The Effect of Artificial Intelligence on Human Resources Recruitment and Selection: Balancing Automation and Human Touch in Egyptian Banks

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Abstract: The research aims to study the impact of Artificial Intelligence (AI) applications on the recruitment process of Human Resources (HR) for private banking in Egypt. Traditional HR practices now shift through AI-enabled transformations which bring faster recruitment processes and better decision support and bias elimination. The deployment of AI within HRM practitioners faces challenges regarding ethical situations as well as worker misemployment and technical execution complications. This research explores three essential aspects of AI adoption represented by AI usage as well as relative advantages and complexity that impact HR recruitment practices using systematic study methods. A survey involving HR professionals from major Egyptian banks supplied quantitative research data for this study. This research demonstrates that AI brings operational improvements to human resource functions, yet organizations should maintain human involvement to preserve ethical standards of inclusivity and fairness throughout decision-making systems. HR professionals and policymakers can access practical guidance through this work which focuses on training artificial intelligence systems along with usability enhancements and ethical strategies for AI deployment.

Keywords: Artificial Intelligence, Human Resources, Recruitment, Selection, Automation.

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Introduction

Artificial intelligence (AI) integration with business operations functions as a transformative power across many sectors while fundamentally changing traditional operational practices (Abdelraouf and Kadry, 2024; Gamal, 2025). The deployment of AI in human resources (HR) management emerges as an especially critical research domain because it combines technical advancements with people-focused HR approaches within the broader technological revolution. The HR automation-efficiency spectrum confronts interpretation regarding how precisely AI systems will interact with human stakeholders in employee-focused practices (Mukherjee, 2023).

The Egyptian banking sector currently faces an important decision regarding this technological transformation (Tawakol, 2023). The rapidly changing private banking sector within Egypt evaluates artificial intelligence solutions for their human resource management systems.

Researchers investigate how human-AI collaboration frameworks function within Egyptian private banks' HR departments, with specific attention to how these systems align with Egyptian business regulations that require human oversight in decision-making processes (Khalifa et al. 2021; Metawa et al. 2022). This research examines how artificial intelligence influences Human Resource Management practices within Egyptian private banking institutions. Artificial recruitment systems demonstrate three core features that impact hiring bias levels, employee skills assessment, and recruitment efficiency (Tambe et al. 2019).

This research primarily explores the challenges of balancing HR process automation through technology while maintaining critical human judgment and decision authority. While implementing Artificial Intelligence in HR operations shows potential benefits such as improved processing speed and reduced systematic bias, organizations must address risks including over-reliance on automation, which could undermine human ethical oversight and interpretive capabilities. Currently, the business application of artificial intelligence within Egyptian banking HR functions remains empirically understudied (Khogali and Mekid, 2023).

Through methodical analysis of the relationship between AI implementation and HR practices, this study addresses the research question: "What significant effects does Artificial Intelligence have on HR practices, particularly regarding the balance between automation and human judgment in the Egyptian private banking sector?" This investigation will provide valuable insights for banking institutions, HR professionals, and policymakers involved in developing effective human resource strategies that incorporate AI technologies while maintaining appropriate human oversight in Egypt's competitive and modernizing banking industry.

Research unveiled AI's positive impact on private banking sector recruitment practices in Egypt which combines shortened hiring periods with greater efficiency and reduced bias in candidate assessments. AI-driven tools accelerate business processes through automated resume screening and candidate communication alongside interview scheduling which all lead to accelerated data-dependent HR decision-making. Despite its benefits, the study suggests AI technologies face complex implementation difficulties while requiring human supervision to stop algorithmic biases and maintaining HR personnel involvement in processes that developers cannot interfere with. Organizations must establish simple AI systems alongside human professional training programs together with ethical guidelines which protect inclusivity and fairness to leverage the full benefits that artificial intelligence provides for recruitment processes.

The research analyzes the methods through which private banks in Egypt can maximize their use of artificial intelligence technologies in human resource practices while preserving human supervision operations. Many organizations must modernize HR processes under mounting pressure to maintain traditional human contact which has represented the essence of classical HR management. This study produces findings that will strengthen both conceptual HR-AI implementation knowledge and practical AI use in Egyptian banks and similar organizational structures.

Literature review

In this section, the analytical literature review of AI and HR are introduced. First an overview of AI and its main three dimensions. Second an overview on HRM. Then the chronological literature review of research variables and its main findings.

2.1 An Overview of AI

Artificial Intelligence (AI) represents the creation of computer systems capable of accomplishing intelligent activities such as learning from experience or making decisions through data recognition for tasks humans generally perform. AI technology duplicates human intellectual capabilities so these systems learn to perceive their environments while understanding what they see to develop responsive behaviors. AI as a field includes multiple approaches namely machine learning and deep learning together with natural language processing and computer vision and robotics (Jarrahi, 2018).

Machine learning functions as an AI subsection which helps create statistical models alongside algorithms designed to enable computers to learn autonomously through unquestioned task execution. Beyond machine learning stands deep learning because its artificial neural networks derived from human

brain functional principles help systems process extensive datasets to extract hidden patterns (Raschka et al. 2020).

According to Fanni et al. (2023) natural language processing functions as a subfield of Artificial Intelligence by optimizing computer interaction using human natural expressions. The combination of systems that interpret and produce human speech allows developers to deploy tools for virtual assistants while facilitating both language translation and text analytics solutions. Computer vision represents a fundamental AI subfield that lets machines analyze digital pictures and video content much in the way human eyes do. Automated vehicles alongside object detection and facial recognition systems are among its major practical applications.

Several industries already benefit substantially from AI applications covering healthcare and finance as well as transportation and entertainment sectors. The implementation of artificial intelligence in the real world sparks multiple concerns about personal information protection and system reliability as well as prejudice in decision-making systems and job elimination possibilities. Basic advances in AI require immediate attention along with responsible ethical and proper development methods of this technology (Ness et al. 2023).

Dimensions of AI

AI Usage

The deployment of artificial intelligence technologies through AI usage enables diverse industries to automate intelligent human tasks. The spectrum of AI applications covers basic capabilities in voice recognition and language translation but also reaches advanced capabilities including autonomous driving and medical diagnosis together with financial prediction capabilities (Raj and Kos, 2023). Algorithms together with machine learning models combined with other AI techniques enable the analysis of data which subsequently leads to predictive modelling and process automation and contributes to enhanced decision-friendly outputs. Through AI technology exploitation organizations enhance operational efficiency and improve service innovation while extracting valuable data insights from extensive datasets which surpass human analysis capacity (Shabbir and Anwer, 2018).

Relative Advantage

The perceived benefit of an innovation serves as a relative advantage when AI technology is compared against existing practices or technologies that need improvement or replacement. Multiple avenues in AI highlight the distinct superiority offered by the technology in distinct

ways. AI systems demonstrate excellence at process automation which leads to productivity gains that simultaneously reduce costs and optimize operational efficiency (Agarwal et al. 2021). Measuring operational efficiency within manufacturing reveals how AI predictive maintenance optimizes asset utilization resulting in greater productivity alongside reduced downtime which creates substantial cost reductions. AI enhances human decision-making because it evaluates large datasets to recognize complex patterns that typically stay hidden from unaided human observation. AI-driven proficiency leads organizations to achieve data-centric decision-making superiority in financial and healthcare domains and marketing functions. Through AI technology organizations achieve operational excellence while maintaining competitive adaptability to changing conditions (Lindborg, 2018).

Complexity
The degree of difficulty surrounding AI technology use comprises implementation complexity and user understanding complexity within industries and organizations. Processes that need sophisticated algorithms and data processing pipelines with infrastructure requirements become complex to develop maintain and deploy especially for organizations lacking resources or domain expertise in AI (Prasad Agrawal 2023).
AI systems need access to excellent quality datasets that include diverse content and must work with very large datasets. Many companies face difficulties obtaining suitable data from data tools which need intense cleaning along with data preprocessing for application in industries that keep data isolated or lack structure or meet privacy rules. AI adoption requires complex system integration which demands substantial changes to both foundational structures and software base code and organizational frameworks (Liang et al. 2022).

An Overview on Human Resource Management (HRM)
The management of HR constitutes an essential organizational operation to efficiently handle workforce development. The discipline includes multiple organizational practices to source qualified staff while building internal systems that sustain employee longevity and develop their potential for achieving business objectives (Praba et al. 2025). Talent acquisition stands as a fundamental HRM duty because organizations must hire suitable individuals to match specific positions they need to fill (Chakraborty and Sharada, 2025). Job analysis and candidate sourcing and screening and interviewing procedures lead to selecting suitable employees. Organizations

need effective talent acquisition methods to secure essential capabilities that will fulfill operational and strategic performance requirements (Enis, 2017). After hiring new employees HRM takes charge of their workforce development and employee keeps rates (Yu and Santos, 2025). Companies must create training systems alongside development platforms that develop employee knowledge base together with competencies and skills proficiency. HRM stands responsible for developing an environment that boosts employee engagement and generates both high motivation and satisfaction among workers. Fair compensation systems along with benefit structures combined with work-life balance programs and recognition-centered culture create these outcomes (Azeez, 2017).

The proposed Main Hypothesis and research model as follows:
H1: AI has a significant effect on Recruitment and selection of human resources management (HRM)

Sub-Hypotheses:
H1a: AI usage has a significant effect on Recruitment and selection of human resources management (HRM)
H1b: Relative advantage of AI has a significant effect on Recruitment and selection of human resources management (HRM)
H1c: Complexity of AI has a significant effect on Recruitment and selection of human resources management (HRM)
H2: AI has an insignificant effect on Recruitment and selection of human resources management (HRM)
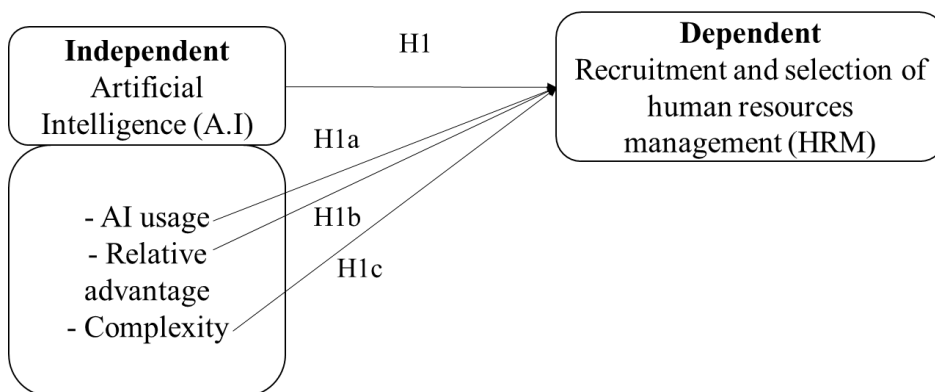
The Research model

Independent
Artificial Intelligence (A.I)

H1

Dependent
Recruitment and selection of human resources management (HRM)

H1a

- AI usage
- Relative advantage
- Complexity

H1b

H1c

Figure 1.1: Research Model

Source: Developed by the researchers

Method

In this section, the research will cover the sector of the study that will be analyzed then show the conceptual model and the research measures and scales then at the end, the sample will be included.

Study Sector

The research investigated the implementation of private banking operations within the boundaries of Egypt. Various factors support the choice of this sector for study. Private banks in Egypt maintain transparent operations thanks to rigorous government oversight, which ensures their access by the general public. The transparency of these institutions allows researchers to efficiently gather and evaluate data, which produces significant insights regarding both AI acceptance and human resource management practices throughout them. Public and private banks operate across Egypt's well-structured banking sector. Private financial organisations in Egypt maintain a vital position throughout the national economic and financial structures. A summary of private banking in Egypt features the following important points. Major private banks: Major private financial institutions based in Egypt consist of Commercial International Bank (CIB) and Arab African International Bank (AAIB) as well as Banque Misr and Banque du Caire and Credit Agricole Egypt together with HSBC Bank Egypt and QNB AlAhli (Central Bank of Egypt, 2025).

Statista's (2022) research shows the private banking sector of Egypt employs a total of 136,273 staff members. Assets and deposit-gathering and lending services from the lending and deposit segment maintain dominance in the Egyptian banking sector. Private banks in Egypt controlled 70% of the country's financial sector assets during 2022. Private banking institutions across Egypt's economy thrive from HR operations enhanced by effective AI applications that deliver broad-reaching effects on their business performance while raising competitiveness standards. This area of research allows scientists to identify beneficial AI approaches, industry barriers, and opportunities, which guide the development of organisational recommendations for industrial transformation. Private banks in Egypt deliver leadership positions in technological development, which includes AI solution deployment. The examination of this sector leads us to understand innovative ways AI is used in human resources management through recruitment and talent assessment and employee development and performance analysis.

The observed knowledge gives direction to AI implementation initiatives throughout different industries. The present research studies only private banks operating in Egypt; future studies should consider broadening their focus to

private Egyptian banks working beyond national boundaries. Such an all-inclusive methodology would better measure AI's effect on HR functions for private Egyptian banking institutions throughout the entire national spectrum and around the world. The research analyses human resource system integration with AI technology within private banking institutions across Egypt to establish strategic AI recommendations. More research needs to be done on how AI is used in human resources to fully understand how it affects systems in private Egyptian banking domains across the country and around the world.

Research Population

The research population consists of HR employees from major Egyptian banks. Specifically, the study targets HR professionals from banks such as the Commercial International Bank (CIB), QNB Al Ahli, and Arab African International Bank. Credit Agricole, Atijarawafa Bank, ADIB, Ahly Kuwait, Abu Dhabi, and HSBC: these banks represent a private sector institution [MOU2] and are among the largest in Egypt, providing a comprehensive view of AI adoption in HR practices within the Egyptian banking sector.

Research Sample
The research employed a simple random sampling method to select participants from the target population. The sample size of 384 employees was determined using Cochran's formula for sample size calculation:

$$n = \frac{P \times q}{\frac{P \times q}{N} + \frac{B^2}{Z^2}}$$

$$n = \frac{0.5 \times 0.5}{\frac{0.5 \times 0.5}{136,273} + \frac{(0.05)^2}{(1.96)^2}} = 383 < 410$$

Where:

- n = the required sample size
- P = the proportion of the population having the characteristic (assumed to be 0.5 for maximum variability)
- q = 1-P (also 0.5)
- N = the total population size (136,273 employees in Egyptian private banks)
- B = the allowable margin of error (0.05 or 5%)
- Z = the z-score associated with the desired confidence level (1.96 for 95% confidence)

The calculation resulted in a required sample size of 383 respondents. The actual data collection yielded 410 respondents, which exceeded the minimum required sample size, ensuring that the results maintained the desired 95% confidence level with a 5% margin of error.

Research Design

For this study, a quantitative research design will be employed. The research will use a cross-sectional survey method to collect primary data from HR professionals in Egyptian banks. This approach involves gathering data from participants at a single point in time rather than tracking changes over an extended period. The cross-sectional design was selected because it efficiently captures the current state of AI adoption in HR practices across multiple banking institutions simultaneously.

This design allows for the examination of the relationship between AI adoption (independent variable) and its impact on HR practices (dependent variable) at a specific point in time. The quantitative approach will enable the testing of the hypotheses through statistical analysis, providing empirical evidence to answer the research question. Survey instruments will be designed to measure both the extent of AI implementation and its perceived effects on various HR functions including recruitment, selection, training, and performance management.

Secondary Data

Secondary data for this research will be collected from various sources, including:

1. Previous academic studies on AI adoption in HR and the banking sector.
2. Reports from the Central Bank of Egypt and the Egyptian Banking Institute.
3. Industry analyses from consultancy firms such as McKinsey, Deloitte, and PwC.
4. Relevant books and academic journals on AI in HR and banking.
5. Websites of Egyptian banks and financial technology companies.
6. Egyptian government reports on digital transformation in the financial sector.

This secondary data will be used to develop the theoretical framework, inform the questionnaire design, and provide context for the primary data analysis.

Primary Data

Primary data will be collected through a structured questionnaire distributed to HR professionals in the selected Egyptian banks. The questionnaire will be designed to gather quantitative data on AI usage, relative advantage, complexity, and its impact on HR practices, specifically focusing on balancing automation and human touch. The data collected will directly address the research question and test the hypotheses.

Questionnaire Development

The questionnaire is developed based on the research objectives and hypotheses. It will include sections on:

1. Demographic information of respondents.
2. Current AI usage in HR practices.
3. Perceived relative advantage of AI in HR.
4. Perceived complexity of AI implementation.
5. Impact of AI on HR processes (balancing automation and human touch).

The questionnaire will use a 5-point Likert scale for most items to ensure consistency and ease of statistical analysis. It will be administered through a combination of methods:

1. Personal distribution to HR professionals during industry events or bank visits.
2. Electronic distribution via email to HR departments of the selected banks.
3. Sharing through professional networks on platforms like LinkedIn and WhatsApp.

A pilot test of the questionnaire will be conducted with a small group of HR professionals to ensure clarity, relevance, and effectiveness before full-scale distribution.

Table 1: Research measurements

Research Variable	Source	Indicator
AI usage	Pan et al. (2022)	1,2,3,4
Relative Advantage	Pan et al. (2022)	5,6,7
Complexity	Pan et al. (2022)	8,9,10
Human Resources Management	Prabhakar, (2023)	12,13,14,15,16

Source: developed by the researchers

Data preparation

Most questions and variables are measured by Likert Scale- Strongly agree...... Strongly disagree) So we recorded all scales to be as follows strongly agree will be recorded to be 5 agree will be recorded to be 4 neutral will be recorded to be 3 disagree will be recorded to be 2 and strongly disagree will be recorded to be 1 and some variables are measured by Likert Scale- never...... Always) So we recorded all scales to be as follows Always will be recorded to be 5 often will be recorded to be 4 sometimes will be recorded to be 3 rarely will be recorded to be 2 and never will be recorded to be 1.

Data results
Descriptive Statistics

Table 2: Descriptive statistics for each sentence in each main variable

#	Statement in English	Mean	Standard Deviation
1	AI usage attracts candidates	4.836585366	0.572497679
2	AI usage communicates with candidates	4.053789731	0.410692343
3	AI usage evaluates candidates	4.773170732	0.636895124
4	AI technology improves recruitment performance	4.1	0.51600307
5	Using AI technology enhances recruitment effectiveness	4.619512195	0.556455563
6	Using AI technology increases recruitment ability	4.305764411	0.477369103
7	AI tools are clear and understandable to be used	4.582926829	0.655390452

8	Interacting with AI tools does not require much mental effort	4.114634146	0.418438695
9	The AI that is used in the bank is user-friendly	4.875609756	0.54762456
10	It is easy to achieve targets by using AI technology	3.982926829	0.265730013
11	The use of new emerging technologies in the recruitment and selection process has improved the efficiency of the process	4.6	0.641666534
12	The use of new emerging technologies in recruitment and selection has increased cost-effectiveness	3.987804878	0.236824057
13	AI is beneficial for automated tasks such as resume screening	4.743902439	0.597692703
14	Candidate interviewing has become faster due to the use of emerging technology	4.025062657	0.198925338
15	The use of new technologies has increased the accuracy of the recruitment and selection process	4.724390244	0.609332669
16	Use of emerging technologies has resulted in improved quality of feedback given to candidates	4.185463659	0.401866528
17	The use of new emerging technologies decreases the time and effort required for the recruitment and selection process	4.799498747	0.407097521

The table highlights the overall positive perception of AI and emerging technologies in recruitment, with high mean scores across all statements and relatively low standard deviations indicating consistent agreement among respondents.

Confirmatory factor analysis (CFA)

Table 3: CFA analysis

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
AI usage	**0.749**	**0.859**	**0.677**
Complexity	**0.730**	**0.822**	**0.552**
Recruitment and selection of human resources management (HRM)	**0.703**	**0.780**	**0.547**
Relative advantage	**0.708**	**0.725**	**0.593**

Source: Based on SmartPLS calculations

A Confirmatory Factor Analysis was conducted to evaluate both reliability and validity. The Cronbach alpha coefficients achieved values above 0.7 which suggested acceptable reliability levels. The constructs' validity dissolved through assessments of Composite Reliability and Average Variance Extracted which exceeded minimum benchmarks (Brown and Moore, 2012).

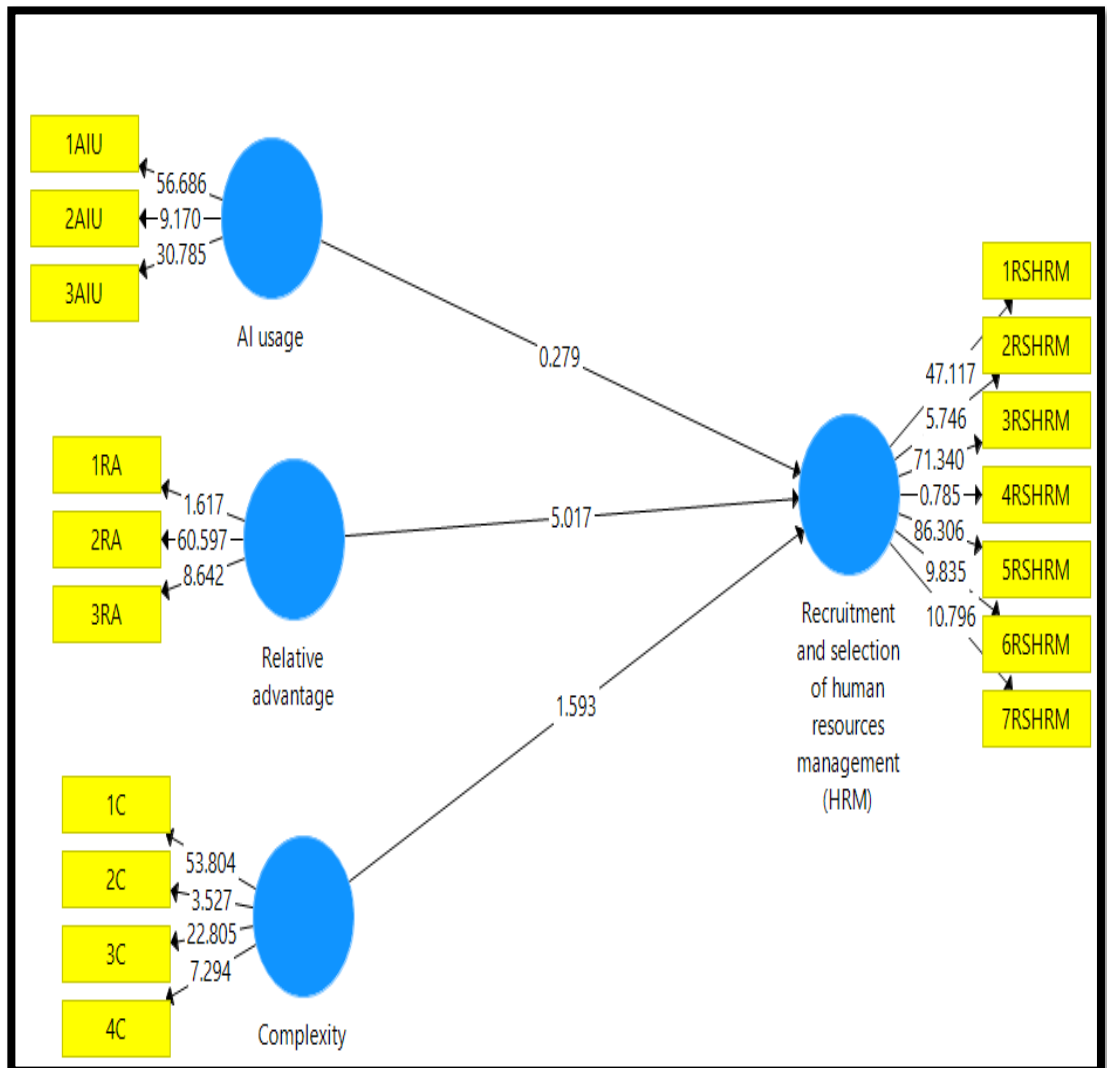**Structural equation modelling (SEM)**

Figure 4.3: SEM analysis

Source: Based on SmartPLS calculations

This diagram shows how three factors - AI usage, relative advantage, and complexity - influence recruitment and selection in human resources management (HRM) through various weighted connections and sub-components.

Path coefficient

Table 4: Statistical results

	Original Sample (O)	Sample Mean (M)
AI usage -> Recruitment and selection of human resources management (HRM)	0.048**	-0.281
Complexity -> Recruitment and selection of human resources management (HRM)	0.367***	-0.580
Relative advantage -> Recruitment and selection of human resources management (HRM)	0.650***	0.619

P value < 0.01 ***, 0.01 < p value < 0.05, 0.05 < p value < 0.1*, P value > 0.1
Source: Based on SmartPLS calculations

Based on the table above, it was found that AI usage had a positive significant effect on Recruitment and selection of human resources management (HRM) at 95% confidence level. In addition, Complexity and Relative advantage had a positive significant effect on Recruitment and selection of human resources management (HRM) at 99% confidence level since mean that the suggested sub-hypothesis is accepted which are (H1a, H2b and H3c). Thus, the main hypothesis H1 is accepted and the alternative hypothesis H2 is rejected.

Model fit

Table 5: R square model

	SSO	SSE	Q2	R Square	R Square Adjusted
Recruitment and selection of human resources management (HRM)	2870.000	1570.657	0.453	0.857	0.856

SRMR= 0.228, d_ULS= 7.978, d_G= 5.003, Chi-Square= 6775.763, NFI= 0.388
Source: Based on SmartPLS calculations
The statistical output table exhibits essential model fit indicators related to HRM

recruitment and selection analysis. The model demonstrates robust predictability because its R-square value of 0.857 (and its adjusted R-square of 0.856) shows that the model explains 86% of recruitment and selection variation. The Q2 value reaches 0.453 indicating acceptable accurate predictions based on Sum of Square values (SSO and SSE). Additional model fit metrics indicate reasonable predictive capability although structural fit issues exist as highlighted by the elevated SRMR value (0.228) together with a low NFI (0.388). A systematic implementation of these changes which upholds theoretical validity is expected to enhance the model's overall fit indices.

4.5 Discussion

Results from the study demonstrate statistical correlations between AI dimensions and recruitment and selection practices at Egyptian private banks. Research findings indicate that artificial intelligence implementation adds value to recruitment processes ($\beta = 0.048$, p < 0.05). While statistically significant, this low beta weight suggests that AI implementation is one of several factors influencing recruitment effectiveness, with other organizational variables likely playing substantial roles as well. Resumes and candidate assessments undergo enhanced screening processing through these applications, leading to workload reduction before interviews take place.

Analyses revealed that recruitment procedures received the highest influence from relative advantage assessments ($\beta = 0.650$, p < 0.001). This strong correlation indicates that the acceptance of HR processes by users directly relates to their beliefs about artificial intelligence technology benefits in the banking environment. The statistical evidence suggests that when banking professionals perceive clear advantages from AI implementation, they are significantly more likely to integrate these tools into their recruitment workflows.

AI recruitment systems demonstrated a substantial relationship with organizational performance metrics ($\beta = 0.367$, p < 0.001), suggesting that banks leveraging these technologies experience measurable improvements in their HR operations. The AI recruitment systems showed strong predictive capabilities with an R-square value of 0.857, indicating approximately 86% accuracy in candidate identification processes within the studied banking institutions.

The empirical study demonstrates how Egyptian private banking companies specifically utilize AI technology for their recruitment and selection operations. When comparing recruitment metrics before and after AI implementation, the research data measured a modest but significant effect size (0.048, p < 0.05), confirming that these technologies contribute to measurable improvements in recruitment outcomes specific to the banking sector.

The study concludes that the maximum relevance of recruitment practices is derived from relative advantage assessments ($\beta = 0.650$, p < 0.001), underlining how perceived AI technology benefits strongly affect workplace integration within Egyptian private banks. These findings provide banking-sector specific

evidence on how AI technologies are transforming human resource practices within the unique regulatory and organizational context of Egyptian financial institutions.

The benefit of AI complexity implementation, $\beta = 0.367$, $p < 0.001$, improved the performance of recruitment in banking, which refers to bank success in dealing with the AI complexity issues of implementation. Results from this study validate Prasad Agrawal's 2023 testing concerns about AI implementation and simultaneously align with the organizational AI capability framework that Liang et al. (2022) introduced, which Khogali and Mekid (2023) developed through their user-led AI implementation research. The strong R-square value assessment indicated that AI components detect 86 percent of variations found in the recruitment and selection metrics.

Conclusion

This study evaluated how AI shapes private banking HR recruitment as well as selection in the Egyptian market by assessing the benefits surrounding its challenges. AIOutcome-Enhanced recruitment efficiency emerges from automated candidate screening alongside better decision systems helping to accelerate hiring procedures. The implementation of AI in HRM faces viability issues because organizations struggle with complex system implementation alongside the potential biases of AI algorithms and requirements for human involvement to achieve transparent and fair outcomes. Human recruitment expertise needs careful alignment with automated elements to maintain honest hiring practices.

The research further demonstrates that AI's impact on HRM depends on three key dimensions: AI usage, relative advantage, and complexity. AI tools speed up hiring processes and enhance hiring results but organizations must implement user-friendly frameworks together with workforce preparation and organizational digital transformation support. Professionals in HR need specialized training to work effectively with AI-operated recruitment tools according to current research. Human decision-makers play an essential dual role since they need to handle technical roles for reducing AI bias while sustaining real personal interactions with jobseekers.

> In order to harness the potential benefits of artificial intelligence in human resource recruitment processes organizations need deliberate strategies for implementation. The organizational priority must be to develop improved methods of AI implementation alongside moral decision-making standards as well as merging technology solutions with human expertise in talent management.

Academic and Practical Implications

This research adds to academic knowledge about artificial intelligence patterns in human resource management fields throughout emerging markets with a specific focus on Egypt. A structured framework emerges from the study which analyzes the relationship between AI usage and both relative advantage and complexity for evaluating acceptance of AI in recruitment processes. Research should advance by examining in detail how AI affects workplace health as well as job-related happiness among employees alongside organizational atmosphere assessment. Exploring how Artificial Intelligence promotes diversity along with inclusion within workplaces will supply essential data about technology-driven influences on fair hiring criteria. Long-running analysis of AI integration in HR workflows helps understand the lasting consequences for these systems over time in us firms (Allam and Abdelraouf, 2023).

This investigation provides real-world guidelines which benefit human resource professionals together with banking institutions and government policy officials. Casual training in AI technology must become an organizational priority because it teaches HR teams to handle recruitment tasks powered by AI effectively. The adoption rates will improve through investments in user-friendly AI tools yet ethical AI policies will safeguard fairness and organizational transparency. HR practitioners must integrate AI tools to supplement their judgment because this relationship ensures optimal performance between algorithmic efficiency and human emotional intelligence. These strategies enable organizations to maximize the beneficial applications of AI while reducing associated risks which leads to enhanced human resource management across the banking industry alongside broader impact outside banking. Future scholarly work must examine ways private Egyptian banks can tap into knowledge-sharing opportunities developed through their international banking partnerships. The combined industry effort would enable participants to exchange proven practices while learning from their experiences as well as best AI considerations for human resources management to establish a shared worldwide strategy.

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All authors have divided the work equally
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Appendix
Appendix A
This questionnaire is designed to gather data of the AI on HR: Balancing Automation and Human Touch. Your participation is voluntary, all responses will be treated with the utmost confidentiality. The information collected will be used solely for research purposes and will remain anonymous. If you work in a banking sector, kindly take a moment to carefully read and respond to the following questions. Thank you for your participation and valuable contribution to this study.

Please be aware that:

1= Strongly Disagree.
2= Disagree.
3= Neutral.
4= Agree.

5= Strongly Agree.

1. Gender

a) Female أنثى

b) Male ذكر

2. Age العمر

a) 18 – 25

b) 25 – 35

c) 36 – 50

d) 50+

3. Please choose the bank that you currently work at. يرجي اختيار اسم جهة العمل؟

  a) Commercial International Bank
  b) United Bank
  c) Honk Kong Shanghi Bank
  d) Alex bank
  e) National bank of Kuwait
  f) Middle East Investment Bank
  g) Attijariwafa
  h) societe Arabe internationale de Banque
  i) Emirates national bank of dubai
  j) Qatar national bank
  k) Arab Invrstment bank
  l) First Abu Dhabi Bank Misr
  m) Ahli united bank
  n) Abu Dhabi Islamic Bank
  o) Arab African International Bank
  p) Arab banking corporation
  q) Citibank
  r) Mashreq
  s) Other ……..

AI:

No.	Indicator	1	2	3	4	5
AI Usage						
1	AI usage attract candidates. يجذب استخدام الذكاء الاصطناعي المرشحين للعمل.					
2	AI usage communicate with candidates. يستخدم الذكاء الاصطناعي للتواصل مع المرشحين.					
3	AI usage evaluate candidates. يستخدم الذكاء الاصطناعي لتقييم المرشحين للعمل.					
Relative Advantage						
4	AI technology improves recruitment performance. تُحسّن تكنولوجيا الذكاء الاصطناعي أداء التوظيف لدينا.					
5	Using AI technology enhances recruitment effectiveness. استخدام تكنولوجيا الذكاء الاصطناعي يعزز فعالية التوظيف لدينا.					
6	Using AI technology increases recruitment ability. استخدام تكنولوجيا الذكاء الاصطناعي يزيد من قدرتنا على التوظيف.					
Complexity						
7	AI tools are clear and understandable to be used. أدوات الذكاء الاصطناعي واضحة وسهلة الفهم للأستخدام.					
8	Interacting with AI tools does not require much mental effort. التفاعل مع أدوات الذكاء الاصطناعي لا يتطلب جهدًا ذهنيًا كبيرًا.					
9	AI that is used in the bank is user-friendly. الذكاء الاصطناعي المستخدم في البنك سهل الاستخدام.					
10	It is easy to achieve targets by using AI technology.					

من السهل تحقيق الأهداف باستخدام تقنية الذكاء الاصطناعي.					

Human Resources Management Balancing Automation and Human Touch:

No.	Indicator	1	2	3	4	5
11	The use of new emerging technologies in the recruitment and selection process has improved the efficiency of the process. لقد حسّن استخدام التقنيات الناشئة الجديدة في عملية الاختيار والتوظيف من كفاءة العملية.					
12	The use of new emerging technologies in recruitment and selection has increased cost-effectiveness. أدى استخدام التقنيات الناشئة الجديدة في التوظيف والاختيار إلى تحقيق وفورات في التكلفة.					
13	AI is beneficial for automated tasks such as resume screening. يُعد الذكاء الاصطناعي مفيدًا للمهام الآلية مثل فرز السير الذاتية.					
14	Candidate interviewing has become faster due to the use of emerging technology. أصبحت مقابلة المرشحين للعمل أسرع بفضل استخدام التكنولوجيا الناشئة.					
15	The use of new technologies has increased the accuracy of the recruitment and selection process. أدى استخدام التقنيات الجديدة إلى زيادة دقة عملية التوظيف والاختيار.					
16	The use of emerging technologies has resulted in improved quality of feedback given to candidates. أدى استخدام التقنيات الناشئة إلى تحسين جودة ردود الفعل التي يقدمها موظف الموارد البشرية للمرشحين للعمل.					
17	The use of new emerging technologies decreases the time and effort required for the recruitment and selection process. أدى استخدام التقنيات الناشئة الجديدة إلى تقليل الوقت والجهد المطلوب لعملية التوظيف والاختيار.					