AI Based Recruitment in Libya: A Field Analysis of Societal Acceptance and Perceptions

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■ **Abstract:**

Artificial intelligence (AI) has increasingly transformed organizational recruitment practices by supporting decision-making, improving efficiency, and enhancing candidate selection processes. This study investigates perceptions and acceptance of AI-based e-recruitment systems within organizational and higher education contexts in Libya. A quantitative research approach was employed using a structured questionnaire administered to 60 respondents from universities, higher education institutes, and business organizations.

The findings indicate a generally positive attitude toward AI-supported recruitment, particularly regarding decision accuracy, reduced recruitment time, and improved selection effectiveness. However, respondents expressed reservations toward fully automated recruitment processes and emphasized the continued importance of human involvement in hiring decisions.

The results suggest that hybrid recruitment models, combining AI-driven tools with human judgment, are perceived as the most appropriate approach for organizational decision-making. This study contributes to the information systems and organizational sciences literature by providing empirical insights into AI adoption in recruitment and its implications for organizational effectiveness and decision support.

● **Keywords:** Artificial Intelligence; AI-Based E-Recruitment; Technology Adoption; Higher Education; Societal Perceptions; Libya.

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■ **المستخلص:**

يشهد الذكاء الاصطناعي (AI) تطورًا متزايدًا أسهم بشكل ملحوظ في تحويل إجراءات التوظيف داخل المؤسسات، من خلال دعمه لعمليات اتخاذ القرار، وتحسين الكفاءة، وتعزيز عمليات اختيار المرشحين. تهدف هذه الدراسة إلى استكشاف الانطباعات ومدى قبول أنظمة التوظيف الإلكتروني المعتمدة على الذكاء الاصطناعي في كلٍّ من المؤسسات التنظيمية ومؤسسات التعليم العالي في ليبيا. وقد اعتمدت الدراسة المنهج الكمي، وجُمعت البيانات باستخدام أداة جمع بيانات منظمة تم تطبيقها على عينة مؤلفة من 60 مشاركًا من الجامعات، ومؤسسات التعليم العالي، والمنظمات التجارية.

تشير النتائج إلى وجود اتجاه إيجابي عام نحو التوظيف المدعوم بالذكاء الاصطناعي، لا سيما فيما يتعلق بدقة اتخاذ القرار، وتقليل الوقت اللازم لعمليات التوظيف، وتحسين فعالية اختيار المرشحين. ومع ذلك، عبّر المشاركون عن بعض التحفظات تجاه الاعتماد الكامل على الأتمتة في عمليات التوظيف، مؤكدين على الأهمية المستمرة للدور البشري في اتخاذ قرارات التعيين.

وتُظهر النتائج أن نماذج التوظيف الهجينة، التي تجمع بين أدوات الذكاء الاصطناعي والحكم البشري، تُعد الخيار الأنسب لاتخاذ القرارات التنظيمية. وتسهم هذه الدراسة في إثراء أدبيات نظم المعلومات والعلوم التنظيمية من خلال تقديم رؤى تجريبية حول تبني الذكاء الاصطناعي في التوظيف وآثاره على الفاعلية التنظيمية ودعم القرار.

● **الكلمات المفتاحية:** الذكاء الاصطناعي؛ التوظيف الإلكتروني المعتمد على الذكاء الاصطناعي؛ تبني التكنولوجيا؛ التعليم العالي؛ التصورات المجتمعية؛ ليبيا

I. Introduction

Recruitment is a strategic organizational process that involves attracting, identifying, and selecting candidates whose skills and qualifications align with organizational requirements and objectives. With the advancement of information technology and artificial intelligence (AI), recruitment practices have undergone significant transformation, leading to the emergence of AI-based e-recruitment systems that automate and optimize multiple stages of the hiring process, including job posting, candidate screening, and selection (Aljuaid, 2021). These systems are designed to enhance organizational efficiency, consistency, and decision quality, addressing several limitations associated with traditional, manual recruitment methods.

As organizational operations become increasingly digitalized, organizations are required to adopt advanced information systems to maintain competitiveness and operational effectiveness. Effective employee selection is a critical factor for organizational success, as it directly influences workforce quality and overall performance. Consequently, organizations must implement recruitment strategies capable of identifying and selecting the most qualified candidates from a highly competitive labor market, while ensuring alignment with organizational goals and strategic priorities (Kavanagh & Johnson, 2017).

Artificial intelligence has become an integral component of contemporary organizational information systems, contributing significantly to improved decision-making and process optimization. AI technologies, grounded in machine learning algorithms, enable organizations to reduce recruitment-related costs, minimize wasted effort, and accelerate hiring processes, while simultaneously enhancing the accuracy and reliability of candidate evaluation and selection decisions (Aljuaid & Abbod, 2020). In this context, AI-based e-recruitment systems function as decision-support tools that assist human resource professionals and organizational decision-makers.

Despite these technological advancements, recruitment processes—particularly within higher education institutions and public-sector organizations—remain largely manual in many contexts, resulting in delays, inefficiencies, and limited transparency for applicants (Aljuaid, 2021). This gap highlights the growing need for AI-supported e-recruitment systems that can modernize recruitment practices and support more effective and data-driven decision-making within organizations.

Understanding organizational acceptance and user perceptions of AI-based recruitment systems is therefore essential for successful implementation. Issues related to trust, fairness, transparency, and the role of human judgment continue to influence attitudes toward AI-supported decision-making in recruitment. Examining these perceptions provides valuable insights into how AI technologies can be effectively integrated into organizational recruitment processes without fully replacing human involvement.

Accordingly, this study aims to examine the level of awareness, acceptance, and perceptions of AI-supported e-recruitment systems among participants in

Libya, with particular emphasis on universities, higher education institutes, and business organizations. By adopting a quantitative research approach, the study seeks to assess the perceived impact of AI on recruitment decision-making, organizational efficiency, and candidate selection processes. The findings contribute to the literature on information systems and organizational sciences by providing empirical evidence on AI adoption in recruitment and by highlighting the importance of hybrid recruitment models that combine intelligent systems with human judgment.

The remainder of this paper is structured as follows. Section II reviews the relevant literature on recruitment strategies and AI-based e-recruitment systems. Section III presents the research methodology, including the study design, sampling approach, and data analysis procedures. Section IV analyses the impact of artificial intelligence on e-recruitment decision-making based on the empirical findings. Finally, Section V concludes the study and highlights the main findings and directions for future research.

II. Literature Review

Using efficient recruitment strategies enables organizations to attract and retain employees with high potential, which in turn supports effective talent management and overall organizational performance (Aljuaid, 2021; Kumar, Garg, & Pvt, 2010). Recruitment practices have evolved significantly since the 1990s, driven by globalization, increased competition, and advances in technology that have expanded the demand for talented professionals (Lewis, Daunton, Thomas, & Sanders, 2010).

The growth of internet technologies has encouraged organizations to adopt electronic or online recruitment methods as an alternative to traditional hiring approaches (Breaugh & Starke, 2000). E-recruitment allows employers to post job vacancies online, receive and filter applications electronically, and communicate efficiently with candidates. This approach reduces administrative costs, shortens recruitment timelines, and broadens the range of potential applicants (Aljuaid & Abbod, 2020; Greiner, 2004).

E-recruitment also promotes fairness and transparency in the selection process, as digital systems standardize candidate evaluation and minimize

potential bias (Swider, Zimmerman, & Barrick, 2015). Moreover, online recruitment supports strategic human resource objectives, helping organizations attract skilled individuals whose competencies align with organizational goals and culture (Dineen & Williamson, 2012).

In Libya, both public and private institutions have started to adopt digital recruitment tools to modernize their human resource management systems. Although this transformation remains at an early stage due to infrastructural and technological challenges, the growing use of online job portals indicates an emerging awareness of the advantages of e-recruitment in enhancing transparency, efficiency, and accessibility (Ekhsan & Ernasari, 2022; Taktek, Brka, Shtewi, Ekare, & Zawawi, 2023).

The identification of suitable candidates constitutes a fundamental stage in the e-recruitment process, as it directly impacts the effectiveness of subsequent selection procedures. This stage involves recognizing potential applicants in accordance with organizational hiring requirements, including the specification of essential qualifications, competencies, and candidate attributes that inform the development of precise job descriptions and specifications (Holm, 2012). Furthermore, defining the relevant labor market segment to be targeted is essential for attracting qualified candidates. Through systematic e-recruitment practices, organizations are able to access a broader and more diverse applicant pool, thereby enhancing the likelihood of selecting the most appropriate candidates for vacant positions (Lavigna & Hays, 2004).

The types of recruitment process within an organization refers to the comprehensive procedure of attracting, shortlisting, and selecting suitable candidates for available positions (Breaugh & Starke, 2000). Generally, recruitment can be categorized into two main types: internal recruitment and external recruitment.

Internal recruitment involves filling job vacancies from within the organization through promotion or transfer of existing employees. This approach is often faster, more cost-effective, and administratively simpler, as managers already understand the skills, experience, and performance of their employees (Greiner, 2004). Promoting internal candidates also increases motivation and job satisfaction by rewarding commitment and competence (Marsden, 1994).

In contrast, external recruitment refers to hiring candidates from outside the organization. This process is typically managed by the human resources department using traditional methods—such as newspaper advertisements—or modern approaches, including online recruitment and job portals (Breaugh & Starke, 2000). External recruitment enables organizations to access a larger and more diverse pool of candidates, introducing new skills and innovative perspectives that can strengthen organizational performance (Dineen & Williamson, 2012; Marsden, 1994). However, this method tends to be more time-consuming and costly compared to internal recruitment (Ekhsan & Ernasari, 2022).

According to (Swider et al., 2015), the e-recruitment process includes multiple sequential stages aimed at selecting the most suitable candidate for a specific role. Two critical stages in this process are identifying hiring needs and developing a recruitment plan. These are followed by creating detailed job descriptions, posting and promoting vacancies, screening applications, conducting interviews, and making final hiring decisions (Dineen & Williamson, 2012). Human resource professionals are encouraged to follow these structured steps to ensure that the most appropriate candidates are selected for each position (Swider et al., 2015).

Applicant assessment constitutes a pivotal phase of the recruitment process, as it determines the extent to which candidates meet the requirements of vacant positions. This phase entails the systematic evaluation of application materials, including curricula vitae and supporting documents, to identify candidates whose qualifications, skills, and experience align with job specifications)Faliagka, Tsakalidis, & Tzimas, 2012 (. Candidates who demonstrate compatibility with the required criteria are subsequently shortlisted for further stages of the selection process (Holm, 2012).

In e-recruitment contexts, assessment plays a central role in ensuring alignment between applicant attributes and organizational needs. The integration of software-based assessment and scoring systems facilitates objective evaluation by producing quantitative measures that support informed hiring decisions (Lavigna & Hays, 2004), thereby enhancing efficiency and accuracy in candidate selection (Barber, 2006). Moreover,

the assessment process allows organizations to operate within defined time frames while retaining flexibility to adapt evaluation criteria in accordance with job requirements and managerial expectations (Laumer, von Stetten, & Eckhardt, 2009).

The final recruitment decision constitutes a critical stage in selecting the most suitable candidate. It is guided by assessment outcomes, short-listing results, and professional judgment, rather than solely by quantitative scores (Faliagka, Ramantas, Rigou, & Sirmakessis, 2017). Managers evaluate applicants' skills, qualifications, experience, and assessment performance to ensure objective and effective hiring decisions (Faliagka et al., 2012). However, biases, such as those introduced by employee referrals, may occasionally influence selection, highlighting the need for careful and impartial evaluation throughout the recruitment process (Faliagka et al., 2012).

Several machine learning techniques are utilized in AI-driven recruitment systems, including: Support Vector Machine (SVM): A machine learning approach used for classification and regression analysis that processes data and learns from examples to categorize or label objects effectively (Noble, 2006).

Deep Learning: A subset of machine learning that teaches computers to learn by example, replicating human cognitive processes. Deep learning represents a foundational technology behind innovations such as autonomous vehicles, enabling systems to recognize stop signs or distinguish pedestrians from static objects like lampposts (Zhang, Tan, Han, & Zhu, 2017).

Fuzzy Logic (FL) is an approach to variable processing that allows for multiple degrees of truth to be evaluated within a single variable. Unlike traditional binary logic, FL is designed to handle uncertainty and approximate reasoning, enabling systems to reach accurate and flexible conclusions even when input data are imprecise or incomplete (Mohd Adnan, Sarkheyli, Mohd Zain, & Haron, 2015).

In addition, several algorithms are commonly used for data ranking and optimization in recruitment-related applications. These include Linear Regression, Genetic Algorithm Optimization (Hoài, 2020), Particle Swarm Optimization (De Almeida & Coppo, 2019), and Artificial Neural Networks

(ANN). Each algorithm contributes uniquely to the analysis and prediction of candidate suitability by processing multidimensional data derived from applicant profiles (De Almeida & Coppo, 2019; Hoài, 2020).

Recent literature has increasingly emphasized the transformative role of artificial intelligence in recruitment and selection processes. In a comprehensive systematic review, examined the role of artificial intelligence in employee recruitment and highlighted its potential to enhance efficiency, accuracy, and consistency in hiring decisions. The study reports that AI-driven recruitment systems contribute to faster candidate screening, improved matching between job requirements and applicant profiles, and reduced administrative workload (Dadaboyev, Abdullayeva, Abbosova, Suleymenova, & Mamadjanova, 2025).

However, the review also underscores several critical challenges associated with AI-based recruitment, particularly ethical concerns related to fairness, transparency, and algorithmic bias. According to (Dadaboyev et al., 2025), while artificial intelligence can reduce certain forms of human bias, it may also reproduce or amplify existing biases if trained on unbalanced or biased datasets. Consequently, the authors stress the importance of maintaining human oversight and ethical governance in AI-supported recruitment systems.

Furthermore, the study highlights a growing consensus in recent research advocating for human–AI collaboration rather than full automation in recruitment decision-making. This hybrid approach is viewed as essential for preserving contextual judgment, ethical responsibility, and trust in recruitment outcomes. These findings are consistent with the present study, which reveals positive perceptions of AI-supported e-recruitment in Libya alongside strong preferences for retaining human involvement in hiring decisions(Dadaboyev et al., 2025).

In addition to general acceptance and reservations regarding AI in recruitment, recent studies emphasize the importance of AI literacy and system transparency for effective adoption and trust in AI-assisted decision-making (Kalff & Simbeck, 2025).

The effectiveness of the AIRec electronic recruitment platform depends primarily on the algorithms used to analyze candidate data and identify the most suitable applicants for available positions. In this context, the AIRec system incorporates an algorithmic model designed to support candidate ranking and

selection by comparing multiple analytical approaches. Candidate data were generated and processed to evaluate the performance of several algorithmic techniques commonly used in intelligent recruitment systems(Aljuaid, 2021).

The AIRec application employs a ranking mechanism based on four algorithmic approaches, including Linear Regression, Genetic Algorithm Optimization, Particle Swarm Optimization, and Artificial Neural Networks (ANN). These algorithms are used to assess candidate suitability by analyzing multiple input variables and generating ranked outputs. Prior empirical studies indicate that ANN-based models generally outperform alternative techniques in recruitment and decision-support applications, demonstrating higher predictive accuracy, greater stability, and better adaptability to complex datasets (Aljuaid, 2021).

In addition to algorithmic performance, system usability plays a critical role in the adoption of AI-based recruitment platforms. Previous research has utilized standardized usability evaluation instruments, such as the System Usability Scale (SUS), to assess effectiveness, efficiency, and user satisfaction. High reliability levels reported in earlier studies provide empirical support for the usability and practical applicability of AIRec-like systems in recruitment decision-making environments (Aljuaid, 2021).

Overall, the literature suggests that ANN-based approaches, combined with usability-focused system design, offer a robust and scalable foundation for AI-driven recruitment systems. Such frameworks enable objective and data-driven candidate evaluation while supporting informed decision-making in modern e-recruitment processes.

III. Research Methodology

This study adopts a quantitative research approach based on the administration of a structured questionnaire to investigate societal acceptance and perceptions of AI-based recruitment systems in Libya. The target population comprises job seekers, faculty members from Libyan universities and higher education institutes, and individuals from selected business organizations, representing diverse educational backgrounds and professional experiences.

The use of a structured quantitative questionnaire enables the systematic

collection of numerical data necessary to address the research questions and achieve the study objectives. The questionnaire was designed to capture key dimensions related to respondents' awareness, acceptance, and perceptions of AI-driven e-recruitment systems, ensuring alignment with the specific aims of the study and prior research instruments (Saunders, Lewis, & Thornhill, 2009). All survey items were formulated to assess the perceived impact of AI-based recruitment technologies within the Libyan context, while maintaining consistency with established measurement approaches in the literature (Aljuaid, 2021).

Sampling refers to the systematic process of selecting a subset of individuals from a target population to ensure that the sample adequately represents the broader population and supports reliable and generalizable findings (Saunders et al., 2009). In the present study, the research sample consisted of 60 participants, including job seekers, faculty members from Libyan universities and higher education institutes with varying educational levels, as well as individuals from business organizations. This diverse sample was intentionally selected to capture a wide range of perspectives on the societal acceptance and perceived impact of AI-based recruitment systems in Libya.

By engaging participants from multiple sectors and professional backgrounds, the structured questionnaire survey (Aljuaid, 2021; Samartha et al., 2022; Sarfaraz, 2017) enabled the collection of varied insights across different organizational contexts. This approach enhances the external validity and contextual relevance of the study, thereby strengthening the applicability of its findings to AI-driven recruitment practices in Libya.

Data analysis was conducted using descriptive statistical techniques, including graphical methods, to examine respondents' perceptions and levels of acceptance of AI-based recruitment systems. These techniques also supported the assessment of the questionnaire's internal reliability and validity. Overall, the applied analytical methods facilitated the identification of patterns and trends within the data, providing meaningful insights into societal acceptance and perceptions of AI-driven e-recruitment systems.

IV. Analysis of the Impact of Artificial Intelligence on E-Recruitment Decision-Making

Data were collected through a structured questionnaire (Aljuaid, 2021; Samartha et al., 2022; Sarfaraz, 2017), which was distributed electronically using Google Forms. The study sample consisted of 60 participants drawn from Libyan universities, higher education institutes, and various business organizations.

In terms of educational background, the majority of respondents held a diploma degree (35%, n = 21), followed by master's degree holders (31.7%). Participants with a bachelor's degree accounted for 20%, while 8.3% held a PhD, and 5% had secondary school education.

Regarding employment status, 33.3% of the respondents were full-time employees, 26.7% were part-time employees, and 28.3% were full-time students, while 11.7% were unemployed at the time of the survey. In terms of marital status, 53.3% of the respondents were married, whereas 43.3% were single. All participants completed the questionnaire based on their perceptions and experiences related to AI-based recruitment in Libya.

Regarding age distribution, 25% of the respondents were aged between 18–22 years, 13.3% were between 23–26 years, 15% were between 27–35 years, 21.7% were between 36–40 years, and 25% were between 41–60 years.

The responses to the questionnaire items are summarized and presented in Table 2, which provides an overview of participants' societal acceptance and perceptions of AI-driven e-recruitment systems.

To interpret respondents' perceptions, a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5) was employed. The mean scores derived from the Likert-scale responses, as presented in Table 1, were used as quantitative indicators to assess respondents' levels of agreement or disagreement with the questionnaire items (Williams, Onsman, & Brown, 2010). For interpretative purposes, the mean values were classified into predefined intervals, where scores between 3.4 and 4.19 indicate agreement, while values exceeding 4.2 reflect strong agreement. This classification approach ensured a consistent and objective interpretation of respondents' attitudes toward the study variables.

Table 1: Likert response mean values

Response	Mean value
1	1 to 1.79
2	1.8 to 2.59
3	2.6 to 3.39
4	3.4 to 4.19
5	4.2 to 5

Table 2 reports respondents' perceptions of the impact of artificial intelligence on decision-making within e-recruitment processes and reveals a predominantly positive overall evaluation. The mean scores across all survey items range from 3.35 to 3.95, exceeding the established minimum threshold of 3.4 on the five-point Likert scale. Accordingly, most items fall within the "agree" category based on the adopted classification criteria, indicating a general tendency toward agreement with the proposed statements and a favorable assessment of AI-related practices in the studied context.

Beyond the analysis of mean values, the distribution of responses further supports this positive trend. More than 66% of respondents selected "agree" or "strongly agree" across all AI-related items, demonstrating a high level of consistency in favorable perceptions toward the use of artificial intelligence in e-recruitment decision-making. This convergence of responses strengthens the reliability of the observed positive attitudes.

Several items exhibited particularly high levels of agreement. Notably, AI4 recorded the highest mean score (M = 3.95), reflecting strong recognition of the role of artificial intelligence in eliminating human biases from recruitment decisions and enhancing objectivity and fairness in the selection process. Similarly, items AI7, AI9, and AI11 reported mean values exceeding 3.80, indicating a clear consensus regarding the beneficial contribution of artificial intelligence to reducing the average time required to fill job vacancies, improving engagement between job seekers and organizations, and supporting

companies in accessing the most suitable talent available in the labor market.

In contrast, AI2 yielded a comparatively lower mean value (M = 3.47), suggesting a more moderate evaluation of the perceived fairness of artificial intelligence systems. This finding indicates some variability in respondents' perceptions and reflects cautious attitudes toward ethical considerations and potential limitations associated with AI-driven decision-making. Nonetheless, this reservation does not undermine the overall positive assessment observed across the remaining items.

Table 2: Survey responses - AI

Question	1	2	3	4	5	Mean	Direction
AI1	4(6.7)	9(15.0)	18(30.0)	20(33.3)	9(15.0)	3.35	4
AI2	3(5.0)	8(13.3)	20(33.3)	16(26.7)	13(21.7)	3.47	3
AI3	1(1.7)	5(8.3)	19(31.7)	28(46.7)	7(11.7)	3.58	4
AI4	1(1.7)	2(3.3)	18(30.0)	17(28.3)	22(36.7)	3.95	5
AI5	0(0.0)	3(5.0)	22(36.7)	23(38.3)	12(20.0)	3.73	4
AI6	3(5.0)	10(16.7)	16(26.7)	17(28.3)	14(23.3)	3.52	4
AI7	1(1.7)	3(5.0)	14(23.3)	26(43.3)	16(26.7)	3.82	4
AI8	2(3.3)	6(10.0)	20(33.3)	23(38.3)	9(15.0)	3.52	4
AI9	1(1.7)	2(3.3)	16(26.7)	29(48.3)	12(20.0)	3.82	4
AI10	1(1.7)	2(3.3)	17(28.3)	30(50.0)	10(16.7)	3.77	4
AI11	1(1.7)	1(1.7)	15(25.0)	32(53.3)	11(18.3)	3.87	4

Likert response outcome scores

1 = Strongly disagree	2 = Disagree	3 = Neutral	4 = Agree	5 = Strongly agree

Overall, responses categorized as "agree" and "strongly agree" constituted the majority across all survey items, while disagreement responses remained marginal. Collectively, these findings suggest that artificial intelligence contributes to improving the effectiveness of the selection process, reducing the average time required to fill vacancies, and lowering recruitment-related costs. Consequently, the results provide robust empirical support for the positive role of artificial intelligence in enhancing decision-making processes within e-recruitment systems.

Table 3 presents respondents' awareness of artificial intelligence (AI) and their attitudes toward the automation of e-recruitment, as well as the role of human involvement in recruitment decisions.

The results of the first question indicate a relatively balanced level of awareness regarding different AI applications, with 31 respondents answering "Yes" and 29 answering "No," suggesting a moderate general understanding of AI technologies among the participants. Regarding the second question, which assesses awareness of AI usage in decision-making processes, a higher proportion of respondents reported familiarity, with 34 answering "Yes" compared to 26 answering "No." This finding reflects a generally positive perception and reasonable awareness of AI's role in supporting decision-making.

Table 3: Survey responses – AI (Yes/No)

Question	NO	YES
	Count(%)	Count(%)
AI Yes/No 1	29	31
AI Yes/No 2	26	34
AI Yes/No 3	33	27
AI Yes/No 4	7	53

In contrast, the findings of the third question reveal a tendency toward rejecting full automation of the e-recruitment process. A total of 33 respondents

disagreed with the idea that e-recruitment should be entirely automated, while 27 supported it. This outcome suggests that participants may have reservations about relying exclusively on automated systems, possibly due to concerns related to fairness, accuracy, or the potential loss of human judgment in recruitment decisions.

This perspective is further reinforced by the results of the fourth question, where a strong majority of respondents (53) agreed that a human factor should be incorporated into recruitment decisions, compared to only 7 respondents who disagreed. This demonstrates a clear consensus on the importance of human involvement alongside AI technologies.

Overall, the findings indicate that while respondents exhibit a reasonable level of awareness of AI and acknowledge its value in recruitment processes, they largely favor a hybrid approach in which AI serves as a supportive tool rather than a fully autonomous decision-maker. While overall perceptions toward AI in e-recruitment are positive, more than 60% of respondents express strong support for its use when human judgment remains an integral part of the recruitment process. These results emphasize the perceived necessity of maintaining human oversight in e-recruitment systems to ensure balanced, fair, and informed hiring decisions.

■ V. Conclusion

This study explored perceptions of artificial intelligence–driven decision-making in e-recruitment within the Libyan context using data collected from 60 respondents across higher education institutions and business organizations. Overall, the findings indicate a predominantly positive attitude toward the use of artificial intelligence in recruitment processes, particularly in terms of improving decision accuracy, reducing recruitment time, and enhancing the effectiveness of the selection process.

However, despite this positive perception, respondents expressed clear reservations toward fully automated recruitment systems. The results reveal a strong preference for maintaining human involvement in recruitment decisions, emphasizing the importance of human judgment in ensuring fairness, ethical oversight, and contextual understanding. Accordingly, the findings suggest

that a hybrid recruitment model, in which artificial intelligence supports rather than replaces human decision-making, is perceived as the most appropriate and effective approach.

These findings align with prior studies emphasizing the importance of human–AI collaboration in recruitment decision-making. Future research may extend this work by expanding the study sample across additional sectors, employing longitudinal or mixed-methods research designs, and examining the impact of AI-supported e-recruitment on actual hiring outcomes and organizational performance in developing economies.

In conclusion, the study provides empirical support for the positive role of artificial intelligence in e-recruitment while highlighting the continued necessity of human oversight, particularly in emerging contexts such as Libya.

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