Employee Resource Group
EU	European Union
GDPR	General Data Protection Regulation
HR	Human Resources
HRM	Human Resource Management
ICO	Information Commissioner's Office (UK)

ISO	International Organization for Standardization
IT	Information Technology
KPI	Key Performance Indicator
KPIs	Key Performance Indicators
ML	Machine Learning
NLP	Natural Language Processing
NPS	Net Promoter Score
NYC DCWP	New York City Department of Consumer and Worker Protection
PEOU	Perceived Ease of Use (TAM construct)
POC	People of Colour
PU	Perceived Usefulness (TAM construct)
Q&A	Questions & Answers
ROI	Return on Investment
RPA	Robotic Process Automation
RTA	Reflexive Thematic Analysis
SaaS	Software as a Service
SHAP	SHapley Additive exPlanations
SQL	Structured Query Language
TA	Talent Acquisition
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance and Use of Technology