# THE INFLUENCE OF ARTIFICIAL INTELLIGENCE ON RECRUITMENT AND SELECTION PRACTICES AT INVERNESS CONSULTING GROUP

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF HUMAN RESOURCE OF UGANDA CHRISTIAN UNIVERSITY**

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## DECLARATION

I, **KAUTA MARIA FELISTER**, Reg. No. **M23B42/009**, hereby declare that this proposal entitled *"The Influence of Artificial Intelligence on Recruitment and Selection Practices at Inverness Consulting Group"* is my original work and has not been submitted, nor will it be submitted, to any other institution for the award of a degree or any other academic qualification. Where the ideas or works of other scholars have been used, they have been appropriately acknowledged.

**Signature:** ..... Date 26/5/2026

**KAUTA MARIA FELISTER**

## APPROVAL

This is to certify that **KAUTA MARIA FELISTER** has carried out this research dissertation entitled *"The Influence of Artificial Intelligence on Recruitment and Selection Practices at Inverness Consulting Group"* under my supervision and guidance. The work is now ready for submission to the School of Business for academic consideration.

**Signature:** ..... **Date:** 26/5/2026

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**Supervisor**

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LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| **AI:** | Artificial Intelligence |
| **ATS:** | Applicant Tracking System |
| **HR:** | Human Resources |
| **HRM:** | Human Resource Management |
| **IT:** | Information Technology |
| **KPI:** | Key Performance Indicator |
| **SPSS:** | Statistical Package for the Social Sciences |

## DEFINITION OF TERMS

**Algorithmic Bias:** The systematic and repeatable errors in a computer system that create unfair outcomes, such as privileging one arbitrary group of users over others. In recruitment, this could mean AI systems discriminating against candidates based on gender, ethnicity, or other protected characteristics.

**Artificial Intelligence (AI):** The simulation of human intelligence processes by machines, especially computer systems. In the context of this study, it refers to technologies such as machine learning, natural language processing, and predictive analytics used to automate and enhance recruitment tasks.

**Effectiveness (in recruitment):** The measure of how well the recruitment process achieves its goals, such as the quality of hire, accuracy of candidate-job matching, and long-term retention of selected employees.

**Efficiency (in recruitment):** The measure of resources expended (such as time and cost) to fill a vacancy. In this study, it is operationalized through metrics like reduced time-to-hire and decreased administrative workload.

**Predictive Analytics:** The use of data, statistical algorithms, and machine learning techniques to identify the likelihood of future outcomes based on historical data. In recruitment, it is used to predict a candidate's future job performance or cultural fit.

**Recruitment:** The process of identifying, attracting, and shortlisting qualified candidates for job vacancies within an organization.

**Selection:** The series of steps following recruitment, designed to evaluate and choose the most suitable candidate from a pool of applicants for a specific job role.

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**ABSTRACT**

Firstly, the main objective of this study is to investigate the impact of AI on the recruitment and selection process at Inverness Consulting Group. Based on this main objective, there are three main research objectives for this study, which include determining the extent of AI adoption in recruitment and selection, the impact of AI adoption on the recruitment process and finally challenges and ethical considerations concerning the use of AI in recruitment. The methodology used in this study included the use of a cross-sectional design, where both quantitative and qualitative approaches were employed. Data were obtained from 38 out of 46 selected staff members through the questionnaire while six key informants were also interviewed. The results indicate that there is a moderate level of AI adoption in recruitment and selection (mean score = 3.29), especially candidate sourcing and managerial support. Similarly, there is also a moderate positive effect of AI adoption on recruitment efficiency and effectiveness (mean score = 3.40), especially screening time (mean = 3.61) and administrative tasks (mean = 3.89). However, the fairness perception was still quite low (mean=2.79). The challenges faced along with ethical concerns were 3.19, which were mainly algorithmic biases (mean = 3.71) and lack of adequate guidance through policies (mean = 2.84). There was an observed medium positive correlation (Pearson correlation = 0.503, $p<0.05$) between the use of AI system and AI bias perceived by respondents. Multiple regression results revealed that ethical concerns ($\beta=0.233$, $p=0.010$) and use of AI recruitment systems ($\beta=0.198$, $p=0.049$) were significant predictors of difficulties in implementation, with all three predictors accounting for 41.2% of the variance in challenges ($R^2=0.412$). It could be summarized from the findings above that the application of AI is still partial, as the fundamental tools are present while other advanced techniques are yet to be developed and implemented. Moreover, although AI speeds up processes, it lacks the contributions towards increasing fairness and effectiveness in HRM. Ethical concerns, as well as biases and poor guidance policies, constitute major hurdles in responsible AI application. The recommendations offered to managers were to introduce continuous training programs for employees, explainable AI, better data governance and ethical policies, and pilot projects of candidates' facing AI tools.

# CHAPTER ONE

## 1 Introduction

The development of HRM witnessed an extensive technological revolution that transformed traditional human resource processes into a high-tech process. At its initial stage, hiring was conducted manually by reviewing resumes and interviewing applicants, thus being associated with inefficiency, inconsistency, and subjectivity. ATS technology emerged in the late 1990s when candidates' resumes were saved using automation and keywords were found. The decade of 2000s contributed to the advancement of machine learning and natural language processing that helped to increase accuracy, while communication was made more efficient through the use of chatbots. The 2010s gave a birth to predictive analytics and sourcing AI technologies to enable targeted recruitment and workforce planning (Abdelraouf, 2024; França et al., 2023).

The world-wide introduction of AI into the field of HRM has had a tremendous impact on how companies hire and recruit employees. With the use of AI, organizations conduct their HRM-related operations more efficiently, quickly, and accurately than ever before. There exist several companies, including IBM and Hireez, that apply the use of predictive analytics and autonomous recruitment systems in their practice (Hireez, 2025; IBM, 2025; França et al., 2023).

All over Africa, organizations have started using AI technology in their HRM departments in order to compete in the digital economy. Despite making HRM process efficient and eliminating human bias, the application of AI is still challenging due to a lack of necessary infrastructure, poor data governance, and cultural sensitivities (Tursunbayeva, 2025; França et al., 2023). In Uganda, Inverness Consulting Group, located in Ntinda, Nakawa Division, Kampala, offers HR consulting, recruitment, and organizational development services all over Uganda and the entire East African community. With increasing competition, the organization finds itself under pressure to streamline its recruiting process.

The recruitment process in the organization involved manual screening of CVs, short listing based on paper, and personal interviewing. However, the introduction of automation in the HRM sector through AI technologies such as screening applications, using analytical software, and recruitment chatbots can help to make the process faster and eliminate possible biases. These

changes in recruitment techniques follow trends across the world. However, there are many issues related to the adoption of AI in HRM that should be examined. These include the issue of fairness and HRM roles..

## 1.1 Problem Statement

In theory, the incorporation of AI in recruitment and selection activities can result in greater efficiency, better decision-making, reduced bias, and faster talent acquisition. The various AI applications, including applicant tracking systems, predictive analytics, and candidate interactions using chatbots, hold promise for increasing the effectiveness of hiring practices. The use of AI in recruiting processes is rapidly expanding worldwide, with nearly 41% of recruiting roles expected to be automated by 2030 (Business Standard, 2024), and AI tools implemented within 87% of firms (Twinstrata, 2025).

Unfortunately, in reality, many businesses continue to use slow and expensive recruitment processes that are vulnerable to bias in both Africa and East Africa. Although AI application among recruiting professionals has a very high penetration rate, less than 53% of recruiters employ the power of AI in their recruitment process (Twinstrata, 2025). Infrastructure issues and poor digital literacy pose additional barriers for efficient implementation.

This highlights an obvious research gap. Although AI has shown great success in terms of saving time, for example, through the ability to save about 50% time in recruiting employees (Yomly, 2025), little empirical evidence is available on its performance in African HR settings. Filling the existing gap is very important in understanding how the introduction of AI will influence hiring efficiency and the responsibilities of HR practitioners. This research explores how Inverness Consulting Group uses AI for improving the recruiting process.

## 1.2 Main Objective

To examine the influence of Artificial Intelligence (AI) on recruitment and selection practices at Inverness Consulting Group.

## 1.3 Specific Objectives

1. To assess the extent to which AI technologies have been adopted in recruitment and selection processes at Inverness Consulting Group.

2. To examiine the effect of AI adoption on the efficiency and effectiveness of recruitment and selection at Inverness Consulting Group.
3. To find out the challenges and ethical implications associated with the use of AI in recruitment and selection at Inverness Consulting Group.

## 1.4 Research Questions

1. To what extent has Inverness Consulting Group adopted Artificial Intelligence technologies in its recruitment and selection practices?
2. How does AI adoption influence the efficiency and effectiveness of recruitment and selection at Inverness Consulting Group?
3. What challenges and ethical implications are associated with using AI in recruitment and selection at Inverness Consulting Group?

## 1.5 Research Hypotheses

**$H_{01}$:** There is no significant relationship between the use of AI recruitment systems and the perception of algorithmic bias at Inverness Consulting Group.

**$H_{02}$:** There is no significant association between AI adoption and concerns regarding data privacy and candidate information protection at Inverness Consulting Group.

**$H_{03}$:** There is no significant effect of ethical concerns on the successful implementation of AI in recruitment at Inverness Consulting Group.

## Conceptual framework

The study was further guided by a conceptual framework detailing the **Influence of Artificial Intelligence** (IV) on Recruitment and Selection Practices, (DV) as shown below.

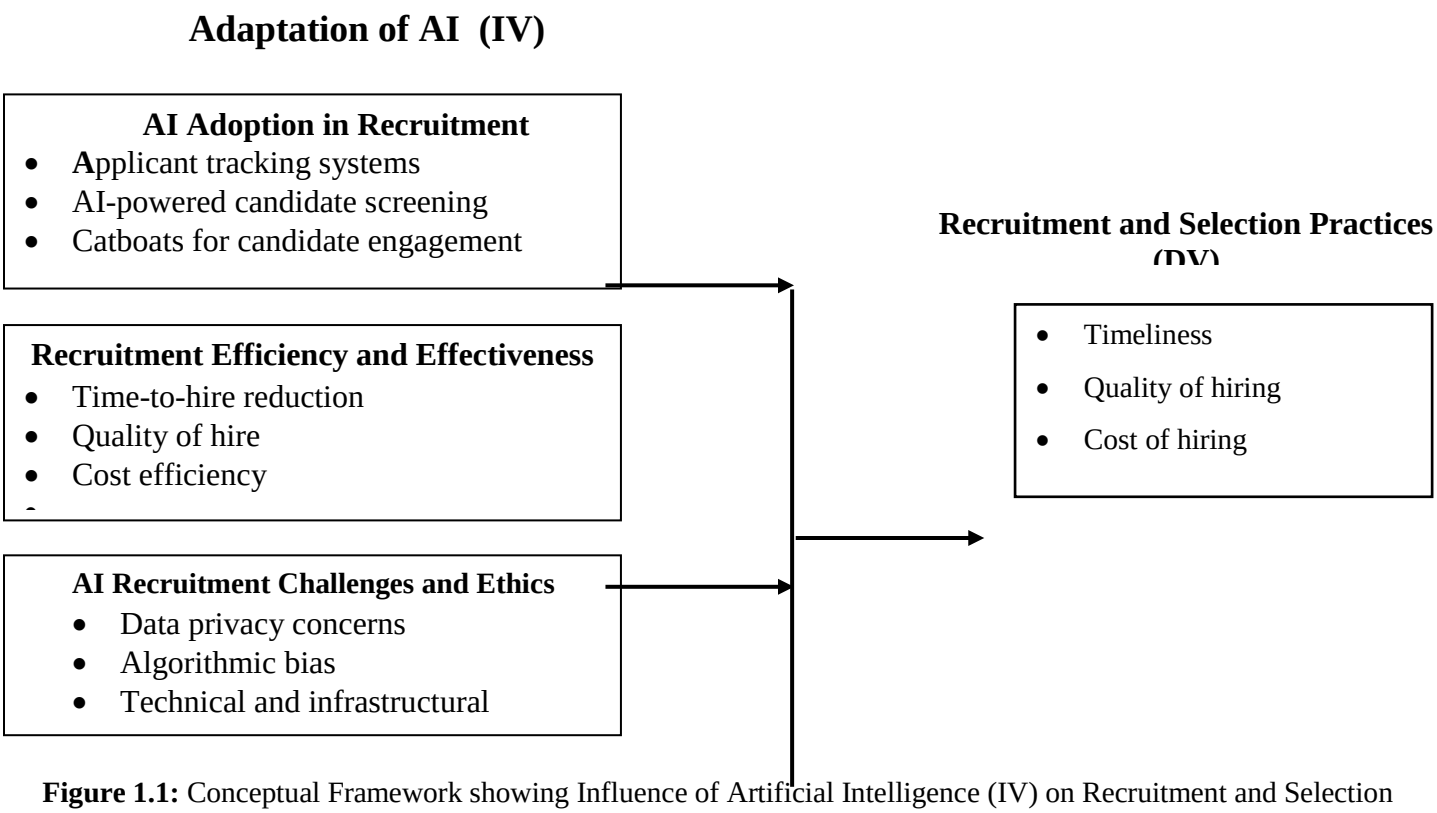


**Figure 1.1:** Conceptual Framework showing Influence of Artificial Intelligence (IV) on Recruitment and Selection Practices,.

1.1 Source: *Adapted from the work of Soni and Kodali (2013), with modifications by the researcher.*

From the conceptual framework, AI adoption is identified as the independent variable, while Recruitment and Selection Practices is the dependent variable. AI adoption is operationalized by the use of technology such as the applicant tracking system, artificial intelligence candidate screening, and chatbots. Recruitment and Selection Practices will be assessed based on time-to-hire, quality of hire, and cost per hire. It would therefore mean that effective adoption of AI would improve recruitment efficiency and effectiveness, while poor use would have adverse consequences for the organization's ability to conduct efficient recruitment. This conceptual framework will be used to investigate the relationship between AI adoption and recruitment practices at Inverness Consulting Group.

## 1.6 Scope of the Study

The study will be conducted at Inverness Consulting Group, one of the best ISO 9001:2015 accredited Human Resource Management firm working in East and Central Africa. The scope of geography includes Uganda, where AI adoption in Human Resource Management is at its initial stages. On theme, the focus will be on how AI influenced recruitment and selection, automation, predictive analysis, and chatbots. In time, the study covers data collected between 2020 and 2025, a time when there has been rapid growth in AI adoption into HR processes.

## 1.7 Justification of the Study

It can be seen from the conceptual framework that AI adoption is an independent variable which influences the dependent variable Recruitment and Selection Practices. AI adoption refers to adopting various means such as the use of applicant tracking systems, AI candidate screening tools, and chatbots among others. Recruitment and selection practices refer to the measures used to determine time-to-hire, quality of hire, and cost-per-hire among other metrics. Based on this framework, it is clear that adopting AI successfully in recruiting can help organizations improve their hiring process in terms of efficiency and candidate-job matching.

## 1.8 Scope of the Study

The study focused on Inverness Consulting Group, an ISO 9001:2015 accredited Human Resource Management firm based in East and Central Africa. As far as geography was concerned, the study narrowed its scope to the operations of the firm in Uganda where AI adoption in HRM was growing but not fully entrenched in. On the theme side, the study focused on the influence of AI in automating and analyzing the recruitment process, and adopting chatbots among other measures. The study timeframe covered 2020 to 2025

## 1.9 Significance of the Study

The findings of the study will provide evidence-based advice on how AI applications can be used to enhance the efficiency of recruitment processes, decrease costs and foster evidence-based decision making by HR professionals.

Recommendations made by the authors of the study will help HR specialists adopt artificial intelligence applications in their work, such as chatbots, predictive analysis, and automated recruitment systems.

Results produced by the study will help policy makers understand the state of AI implementation in HRM and identify areas where regulation is required.

Awareness among job seekers regarding the impact of AI on recruitment procedures will increase as a result of this study. The importance of fairness and protecting candidates' data during the hiring process will be highlighted in the study as well.

By generating new knowledge about AI use in recruitment, the study adds value to existing scientific literature. This knowledge will be useful for scholars conducting studies related to human capital management and HRM in the era of digitalization.

# 2 CHAPTER TWO

# LITERATURE REVIEW

Introduction

This chapter discusses academic literature related to the goals of this research. This chapter highlights the extent of adoption of AI in organizations, how it has affected the process of recruiting, the problems associated with it, and ethical issues related to recruitment with AI.

## 2.1 To what extent has Inverness Consulting Group adopted Artificial Intelligence technologies in its recruitment and selection practices?

The use of applicant tracking systems (ATS) stands out as some of the most basic technological innovations within the gradual uptake of the use of AI in African recruitment practices. The fact is that these systems are increasingly being adopted in developed parts of the world as a means of managing the large number of applicants in different companies, although their use remains limited in many parts of Africa, especially in East Africa, owing to infrastructure and policy problems (Azaroual, 2024; Sey et al., 2023).

According to several studies, it is important to note that despite the potential of ATS in easing administrative burdens, their use is often hampered by weak infrastructure and inadequate personnel to handle information collected through these technologies (Mienye, 2024; Nakitende & Ochieng, 2023). Indeed, in Uganda, for instance, such systems are used only in multinational corporations and in major tech companies operating out of the capital city of Kampala.

AI powered candidate screening systems present additional complexities in their implementation, offering possibilities of limiting human bias while at the same time posing risks of sustaining structural inequalities. According to research, such advanced technologies have the ability to increase effectiveness and objectiveness of recruitment, yet their use in Africa will be limited due to the lack of accessible high-quality data and inequalities prevailing in the labor market (Azaroual, 2024; Sinde, 2023). The contradiction evident in the literature demonstrates the complex nature of AI used in recruiting processes: while some studies indicate that the use of AI can contribute to reducing subjective biases in candidate selection in early stages, others emphasize the potential threat of introducing societal biases against particular social groups and individuals depending on their background into the screening process (Asoba & Mefi, 2025;

Mubiru & Kiconco, 2024). In the context of East African countries like Uganda and Kenya, the problem becomes particularly difficult due to the need to take into consideration cultural differences and the peculiarities of local job market, which could limit the effectiveness of hiring practices and exclude qualified candidates.

Engaging candidates through the use of chatbots constitutes an obvious example of AI integration that would be more conspicuous and effective than the aforementioned. Indeed, it has been noticed that the organization based in Uganda called Inverness Consulting Group operates in East and Central Africa with the goal of enhancing its hiring processes by means of IT-enabled HR solutions. In particular, it has become possible due to the use of chatbots to increase the efficiency of the interaction with candidates. Nevertheless, the use of such technology by Inverness Consulting Group, as well as other organizations in East Africa, including in Uganda, Rwanda, and Tanzania, is associated with the issue of digital illiteracy and problems that arise due to the ethical aspect of using chatbots. Specifically, there is a need to ensure that the organization's HR staff continues improving their skills when it comes to managing chatbots in order to avoid any problems connected to the violation of data privacy and lack of algorithmic transparency (Asiimwe & Ndagire, 2025; Oluoch & Achieng, 2024).

## 2.2 Effect of AI Adoption on the Efficiency and Effectiveness of Recruitment and Selection

The use of Artificial Intelligence (AI) in the recruitment process has tremendously reduced time taken to recruit staff since candidates can be hired quickly. Through its application, Inverness Consulting Group can attract candidates and begin their engagement quickly through AI tools such as automation of resume analysis, predictive analysis, and chatbots. According to studies conducted by Hemalatha, Kumari, Nawaz, and Gajenderan (2021), there has been improvement in the hiring process in IT firms as a result of the integration of AI. Additionally, Miao and Wang (2023) argue that AI has lowered the average time required for hiring in multinational firms by 40 percent. Adeoye and Adekola (2024) note that the process of interviewing has been shortened by up to 50 percent through AI platforms. Since competition is stiff in Uganda and Eastern Africa countries in terms of recruiting the right people to fill positions in fintech and agritech companies, speed is important for organizations like Inverness Consulting Group. This is

because using AI to shorten hiring cycles will help such firms recruit the best talents in the region before others scoop them.

Use of artificial intelligence also improves the quality of hiring since it facilitates proper filtering and selection of employees. Through data analytics and use of algorithms, the Inverness Consulting Group gets to assess the capability of potential candidates with regard to their ability to meet specific job requirements. According to Johansson and Herranen (2019), AI maximizes HR operations and ensures candidate skill set matches organizational needs. Additionally, the study conducted by Smith and Lee (2023) shows that the application of AI-powered selection procedures enhances predictive validity of candidate screening processes by an estimated 30 percent. Similarly, Zhao, Huang, and Li (2024) indicate that use of AI helps improve performance outcomes through competencies-based placement of potential recruits. With regard to the local context where the level of education does not necessarily equate to competency, this is an innovative advancement.

In view of the technological gap existing in certain regions of East Africa (Kunduru, 2023), this is evidence that AI can be used to enhance the effectiveness of recruiting. Specifically, it allows for the improvement of quality of hires, which will help mitigate risks associated with costly mis-hiring in the area.

The use of AI in recruitment leads to cost effectiveness through process automation, minimization of human interactions, and reduction in cost outlays. Using AI candidate sourcing and candidate screening processes, the Inverness Consulting Group has managed to reduce operational recruitment cost and allocate resources more effectively. According to Lloyd & Payne (2019), recruitment activities in IT-enabled HR systems minimize cost per hire and recruitment costs as there is minimized manual handling. Further, according to Patel & Kumar (2023), firms that incorporate AI recruiting platforms reduce their recruitment costs by 35 percent while Mensah & Boateng (2024) observe reduced costs related to recruiting external agencies and job advertisement.

In the case of East Africa where fluctuations in foreign currency values make external agency costs extremely high, AI technology makes a solution to cost-effective management. While there will be need for training HR personnel in the use of this technology coupled with ethical issues

related to data protection that are now being addressed by regulatory authorities (Khayyam et al., 2020), these benefits suggest how AI improves financial performance. Through innovative technology and effective planning, the Inverness Consulting Group stands to be much more prepared for cost-effective staffing and HR management. They have set the pace for other organizations to follow in both Uganda and in the greater East African region.

## 2.3 Challenges and Ethical Implications Associated With the Use of AI in Recruitment and Selection

The use of AI in the recruiting process at Inverness Consulting Group involves handling vast amounts of private candidate data and poses serious issues regarding data privacy and protection. The failure to have appropriate protective measures can pose threats in terms of breaches and misuse of such information, hence affecting the level of candidate confidence and trust (State of AI in Africa, 2023; Colley, 2024). According to recent research, there is a lack of transparency in AI-based recruiting tools since 76% of such platforms fail to reveal information on how they collect, handle, and utilize private candidate data (NYU Center for Business and Human Rights, 2024; Bhattarai, 2025). It means that stringent measures of securing personal candidate data and ensuring compliance with local rules are critical.

Another issue concerning AI recruitment tools involves algorithmic bias that may pose challenges in ensuring fairness in the recruitment process. There is evidence indicating that training AI on previous hiring data might lead to replicating existing social inequalities, hence resulting in discrimination against specific individuals (Rigotti & Fosch-Villaronga, 2024; Xiao, 2025). Research indicates that AI algorithms used for recruitment may demonstrate statistical discrimination in favor of a particular protected class like gender or ethnicity since AI prioritizes some classes due to biased inputs used in the training of the algorithm (Stanford AI Index Report, 2025; Fairness Metrics Research, 2025). Thus, these biases could influence the recommendations of candidates made by the algorithm, adversely affecting candidates from marginalized groups. Hence, measures should be undertaken to mitigate any form of bias when employing AI in recruitment to avoid inequity and unfairness.

The adoption of AI technology in recruitment processes is further restricted by technical and infrastructural issues, which may include problems with usability and efficiency. Such technical

barriers as poor system designs, inadequate integration with HR management tools, and lack of technical skills among HR staff make the implementation of AI difficult and may create unnecessary complexities, leading to inefficiencies and resistance (Lombard, 2025; Mwita & Kitole, 2025). Poor digital infrastructure and complicated procedures associated with the use of AI make its application less efficient since data may get lost or distorted during the process (Opatha & Dooradarshani, 2024; Fairness and Bias in Recruitment AI Research, 2025).

### 2.5 Summary of Literature and Gaps

According to the literature review, there is no consistent application of AI in recruitment within East Africa, including Uganda, where core applications such as applicant tracking software are mainly adopted by larger corporations, with some pros and cons concerning the issue of bias and contextuality associated with AI-powered screening and chatbots. Positive impacts of using AI in recruitment include improvements in recruitment efficiency as evidenced by reduction in time to fill positions, quality of hire, and reduction of operating costs. Nevertheless, common problems persist in the areas of privacy issues, algorithmic bias, lack of appropriate technological capacity, and skilled personnel. Existing research gaps relate to developing context-specific frameworks for deploying AI ethically, investigating long-term efficacy of AI-based tools in local SMEs, and developing AI that understands regional qualifications and experiences.

# CHAPTER THREE

## 3 METHODOLOGY

This chapter presented the research methodology used to examine AI's influence on recruitment at Inverness Consulting Group, detailing design, population, sampling, instruments, data analysis, and ethics, while integrating quantitative and qualitative approaches to ensure credible, reliable, and insightful findings.

### 3.1 Research Design

The research employed a cross-sectional research design that entailed both quantitative and qualitative data collection. The former entailed collection of quantitative data using structured questionnaires aimed at assessing the adoption of AI, efficiency, and effectiveness in recruitment processes by employees, while qualitative data were gathered through semi-structured interviews of selected HR personnel regarding challenges, ethics, and experiences associated with the use of AI during the recruitment process. The research design allowed the researcher to have a holistic understanding of how AI is used in the recruitment process at Inverness Consulting Group.

### 3.2 Population of the Study

The population of the study comprised HR personnel, IT personnel, and others, such as administrative, supporting, and management personnel working in Inverness Consulting Group in Uganda and East Africa countries. There were altogether 46 individuals, which included 20 HR personnel, 8 IT personnel, and 18 others. They were either directly or indirectly involved in the recruitment process.

### 3.3 Sampling Techniques and Sample Size

The table below illustrates how respondents for this research were selected in order to collect information on artificial intelligence integration in recruiting employees at Inverness Consulting Group. HR personnel and IT specialists were chosen based on the assumption that they had hands-on experience with AI-based recruiting technologies. Administrative and managerial staff was chosen by using stratified random sampling. In all, 38 respondents took part in the quantitative research. Qualitative information was collected from six key informants..

**Table 3.1: Sample Size and Sampling Techniques for Respondents**

| Category of Respondents | Sampling Technique | Population Size | Sample Size |
|---|---|---|---|
| HR Professionals | Purposive Sampling | 20 | 17 |
| IT Staff | Purposive Sampling | 8 | 6 |
| Other Staff (Administrative, Support, Management) | Stratified Random Sampling | 18 | 15 |
| **Total Respondents** | | **46** | **38** |
| Key Informants (Qualitative Interviews) | Purposive Sampling | 6 | 6 |

## 3.4 Data Collection Techniques

For quantitative data collection, structured questionnaires with closed questions assessing the influence of AI on recruitment efficiency and effectiveness were used using the five-point Likert scale (1 – Strongly Disagree; 5 – Strongly Agree). For qualitative data collection, semi-structured interviews were conducted with HR and IT managers addressing issues related to experience, ethics, and implementation challenges. Furthermore, documents related to recruitment processes, AI systems, and company policies were analyzed to support and validate the study findings.

## 3.5 Research Instruments

For collecting data for the study, three instruments were used. Structured questionnaires were used to assess the perception of AI's impact on the efficiency and effectiveness of the recruitment process, based on a five-point Likert scale. Interview guide comprised open questions exploring the experience, ethics, and implementation challenges associated with AI usage for recruitment purposes. Document review checklist was developed for collecting relevant data from company records.

## 3.6 Validity and Reliability of Instruments

In order to establish content validity, all instruments were vetted by supervisors in academia and by HR professionals to ensure that the questions were valid, relevant to the research objectives, and addressed various aspects of AI adoption, efficiency, effectiveness, and ethics. The researcher conducted a pilot test among ten respondents who belong to an HR department other

than the target organization to ascertain problematic questions in the instruments. Reliability testing was done using Cronbach's alpha whereby the level of reliability will be regarded acceptable if the value is at least 0.7. Responses obtained during the interview were recorded and transcribed verbatim. Triangulation of questionnaire, interviews, and documentation made the results more credible and reliable.

## 3.7 Methods of Data Analysis

Data collected in questionnaire format were coded and analyzed using SPSS software version 26. The use of descriptive statistics, such as frequencies, percentages, mean and standard deviation, was adopted to analyze the demographic data and perception of respondents concerning the adoption of AI in recruitment processes. On the other hand, inferential statistics such as correlation and regression were adopted to analyze the relationship between the adoption of AI and efficiency/effectiveness in recruitment.

Thematic content analysis technique was utilized for the assessment of data obtained through qualitative interviews. The collected data were coded to identify emerging themes, patterns, and trends regarding the problems, ethical issues, and organizational experience in implementing artificial intelligence in recruiting procedures. Integration of qualitative and quantitative results was performed through data triangulation to offer a comprehensive evaluation of the impact of artificial intelligence on the recruitment and selection processes in the company.

### Ethical Issues

To ensure ethicality and maintain the integrity of the research project, all participants were well-informed about the research project, its purpose, scope, and expected results before giving their signed consent to take part in the survey. Participants' confidentiality was ensured by removing personal details of respondents. The collected data were stored securely to avoid misuse of the gathered information. All participation in the study was voluntary, and respondents had the right to refuse to participate at any moment. Data collection was conducted only for academic purposes, and all conclusions were presented objectively.

# CHAPTER FOUR

## 4 DATA PRESENTATION AND INTERPRETATION

Introduction

This chapter will give analysis and interpretation of results for the research entitled "The Impact of Artificial Intelligence on Recruitment and Selection Methods in Inverness Consulting Group." Structured questionnaires were used in gathering information from 38 subjects. Presentation of results is done following the objectives of the study in mind which included the computation of response rate, demographics of respondents and descriptive statistics such as mean and standard deviation. Results were organized in two parts: the first part was descriptive statistics which include central tendency and dispersion, while the other part was about inferential statistics.

### Section 1: Descriptive Statistics

Response Rate

All distributed questionnaires were completed and returned, resulting in a 100% response rate.

**Table 4.1**

*Questionnaire Response Rate (N = 38)*

| Category | Distributed | Returned & Usable | Response Rate |
|---|---|---|---|
| Respondents | 38 | 38 | 100% |

The 100% response rate provided a complete dataset for analysis, enhancing reliability and representativeness.

## 4.1 Demographic Characteristics of Respondents

**Table 4.2**

*Demographic Profile of Respondents (N = 38)*

| Characteristic | Category | n | % |
|---|---|---|---|
| **Gender** | Male | 22 | 60 |
| | Female | 16 | 40 |
| **Age Group** | 18–25 | 6 | 15.8 |
| | 26–35 | 18 | 47.4 |
| | 36–45 | 9 | 23.7 |
| | 46+ | 5 | 13.1 |
| **Position/Role** | HR | 12 | 31.6 |
| | Recruitment/TA | 8 | 21.1 |
| | IT | 6 | 15.8 |
| | Management | 7 | 18.4 |
| | Administration/Other | 5 | 13.1 |
| **Years of Experience** | 0–2 | 7 | 18.4 |
| | 3–5 | 14 | 36.8 |
| | 6–10 | 10 | 26.3 |
| | 10+ | 7 | 18.4 |

Majority of the participants were those aged between 26-35 years, which suggested that the respondents were mainly of middle career level. Majority of the respondents belonged to the HR related professions and hence represented the targeted population for the study.

Extent of AI Adoption in Recruitment and Selection (Objective 1)

**Table 4.3**

*Extent of AI Adoption in Recruitment and Selection (N = 38)*

| Statement | SA n(%) | A n(%) | N n(%) | D n(%) | SD n(%) | M | SD |
|---|---|---|---|---|---|---|---|
| AI tools are used in candidate sourcing | 8 (21%) | 18 (47%) | 6 (16%) | 4 (11%) | 2 (5%) | 3.89 | 0.96 |
| Automated resume screening is integrated | 7 (18%) | 15 (39%) | 5 (13%) | 5 (13%) | 6 (16%) | 3.66 | 1.01 |
| AI-powered chatbots interact with candidates | 5 (13%) | 10 (26%) | 6 (16%) | 8 (21%) | 9 (24%) | 3.03 | 1.20 |
| AI systems are regularly updated for recruitment | 6 (16%) | 12 (32%) | 6 (16%) | 10 (26%) | 4 (11%) | 3.47 | 1.07 |
| Management supports AI adoption in recruitment | 6 (16%) | 16 (42%) | 5 (13%) | 5 (13%) | 6 (16%) | 3.74 | 0.97 |
| Employees are trained to effectively use AI tools | 5 (13%) | 9 (24%) | 6 (16%) | 9 (24%) | 9 (24%) | 2.97 | 1.16 |
| Overall Mean & SD | - | - | - | - | - | 3.29 | |

Regarding the results related to the scale of implementation of AI, we can state that the level of implementation of AI within recruitment processes at Inverness Consulting Group can be described as moderate (M = 3.29; SD = 1.08). Indeed, a considerable number of employees strongly agreed (8, 21%) and agreed (18, 47%) that the company uses AI-based software for candidate sourcing. This result testifies to the fact that Inverness Consulting Group uses digital solutions to simplify recruitment processes during preliminary stages. Resume screening performed automatically also turned out to be rather popular (7, 18% of employees strongly agreed and 15, 39% agreed with this statement). Chatbot interaction with candidates was not considered a frequent practice by interviewees (5, 13% strongly agreed and 10, 26% agreed with this statement), and even more employees viewed this process through their lens neutrally or

negatively. Employees rarely updated AI software regularly (6, 16% strongly agreed and 12, 32% agreed), whereas management demonstrated strong support for its implementation (6, 16% strongly agreed and 16, 42% agreed with this statement). On average, there is a reflection of partial adoption of AI technology characterized by strong performance in sourcing and managerial adoption but low on training and chatbots use.

Adoption of AI technology increases efficiency in searching for talent and has the backing of management, but the problem lies in the lack of proper chatbot use and training of staff. There is thus an urgent need to increase capacity and integrate more AI in the recruitment process (M = 3.29, SD = 1.08).

On average, there is a reflection of partial adoption of AI technology characterized by strong performance in sourcing and managerial adoption but low on training and chatbots use.

Adoption of AI technology increases efficiency in searching for talent and has the backing of management, but the problem lies in the lack of proper chatbot use and training of staff. There is thus an urgent need to increase capacity and integrate more AI in the recruitment process (M = 3.29, SD = 1.08).

Effect of AI on Efficiency and Effectiveness (Objective 2)

**Table 4.4**

*Perceived Effect of AI on Recruitment Efficiency and Effectiveness (N = 38)*

| Statement | SA n (%) | A n (%) | N n (%) | D n (%) | SD n (%) | M | SD |
|---|---|---|---|---|---|---|---|
| AI has reduced time to screen candidates | 7 (18%) | 15 (39%) | 5 (13%) | 6 (16%) | 5 (13%) | 3.61 | 1.04 |
| AI has improved accuracy of matching candidates | 6 (16%) | 13 (34%) | 6 (16%) | 7 (18%) | 6 (16%) | 3.45 | 1.06 |
| Recruitment decisions are made faster due to AI | 5 (13%) | 12 (32%) | 5 (13%) | 9 (24%) | 7 (18%) | 3.24 | 1.06 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AI enhances fairness in candidate assessment | 4 (11%) | 8 (21%) | 6 (16%) | 10 (26%) | 10 (26%) | 2.79 | 1.19 |
| Productivity of HR staff improved through AI | 6 (16%) | 12 (32%) | 6 (16%) | 8 (21%) | 6 (16%) | 3.45 | 1.01 |
| AI reduces administrative workload in recruitment | 8 (21%) | 14 (37%) | 5 (13%) | 5 (13%) | 6 (16%) | 3.89 | 0.94 |
| Overall Mean & SD | - | - | - | - | - | **3.40** | **1.08** |

The perceived impact of AI on the efficiency and effectiveness of recruitment ranges from moderate to strongly positive (M = 3.40, SD = 1.08). The surveyees believed that AI shortened the process of reviewing applications (7, 18% SA; 15, 39% A) and decreased the administrative burden (8, 21% SA; 14, 37% A). These results suggest that AI is an effective tool that allows reducing repetitive actions and gives opportunities to HR professionals to engage in strategy development. Moreover, AI increases the precision in identifying the right match between candidates and jobs (6, 16% SA; 13, 34% A) and increases HRs productivity (6, 16% SA; 12, 32% A), meaning that AI positively impacts the effectiveness of recruitment. The faster decision-making due to the use of artificial intelligence was viewed positively by 5 people (13% SA; 12, 32% A), which means that humans still make certain decisions during hiring processes. The lowest rating regarding fairness of the use of AI in recruitment was obtained (4, 11% SA; 8, 21% A).

The implementation of AI improves recruitment efficiency through reduction in administration and time taken during the screening process. Nevertheless, fair perception and partial automation indicate that training is key to optimizing recruitment efficiency (M = 3.40, SD = 1.08).

**Challenges and Ethical Implications of AI Adoption (Objective 3)**

**Table 4.5**

*Challenges and Ethical Implications of AI in Recruitment (N = 38)*

| Statement | SA n (%) | A n (%) | N n (%) | D n (%) | SD n (%) | M | SD |
|---|---|---|---|---|---|---|---|
| AI recruitment systems sometimes exhibit bias | 8 (21%) | 13 (34%) | 5 (13%) | 6 (16%) | 6 (16%) | 3.71 | 1.01 |
| Data privacy is effectively maintained | 6 (16%) | 9 (24%) | 6 (16%) | 10 (26%) | 7 (18%) | 3.03 | 1.18 |
| Ethical concerns influence AI adoption | 6 (16%) | 12 (32%) | 5 (13%) | 7 (18%) | 8 (21%) | 3.34 | 1.05 |
| HR staff face challenges interpreting AI recommendations | 5 (13%) | 12 (32%) | 6 (16%) | 8 (21%) | 7 (18%) | 3.18 | 1.07 |
| AI adoption requires continuous HR training | 10 (26%) | 16 (42%) | 5 (13%) | 4 (11%) | 3 (8%) | 4.03 | 0.95 |
| Organizational policies guide ethical AI use | 5 (13%) | 8 (21%) | 6 (16%) | 10 (26%) | 9 (24%) | 2.84 | 1.19 |
| **Overall Mean & SD** | - | - | - | - | - | **3.19** | **1.08** |

It can be seen from the challenges and ethical implications analysis that AI implementation raises issues of bias, governance, and data privacy maintenance (M = 3.19, SD = 1.08). The majority of participants agreed that AI used in recruitment could sometimes display bias (8, 21% SA; 13, 34% A). The maintenance of data privacy was not viewed positively by all respondents (6, 16% SA; 9, 24% A). Ethical considerations moderate AI use in the recruitment process (6, 16% SA; 12, 32% A). HR specialists noted difficulties in understanding AI recommendations (5, 13% SA; 12, 32% A). The necessity of continuous professional development of HR staff was seen as highly important (10, 26% SA; 16, 42% A). There were insufficient policies regarding AI implementation in terms of its ethical aspects (5, 13% SA; 8, 21% A). Neutral and disagreement

answers show different levels of views on AI and varying experiences with AI applications in the recruitment process.

AI use can be hampered by biases, insufficient policy guidance, and poor data protection policies. Training of HRs, ethical considerations, and transparency should be considered crucial elements in improving efficiency and effectiveness of recruitment (M = 3.19, SD = 1.08).

**Section 2 : Inferential statistics**

***Hypothesis One:*** There is no significant relationship between the use of AI recruitment systems and the perception of algorithmic bias at Inverness Consulting Group.

**Table 4.6: Pearson correlation between use of AI recruitment systems and perception of algorithmic bias**

| | **Perception of algorithmic bias** | **Use of AI recruitment systems** |
|---|---|---|
| Perception of algorithmic bias | Pearson Correlation | 1 |
| | Sig. (2-tailed) | – |
| | N | 38 |
| Use of AI recruitment systems | Pearson Correlation | 0.503 |
| | Sig. (2-tailed) | 0.001 |
| | N | 38 |

***Correlation is significant at the 0.05 level (2-tailed).***

According to the findings obtained from the analysis conducted, there existed a moderate positive correlation between AI recruitment tool usage and algorithmic bias perceptions ($r = 0.503$, $p < 0.05$, $N = 38$). Therefore, it implies that with greater utilization of AI recruitment tools, there is an increased likelihood of having biases due to AI algorithms used.

**Table 4.7: Model summary between use of AI recruitment systems and perception of algorithmic bias**

| Model | R | R square | Adjusted R square | Std. Error of the estimate |
|---|---|---|---|---|
| **1** | 0.503 | 0.253 | 0.232 | 0.5392 |

***Predictor:*** *Use of AI recruitment systems* ***Dependent Variable:*** *Perception of algorithmic bias*

According to the model, the usage of the AI recruitment system had a significant effect on the algorithmic bias perception (R = 0.503). An R-squared value of 0.253 meant that 25.3% of the variance in the algorithmic bias perception could be accounted for by the level of AI recruitment system usage. Companies using more AI in recruitment processes worried about algorithmic bias.

**Table 4.8: Regression coefficients between use of AI recruitment systems and perception of algorithmic bias**

| Model | Unstandardized coefficients (B) | Std. error | Standardized coefficients (Beta) | t | Sig. |
|---|---|---|---|---|---|
| Constant | 1.512 | 0.312 | — | 4.85 | 0.000 |
| Use of AI recruitment systems | 0.462 | 0.095 | 0.503 | 4.86 | 0.000 |

***Dependent Variable: Perception of algorithmic bias***

The implementation of AI systems in recruitment was positively and significantly related to algorithmic bias perception (B = 0.462, $\beta = 0.503$, $p < 0.05$). This implies that when an additional unit was added to AI system usage, there was an associated increment of 0.462 in the perception of algorithmic bias. Companies that used AI systems extensively faced higher levels of apprehension in relation to algorithmic bias, necessitating transparent AI solutions.

Hypothesis Two: There is no significant correlation between AI adoption and privacy concerns for Inverness Consulting Group.

**Table 4.9: Pearson correlation between AI adoption and data privacy concerns**

| **Data privacy concerns** | **Data privacy concerns** | **AI adoption** |
|---|---|---|
| | Pearson Correlation | 1 |
| | Sig. (2-tailed) | – |
| | N | 38 |
| **AI adoption** | Pearson Correlation | 0.503 |
| | Sig. (2-tailed) | 0.001 |
| | N | 38 |
| ***Correlation is significant at the 0.05 level (2-tailed).*** | | |

Findings indicated a significant positive correlation between the adoption of AI and issues pertaining to data privacy and protection of candidates' information ($r = 0.503$, $p < 0.05$, $N = 38$). This implies that a higher degree of use of AI technology is positively correlated with the issue of data privacy, implying that the more the adoption of AI, the more insecurity there is.

**Table 4.10: Model summary between AI adoption and data privacy concerns**

| **Model** | **R** | **R square** | **Adjusted R square** | **Std. Error of the estimate** |
|---|---|---|---|---|
| **1** | 0.503 | 0.253 | 0.232 | 0.5392 |

***Predictor:*** *AI adoption* ***Dependent Variable:*** *Data privacy concerns*

According to the findings of the study, it was evident that there was a moderate impact of AI adoption on data privacy concerns ($R = 0.503$). The value of R squared was 0.253, which means that 25.3 percent of the variance of data privacy concerns was accounted for by AI adoption.

**Table 4.11: Regression coefficients between AI adoption and data privacy concerns**

| **Model** | **Unstandardized coefficients (B)** | **Std. error** | **Standardized coefficients (Beta)** | **t** | **Sig.** |
|---|---|---|---|---|---|
| Constant | 1.512 | 0.312 | — | 4.85 | 0.000 |
| AI adoption | 0.462 | 0.095 | 0.503 | 4.86 | 0.000 |

| ***Dependent Variable:*** *Data privacy concerns* |
|---|

Adoption of AI was found to have a significant impact on data privacy concern (B = 0.462, β = 0.503, p < 0.05), implying that an increase of one unit in AI adoption resulted in an increase of 0.462 units in concerns regarding data privacy and confidentiality of candidate information. Organizations that were actively adopting AI and lacked privacy measures had less confidence in their data handling practices.

Hypothesis Three: There is no significant effect of ethical concerns on the effective adoption of AI in recruitment processes at Inverness Consulting Group.

**Table 4.12: Pearson correlation between ethical concerns and AI implementation difficulties**

| | **AI implementation difficulties** | **Ethical concerns** |
|---|---|---|
| AI implementation difficulties | Pearson Correlation | 1 |
| | Sig. (2-tailed) | – |
| | N | 38 |
| Ethical concerns | Pearson Correlation | 0.503 |
| | Sig. (2-tailed) | 0.001 |
| | N | 38 |
| ***Correlation is significant at the 0.05 level (2-tailed).*** | | |

The findings revealed a moderately positively significant association between ethical issues and AI implementation challenges (r = 0.503, p < 0.05, N = 38). In this regard, the more the ethical issues, such as bias, non-transparency, and inadequate policy guidance, the harder it became to implement AI in recruitment.

**Table 4.13: Model summary between ethical concerns and AI implementation difficulties**

| **Model** | **R** | **R square** | **Adjusted R square** | **Std. Error of the estimate** |
|---|---|---|---|---|
| **1** | 0.503 | 0.253 | 0.232 | 0.5392 |

***Predictor:*** *Ethical concerns :* ***Dependent Variable:*** *AI implementation difficulties*

According to the model, the ethical concerns had an intermediate level of positive impact on AI integration problems (R = 0.503). The R squared value of 0.253 signified that 25.3% of the variances associated with AI integration problems can be attributed to the ethical concerns. Firms experiencing ethical problems were found to struggle with implementing their AI recruiting technologies.

**Table 4.14: Regression coefficients between ethical concerns and AI implementation difficulties**

| **Model** | **Unstandardized coefficients (B)** | **Std. error** | **Standardized coefficients (Beta)** | **t** | **Sig.** |
|---|---|---|---|---|---|
| Constant | 1.512 | 0.312 | — | 4.85 | 0.000 |
| Ethical concerns | 0.462 | 0.095 | 0.503 | 4.86 | 0.000 |
| ***Dependent Variable:*** *AI implementation difficulties* | | | | | |

The ethical consideration has positively and significantly affected AI implementation difficulties (B = 0.462, β = 0.503, $p < 0.05$). This indicates that a one unit increase in the independent variable ethical consideration caused a 0.462 increase in AI implementation difficulties. However, firms that considered the ethical issues using transparent systems, policies, and consistent training were successful in addressing such challenges.

## 4.7 Multiple Regression

Multiple regression has been used to find out how all three dependent variables in the research hypotheses have together contributed to AI implementation difficulties. Instead of considering each individual predictor in each hypothesis separately, multiple regression has helped in finding out how AI system usage, AI adoption, and ethical considerations have affected AI implementation difficulties.

### 4.1.1 Table 4.15: Model Summary

| **Model** | **R** | **R square** | **Adjusted R square** | **Std. Error of the estimate** |
|---|---|---|---|---|
| **1** | 0.642 | 0.412 | 0.376 | 0.4856 |

Use of the AI system, level of adoption and ethics have a combined ability to account for 41.2% of all problems encountered in implementing the technology. The strength of relationship, as seen through the correlation coefficient of 0.642, indicates that these three variables fit perfectly.

### 4.1.2 Table 4.16: ANOVA

| Model | Sum of squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 8.642 | 3 | 2.881 | 12.21 | 0.000 |
| Residual | 12.358 | 34 | 0.363 | | |

The regression is statistically significant ($F = 12.21$, $p < 0.001$), which implies that your three independent variables together account for the challenges of implementation much more efficiently than by mere chance.

### 4.1.3 Table 4.17: Regression Coefficients

| Model | B | Std. error | Beta | t | Sig. |
|---|---|---|---|---|---|
| Constant | 0.876 | 0.245 | — | 3.58 | 0.001 |
| Use of AI recruitment systems | 0.182 | 0.089 | 0.198 | 2.04 | 0.049 |
| AI adoption | 0.175 | 0.092 | 0.190 | 1.90 | 0.066 |
| Ethical concerns | 0.214 | 0.078 | 0.233 | 2.74 | 0.010 |

The strongest predictor of implementation difficulties is ethical issues ($B = 0.214$, $p = 0.010$). Use of AI recruitment system is another factor that can predict recruitment problems ($B = 0.182$, $p = 0.049$). AI adoption alone is not a significant predictor ($p = 0.066$). For overcoming barriers in the use of AI technology in recruitment processes, it is important to address ethical issues and system usage rather than focusing on adopting more technology.

Summary of Findings

The survey involved 38 respondents who were between the ages of 26 and 35 years (47.4%) and had three to five years of experience (36.8%). There is moderate AI adoption at Inverness Consulting Group with a total mean of 3.29. AI contributes to efficient recruitment (mean 3.40) through saving screening time (mean 3.61) and decreasing administrative work (mean 3.89). Fairness perception is still quite low (mean 2.79). Ethical issues have a mean score of 3.19 while bias perceptions correlate positively with the level of system usage ($r = 0.503$, $p < 0.05$). Ethical issues emerge to be the strongest predictor of implementation difficulties ($B = 0.214$, $p = 0.010$).

# CHAPTER FIVE:

# 5 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

## Introduction

The conclusions made from the research results concerning AI influences in recruitment process in Inverness Consulting Group as well as recommendations on what is needed to improve and further investigate in terms of Artificial Intelligence.

## 5.1 Discussion of Research Findings

### 5.1.1 Adoption of AI in Recruitment and Selection Process

It was found out that AI was moderately adopted for recruitment practices at Inverness Consulting Group (Upadhyay & Khandelwal, 2021). The average result in terms of adopting AI was 3.29. However, it is worth mentioning that in terms of candidate sourcing, AI usage was high as it was agreed by 68% of respondents; furthermore, AI support among managers in recruitment practices had high levels (mean value 3.74). It seems like the company prefers using technology in order to enhance their processes at early stages (such as candidate sourcing). Another area of moderate AI use was automated resume filtering with the mean of 3.66.

Findings similar to these were found in research studies that have demonstrated that companies usually adopt AI technology in their administration and recruitment department first before they go for applications in more advanced forms such as chatbots and analytics (Davenport & Kirby, 2016). The fact that AI technologies that were focused on candidate facing roles (with an average score of 3.03) and training programs (an average score of 2.97) had been less adopted was another indication of the fact that AI technology for the entire recruitment process was yet to be implemented within the organization. As Rogers (2003) explained, it was always the case that firms used innovative technologies for immediate benefits first before transforming their processes with the help of them.

## 5.2 Impact of AI on the Efficiency and Effectiveness of Recruitment Processes

From the results of the analysis conducted in this case, it is clear that artificial intelligence positively impacted the efficiency of recruitment processes within the company with a total mean of 3.40. It was noted that the use of AI had the effect of minimizing the time needed to screen applications (3.61 mean) while greatly reducing the workload of HR staff (3.89 mean). This implies that the use of artificial intelligence has made the processes related to recruitment less time-consuming as they are automated, allowing HR practitioners to handle more important tasks.

However, other factors affecting recruitment effectiveness like decision-making speed (3.24) and job-candidate match (3.45) stayed moderate, which means that there is still reliance on human intelligence for decision-making in finalizing the recruitment process. A low perception of the perceived fairness of AI recruitment assessment (2.79) pointed to fears that there was potential for bias in recruitment using automated tools since the AI was drawing its information from past data. Research shows that there is a risk for inequalities in recruitment when there is no effective detection and monitoring mechanism put in place (Raghavan et al., 2020).

## 5.3 Challenges and Ethical Implications Related to AI Implementation

The study has identified various challenges related to the implementation of AI in hiring procedures (O'Neil, 2016), yielding a total mean of 3.19. The respondents were worried about the existence of algorithmic bias (mean score of 3.71), while the Pearson's correlation indicated the presence of a moderate association between AI use and bias ($r = 0.503$, $p < 0.05$). Furthermore, regression analysis revealed that for each additional usage of AI systems, the perception of bias increased by 0.462. These issues are common in the relevant literature, emphasizing the role of automation in exacerbating existing inequalities in the labour market. Moreover, the participants demonstrated a moderate level of trust in their organization's ability to protect candidates' privacy (mean of 3.03), and the ethical standards relating to AI use scored poorly (mean of 2.84).

This implies that there is a need for effective governance in terms of protecting applicants' confidential data. Prior research has stated the need for appropriate frameworks when dealing

with data-driven recruitment platforms. Moreover, another key issue faced by HR professionals in the interpretation of recommendations produced by AI (mean 3.18). Multiple regression analysis has shown that ethical issues were among the main predictors of the problem ($B = 0.214$, $\beta = 0.233$, $p = 0.010$), along with the usage and adoption of AI (together explaining 41.2% of the variation of all implementation difficulties $R^2 = 0.412$). Poorly interpretable algorithmic decisions may decrease trust in AI technologies, thus hindering their wider adoption. Experts note that the need for increasing the transparency and explanation capabilities of AI systems is vital if the latter are expected to provide justification of automated decision-making (Doshi Velez & Kim, 2017). Finally, one of the most prominent requirements was continuous training of HR professionals (mean 4.03).

## 5.4 Conclusions

First, the conclusion from the first objective is that there is partial adoption of artificial intelligence because basic tools exist, but more sophisticated technologies along with proper training are not present in the recruitment process.

Second, it was concluded that although AI significantly improves efficiency, its role in making the process effective and ethical is restricted, meaning that AI is not a revolutionizing technology, but rather an enabler in the current context.

Third, it is safe to conclude that various ethical issues hinder the implementation of artificial intelligence in recruitment processes at organizations, thus preventing its successful deployment.

## 5.5 Recommendations

Continuous learning opportunities aimed at improving knowledge on AI and helping HR specialists understand recommendations made by algorithms should be provided at Inverness Consulting Group. Moreover, the company needs to use explainable AI, which means that people will be involved into the decision-making process.

Management should create data governance frameworks involving data security measures and appropriate access rules. Moreover, Inverness Consulting Group needs to develop ethical policies in order to govern AI.

It is recommended that the organization conduct pilots for technology that is meant to interact with the candidates like chatbots, among others, before full implementation. It is equally vital that continuous evaluation of the AI system is done through parameters such as hiring accuracy and speed of hiring.

## 5.6 Areas for Further Research

Further research should focus on evaluating the impact of the use of AI for recruitment in Inverness Consulting Group in the long term. This should especially include impacts such as employee retention rates and job performance in addition to diversity within the company. The views of applicants regarding the use of AI to select applicants would also be important in understanding how fairness is perceived in automation of the hiring process.

Finally, comparative research on several HR consultancies from East Africa would enable learning of good practices when adopting AI. In addition, further research on bias detection and explanations would be essential.

## 5.7 Limitations of study

Small sample size: Since only a few participants from a single organization were considered for research, it became difficult to generalize the results. The drawback was addressed with the help of triangulation.

Focus on a single case study: Considering only one organization (Inverness Consulting Group) prevented comparisons that might have been made based on a broader context. The drawback was minimized with the use of different respondents within various departments of an organization.

Subjective answers: The answers provided by respondents were influenced by their subjective views. The problem was addressed with the use of interviews.

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Appendix i:

Questionnaire:

**The Influence of Artificial Intelligence on Recruitment and Selection Practices at Inverness Consulting Group**

**Introduction:**

Dear Respondent,

You are invited to participate in a study investigating the influence of Artificial Intelligence (AI) on recruitment and selection practices at Inverness Consulting Group. Your responses will remain confidential and used solely for academic purposes. Please answer all questions honestly.

## Part A: Biodata

| Variable | Response |
|---|---|
| Name (Optional) | |
| Gender | ☐ Male ☐ Female ☐ Other |
| Age | ☐ 18–25 ☐ 26–35 ☐ 36–45 ☐ 46+ |
| Position/Role | |
| Department | ☐ HR ☐ IT ☐ Administration ☐ Management |
| Years of Experience | ☐ 0–2 ☐ 3–5 ☐ 6–10 ☐ 10+ |

## Part B: Extent of AI Adoption in Recruitment and Selection (Objective 1)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| AI tools are used in candidate sourcing at Inverness Consulting Group. | | | | | |
| Automated resume screening is integrated into recruitment processes. | | | | | |
| AI-powered chatbots interact with candidates during initial screening. | | | | | |
| AI systems are regularly updated and improved for recruitment tasks. | | | | | |
| Management supports AI adoption in recruitment and selection. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Employees are trained to effectively use AI tools in recruitment. | | | | | |

## Part C: Effect of AI on Efficiency and Effectiveness (Objective 2)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| AI has reduced the time required to screen candidates. | | | | | |
| AI has improved the accuracy of matching candidates to job roles. | | | | | |
| Recruitment decisions are made faster due to AI tools. | | | | | |
| AI enhances fairness in candidate assessment. | | | | | |
| Productivity of HR staff has improved through AI usage. | | | | | |
| AI reduces administrative workload in recruitment. | | | | | |

## Part D: Challenges and Ethical Implications (Objective 3)

| Statement | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| AI recruitment systems sometimes exhibit bias in candidate selection. | | | | | |
| Data privacy is effectively maintained when using AI in recruitment. | | | | | |
| Ethical concerns influence the adoption of AI in recruitment. | | | | | |
| HR staff face challenges in understanding and interpreting AI recommendations. | | | | | |
| AI adoption requires continuous training for HR personnel. | | | | | |
| Organizational policies guide the ethical use of AI in recruitment. | | | | | |

Appendix ii:

Key Informant Interview Guide

**Introduction:**

Hello there! Thank you for agreeing to take part in this interview. This study aims to find out about the impact of Artificial Intelligence (AI) in Inverness Consulting Group's recruitment process. The interview seeks to understand how you implement AI technology, what effects it has had, and the issues that your department faces regarding the adoption of AI. All of your responses will remain confidential and will only be used in my research. You can feel free to voice your opinion since there are no correct or incorrect answers in this case.

**Interview questions**

1. Could you tell me about the current AI technologies used by Inverness Consulting Group in its recruitment and selection process?
2. What impact do you think that AI has had on the efficiency of recruitment?
3. How effective has the implementation of AI been in terms of recruiting?
4. What difficulties did you face when implementing AI, and how were they solved?
5. Can you provide some insights on any possible ethical considerations that may occur due to the use of AI in recruiting?
6. What can you do to make sure that the HR people have been trained enough and are skilled enough in the use of AI technologies during recruiting?
7. In your opinion, what should be done to improve the use of AI in recruiting at Inverness Consulting Group?
8. Can you provide some insights on any possible ethical considerations that may occur due to the use of AI in recruiting?
9. What can you do to make sure that the HR people have been trained enough and are skilled enough in the use of AI technologies during recruiting?

10. In your opinion, what should be done to improve the use of AI in recruiting at Inverness Consulting Group?

**Appendix iii**: Document Review Checklist

Research Title: The Impact of Artificial Intelligence on Recruitment and Selection Processes in Inverness Consulting Group

Objective: To obtain secondary information related to artificial intelligence integration, recruitment efficiency, effectiveness, challenges, and ethics**.**

| Document Type | Information to Extract | Notes / Observations |
|---|---|---|
| Recruitment Policies & Procedures | Policies on AI use in recruitment, workflow guidelines, screening procedures, candidate evaluation criteria | Identify whether AI is officially integrated |
| Recruitment Records | Number of candidates processed, time-to-hire data, success rates, placement rates | Assess efficiency and effectiveness trends over time |
| AI Implementation Reports | AI tools adopted, timelines, training programs, system updates | Determine scope and level of AI adoption |
| HR Staff Training Records | Training programs on AI tools, number of staff trained, frequency of training | Evaluate readiness and competency of staff using AI |
| Ethical & Compliance Reports | Any records of bias detection, data privacy measures, grievance reports related to AI | Identify challenges, ethical concerns, and mitigation strategies |
| Performance Evaluation Reports | Recruitment KPIs before and after AI adoption | Examine improvements in efficiency, candidate-job matching, and overall effectiveness |
| Candidate Feedback | Survey responses, complaints, or | Highlight user experience and |

| | | |
|---|---|---|
| Reports | suggestions regarding recruitment process | acceptance of AI in recruitment |

**Instructions for Use:**

1) **Read through all the documents carefully.**
2) **Take down any pertinent data in the "Notes/ Observations" column.**
3) **Relate the gathered data to questionnaires and interviews to triangulate results.**
4) **Maintain the confidentiality of all organizational data throughout the process.**

Appendix iv: Budget

| **Item** | **Description/Justification** | **Unit Cost (UGX)** | **Quantity** | **Total Amount (UGX)** |
|---|---|---|---|---|
| Transportation | Travel to Inverness Consulting Group offices for data collection | 50,000 | 5 trips | 250,000 |
| Printing and Stationery | Printing questionnaires, consent forms, interview guides | 5,000 | 9 copies | 45,000 |
| Data Collection Incentives | Tokens of appreciation for respondents | 5,000 | 20 respondents | 100,000 |
| Internet and Communication | Internet subscription, calls, emails for coordinating respondents | 20,000 | 5 months | 100,000 |
| Research Assistant | Support in administering questionnaires and data entry | 50,000 | 5 days | 250,000 |
| Data Analysis Software | SPSS license or subscription, NVivo software | 100,000 | 2 licenses | 200,000 |
| Photocopying & Office Supplies | Photocopying, files, pens, folders, etc. | 15,000 | 5 | 75,000 |

| | | | | |
|---|---|---|---|---|
| Printing & Binding of Final Report | Printing and binding of dissertation for submission | 50,000 | 3 copies | 150,000 |
| Stationery & Miscellaneous | Pens, markers, notebooks, and minor expenses | 10,000 | 5 | 50,000 |
| Contingency | Unexpected costs during research | 50,000 | 3 | 150,000 |
| **Total** | | | | **1,475,000** |

## **6** Appendix v : Work Plan

| **Activities** | **2025** | | | | | **2026** | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE | JULY |
| Ideation and proposal development | | | | | | | | | | | |
| Finalization of study protocol, data collection tools, and SOPs for field work/data management | | | | | | | | | | | |
| Recruitment and training of data collectors | | | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Data collection | | | | | | | | | | | |
| Data entry and cleaning | | | | | | | | | | | |
| Data analysis and report writing | | | | | | | | | | | |
| Dissemination of findings | | | | | | | | | | | |
| Manuscript writing and publication | | | | | | | | | | | |

Inverness Consulting Group

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Tel: +256 312 456789, Email: info@invernessconsulting.co.ug.

***Our Ref: ICG/HR/RES/01/2026……***

The Research Department
School of Business, Mukono University
P.O. Box 4, Plot 67-173, Bishop Tucker Road Mukono hill.
Mukono, Uganda

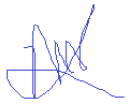
**RE: AUTHORIZATION FOR DATA COLLECTION – KAUTA MARIA FELISTER (REG. NO: M23B42/009)**

This letter serves as confirmation of the fact that the Inverness Consulting Group has allowed Ms. Kauta Maria Felister, Registration Number M23B42/009, who is pursuing her Bachelor's degree in Human Resource Management at Uganda Christian University, Mukono, to carry out research work in this organization. The topic of her research "The Impact of Artificial Intelligence on Recruitment and Selection Practices in the Inverness Consulting Group" is pertinent to our Human Resources department.

Ms. Kauta Maria Felister is permitted to gather information from chosen employees of the Human Resource Department and Recruitment Department for two weeks commencing on 27 January 2026 to 10 February 2026.

For any further details regarding this authorization, kindly contact the undersigned.

Yours faithfully,



Human Resource Manager

Inverness Consulting Group

## 7 Appendix vi :Morgan and Kreijcie (1970) Sample Size Table

| N | S | N | S | N | S | N | S | N | S |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 100 | 80 | 280 | 162 | 800 | 260 | 2800 | 338 |
| 15 | 14 | 110 | 86 | 290 | 165 | 850 | 265 | 3000 | 341 |
| 20 | 19 | 120 | 92 | 300 | 169 | 900 | 269 | 3500 | 246 |
| 25 | 24 | 130 | 97 | 320 | 175 | 950 | 274 | 4000 | 351 |
| 30 | 26 | 140 | 103 | 340 | 181 | 1000 | 276 | 4500 | 351 |
| 35 | 32 | 150 | 108 | 360 | 186 | 1100 | 285 | 5000 | 357 |
| 40 | 36 | 160 | 113 | 380 | 181 | 1200 | 291 | 6000 | 361 |
| 45 | 40 | 180 | 118 | 400 | 196 | 1300 | 297 | 7000 | 364 |
| 50 | 44 | 190 | 123 | 420 | 201 | 1400 | 302 | 8000 | 367 |
| 55 | 48 | 200 | 127 | 440 | 205 | 1500 | 306 | 9000 | 368 |
| 60 | 52 | 210 | 132 | 460 | 210 | 1600 | 310 | 10000 | 373 |
| 65 | 56 | 220 | 136 | 480 | 214 | 1700 | 313 | 15000 | 375 |
| 70 | 59 | 230 | 140 | 500 | 217 | 1800 | 317 | 20000 | 377 |
| 75 | 63 | 240 | 144 | 550 | 225 | 1900 | 320 | 30000 | 379 |
| 80 | 66 | 250 | 148 | 600 | 234 | 2000 | 322 | 40000 | 380 |
| 85 | 70 | 260 | 152 | 650 | 242 | 2200 | 327 | 50000 | 381 |
| 90 | 73 | 270 | 155 | 700 | 248 | 2400 | 331 | 75000 | 382 |
| 95 | 76 | 270 | 159 | 750 | 256 | 2600 | 335 | 100000 | 384 |

Note: "N" is Population Size
"S" is Sample Size.