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The Mediating effect of Artificial Intelligence Between Globalization and Human Resource Management: Evidence from United Arab Emirates

Zainab Khalifa Rashed Alyamani Almaazmi[a]*, Ibrahim Fahad Sulaiman[a], & Kalsom Binti Ali[a]

[a] Fakulti Kepimpinan dan Pengurusan (FKP), Universiti Sains Islam Malaysia. 71800 Nilai, Negeri Sembilan, Malaysia

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ABSTRACT

The increasing influence of globalization and artificial intelligence in human resource management has reshaped workforce strategies across industries, particularly within government institutions. This study aims to bridge these gaps by investigating whether AI serves as a mediator in the relationship between globalization, strategic workforce planning, and managing human resource skills in the MOI in the UAE. To achieve this objective, the study employs a quantitative research approach, utilizing structural equation modeling to analyze relationships between globalization, strategic planning, AI adoption, and HRM skills management. A stratified random sampling technique was used to collect 351 responses from MOI employees, ensuring representation across various departments. The findings reveal several critical insights. First, AI has a significant positive impact on HRM skills management ($\beta = 0.304$, $p = 0.000$), confirming that AI adoption enhances HR decision-making, employee training, and workforce efficiency. Second, globalization does not significantly influence AI adoption ($\beta = 0.095$, $p = 0.185$). Furthermore, globalization has a significant direct impact on HRM skills ($\beta = 0.180$, $p = 0.000$). A crucial finding of the study is the mediating role of AI between strategic planning and HRM skills ($\beta = 0.304$, $p = 0.000$). The results suggest that while strategic planning is a critical factor in HR transformation, AI adoption amplifies its impact by providing scalable, data-driven workforce solutions. The implications of these findings are significant for HR leaders, policymakers, and AI strategists in government institutions. This study provides empirical evidence on the role of AI in HRM modernization and highlights policy recommendations for enhancing workforce skills in a globalized digital era. These insights contribute to both theoretical knowledge and practical applications, offering valuable guidance for HR leaders, AI strategists, and policymakers seeking to navigate the challenges and opportunities of AI-driven HR transformation in public administration.

* Corresponding author. Almaazmi
E-mail address: zalmaazmi7@gmail.com
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الملخص

يشهد تأثير العولمة والذكاء الاصطناعي في إدارة الموارد البشرية تزايدًا مستمرًا، مما أدى إلى إعادة تشكيل استراتيجيات القوى العاملة عبر مختلف القطاعات، لا سيما داخل المؤسسات الحكومية. تهدف هذه الدراسة إلى سد هذه الفجوات من خلال التحقيق في ما إذا كان الذكاء الاصطناعي يعمل كوسيط في العلاقة بين العولمة، والتخطيط الاستراتيجي للقوى العاملة، وإدارة مهارات الموارد البشرية في وزارة الداخلية بدولة الإمارات العربية المتحدة. لتحقيق هذا الهدف، تعتمد الدراسة نهجًا بحثيًا كميًا، حيث تستخدم نمذجة المعادلات الهيكلية لتحليل العلاقات بين المتغيرات. تم استخدام تقنية العينة العشوائية الطبقية لجمع 351 استجابة من موظفي وزارة الداخلية، مما يضمن تمثيلًا متوازنًا عبر مختلف الإدارات. كشفت النتائج عن عدة رؤى أساسية. أولاً، للذكاء الاصطناعي تأثير إيجابي كبير على إدارة مهارات الموارد البشرية ($\beta = 0.304$، $p = 0.000$)، مما يؤكد أن اعتماد الذكاء الاصطناعي يعزز عملية اتخاذ القرار في الموارد البشرية، وتدريب الموظفين، وكفاءة القوى العاملة. ثانيًا، لم يكن للعولمة تأثير كبير على اعتماد الذكاء الاصطناعي ($\beta = 0.095$، $p = 0.185$). علاوة على ذلك، كان للعولمة تأثير مباشر كبير على مهارات إدارة الموارد البشرية ($\beta = 0.180$، $p = 0.000$). ومن بين النتائج الحاسمة التي توصلت إليها الدراسة هو الدور الوسيط للذكاء الاصطناعي بين التخطيط الاستراتيجي ومهارات الموارد البشرية ($\beta = 0.304$، $p = 0.000$). تشير النتائج إلى أنه على الرغم من أن التخطيط الاستراتيجي يعد عاملاً حاسمًا في تحول الموارد البشرية، فإن اعتماد الذكاء الاصطناعي يعزز تأثيره من خلال توفير حلول موارد بشرية قابلة للتطوير تعتمد على البيانات. تنطوي هذه النتائج على آثار مهمة لمديري الموارد البشرية، وصناع السياسات، وخبراء الذكاء الاصطناعي في المؤسسات الحكومية، حيث توفر الدراسة أدلة تجريبية حول دور الذكاء الاصطناعي في تحديث إدارة الموارد البشرية، وتسلط الضوء على توصيات السياسات لتعزيز مهارات القوى العاملة في عصر رقمي معولم. تسهم هذه الرؤى في كل من المعرفة النظرية والتطبيقات العملية، مما يوفر توجيهات قيمة لقادة الموارد البشرية، وخبراء الذكاء الاصطناعي، وصناع السياسات الذين يسعون إلى مواجهة تحديات وفرص التحول الرقمي في إدارة الموارد البشرية داخل الإدارات العامة.

الكلمات الداله:

العولمة، الذكاء الاصطناعي، التخطيط الاستراتيجي، إدارة الموارد البشرية، تحول القوى العاملة، الإمارات العربية المتحدة، وزارة الداخلية، نمذجة المعادلات الهيكلية.

JEL Classification: *J24, M12, M15, O33, & F66*

1. Introduction

The rapid acceleration of globalization has led to significant transformations across industries, including the public sector. In particular, human resource management (HRM) has experienced profound changes due to increased workforce mobility, cross-border competition for talent, and technological advancements. One of the most disruptive innovations in this domain is Artificial Intelligence (AI), which has the potential to redefine traditional HRM practices by automating administrative tasks, optimizing talent acquisition, and enhancing employee engagement (Huang & Rust, 2018). However, despite the growing body of research on

globalization and HRM, the role of AI as a mediating factor remains underexplored, particularly in governmental institutions such as the Ministry of Interior (MOI) of the United Arab Emirates (UAE). The UAE, as a rapidly developing nation, has actively embraced AI as part of its broader strategy to enhance governance and administrative efficiency (UAE Government AI Strategy, 2023). Yet, the interplay between globalization, AI adoption, and HRM effectiveness in the public sector remains unclear. This study aims to address this gap by examining whether AI serves as a mediator in the relationship between globalization and HRM in the UAE's MOI. The globalization of labor markets has introduced both opportunities and challenges for human resource management in public sector organizations. On one hand, globalization fosters knowledge transfer, increases diversity in the workplace, and enables organizations to adopt best practices from international counterparts (Tarique & Schuler, 2010). On the other hand, it also presents challenges such as cultural integration, compliance with international labor laws, and heightened competition for skilled professionals (Sparrow et al., 2016). For institutions like the UAE's MOI, which is responsible for law enforcement, public security, and emergency services, effective HRM is crucial to ensuring national stability and efficiency. AI has emerged as a game-changer in HRM by automating administrative processes, predicting workforce trends, and improving decision-making through data-driven insights (Stone et al., 2015). In the UAE, the government's Artificial Intelligence Strategy 2031 aims to integrate AI into various sectors, including security and public administration (UAE Government, 2023). However, the extent to which AI mediates the impact of globalization on HRM remains unclear, particularly within the unique organizational structure of the MOI. While existing research highlights the individual effects of globalization and AI on HRM, there is a lack of empirical studies exploring their interaction within the UAE's public sector. Previous studies suggest that globalization enhances HR capabilities by exposing organizations to international best practices and fostering workforce innovation (Brewster et al., 2016). However, challenges such as skill gaps, employee resistance to technological changes, and ethical concerns regarding AI implementation complicate this relationship (Vrontis et al., 2022). Therefore, understanding the mediating role of AI in this context is essential for designing policies that align HRM strategies with the UAE's broader digital transformation goals.

The motivation for this study stems from the increasing need for governments to optimize human resource management in response to globalization and technological disruption. The UAE's Ministry of Interior, as a key governmental entity, requires highly skilled personnel to address national security concerns, implement law enforcement strategies, and ensure public safety. However, as globalization introduces new complexities, traditional HRM approaches may no longer be sufficient to meet evolving demands. AI presents a promising solution by enhancing HR functions such as recruitment, training, and workforce planning. For instance, AI-powered predictive analytics can help identify future skill gaps, enabling policymakers to implement proactive workforce development strategies (Jarrahi, 2018). However, the successful integration of AI in HRM depends on organizational readiness, employee acceptance, and the availability of AI-compatible infrastructure (Brougham & Haar, 2018). Given these considerations, the present study aims to investigate the extent to which AI mediates the impact of globalization on HRM within the UAE's MOI. By addressing this research gap, the study will contribute to both academic literature and policy-making efforts aimed at fostering an AI-driven HRM transformation in government institutions.

Despite extensive research on globalization and HRM, there is a limited understanding of the role AI plays as a mediating factor in public sector organizations. While globalization has been shown to positively influence HRM by introducing global best practices, the challenges associated with workforce integration, cultural diversity, and technological adaptation remain significant (Sparrow et al., 2016). The Ministry of Interior of the UAE is facing increased pressure to modernize its HRM practices in response to globalization. However, the existing HRM framework is still reliant on conventional administrative models, which may not be equipped to address the rapid changes introduced by globalization. AI has the potential to bridge this gap by facilitating data-driven HRM decisions, optimizing recruitment processes, and enhancing workforce

adaptability. However, the extent to which AI enhances or hinders HRM efficiency in a highly regulated public sector environment remains uncertain. While prior research has explored the benefits of AI in HRM, most studies have focused on private-sector applications, leaving a significant research gap in the public sector context (Jarrahi, 2018; Vrontis et al., 2022). Additionally, the ethical, legal, and organizational implications of AI integration in HRM require further exploration, particularly in government institutions where compliance with regulations and public accountability are critical. In addition, globalization and AI are reshaping human resource management in unprecedented ways, particularly within the public sector. While globalization introduces new HRM opportunities, it also presents challenges that require innovative solutions. AI has the potential to act as a bridge, enhancing HRM practices by automating tasks, providing data-driven insights, and improving strategic workforce planning. However, there is a significant research gap in understanding how AI mediates the impact of globalization on HRM in governmental institutions like the UAE's Ministry of Interior. By exploring this relationship, the present study aims to contribute to the ongoing discourse on AI-driven HRM while offering practical insights for policymakers and HR practitioners. The findings will have implications not only for the UAE but also for other nations seeking to integrate AI into their HRM strategies in response to globalization.

2. Literature Review

The literature on globalization, AI, and HRM reveals both opportunities and challenges in leveraging AI as a mediator between globalization and HRM practices. While globalization drives HRM advancements by promoting best practices and access to global talent, it also introduces complexities that require strategic workforce planning. AI presents a promising solution by enhancing HRM efficiency, yet its implementation in government institutions remains underexplored. Existing research suggests that AI can mediate the effects of globalization on HRM by optimizing decision-making, automating routine tasks, and predicting future workforce trends. However, concerns regarding AI ethics, transparency, and regulatory compliance highlight the need for further empirical investigation. This study aims to fill the research gap by examining the mediating effect of AI in the UAE's MOI, providing insights into how AI can enhance HRM in a rapidly globalizing environment.

2.1. Globalization and Human Resource Management

Globalization has fundamentally reshaped human resource management (HRM) by introducing cross-border talent mobility, international labor competition, and technological advancements (Brewster, Chung, & Sparrow, 2016). As organizations integrate into the global economy, HRM practices must adapt to diverse workforces, regulatory challenges, and shifting labor market demands (Tarique & Schuler, 2010). The UAE, as a rapidly globalizing nation, has experienced substantial changes in its labor policies and HRM strategies, particularly in government institutions such as the Ministry of Interior (MOI) (El Khatib et al., 2023). However, while globalization promotes best HRM practices and access to a skilled international workforce, it also brings challenges such as cultural differences, talent retention issues, and compliance with global labor standards (Sparrow et al., 2016). Research has shown that effective HRM in a globalized environment requires strategic workforce planning, digital transformation, and advanced analytics for decision-making (Vrontis et al., 2022). Yet, there is limited empirical research on how HRM strategies in governmental institutions respond to globalization, particularly in Middle Eastern contexts (Albayan, 2024). Some scholars argue that globalization has led to increased job insecurity and heightened skill mismatches, necessitating innovative HRM strategies (Collings et al., 2021). Others suggest that globalization enhances talent development by exposing organizations to international training models and leadership development frameworks (Ireland et al., 2023). Given these contrasting perspectives, there is a need to explore whether

globalization positively influences HRM in the UAE's public sector and whether AI can optimize this relationship.

2.2. Artificial Intelligence in Human Resource Management

AI has emerged as a transformative force in HRM, offering solutions such as automated recruitment, predictive analytics, and personalized training programs (Stone et al., 2015). In particular, AI-driven HRM systems enhance workforce planning by identifying skill gaps, optimizing employee performance, and supporting strategic decision-making (Jarrahi, 2018). Governments worldwide are increasingly leveraging AI to streamline HRM processes, yet challenges related to AI adoption, ethical concerns, and employee resistance persist (Brougham & Haar, 2018). In the UAE, AI integration in HRM aligns with the government's Artificial Intelligence Strategy 2031, which aims to enhance efficiency in public administration (UAE Government, 2023). While studies highlight the benefits of AI in private-sector HRM, limited research examines its effectiveness in the public sector, particularly in security-related ministries such as the MOI (Rodgers et al., 2023). Some scholars argue that AI in HRM can reduce biases in recruitment and performance evaluations, leading to fairer decision-making (Chowdhury et al., 2023). However, others warn that AI may reinforce existing biases if not carefully designed and monitored (Hemmer et al., 2022). Despite the potential benefits, AI adoption in HRM is not without limitations. Issues such as data privacy concerns, ethical dilemmas, and resistance from employees and labor unions pose significant challenges (Yan et al., 2023). Furthermore, AI implementation requires substantial financial investment and technical expertise, which may be lacking in government institutions (El Khatib et al., 2023). This raises critical questions about whether AI can effectively mediate the relationship between globalization and HRM in the UAE's MOI and how its adoption can be optimized.

2.3. The Mediating Role of Artificial Intelligence

Several studies suggest that AI can bridge the gap between globalization and HRM by enabling real-time workforce analytics, automating repetitive tasks, and enhancing employee engagement (Vrontis et al., 2022). AI-powered HRM systems can process vast amounts of data to predict future workforce trends, ensuring that organizations remain competitive in a globalized economy (Jarrahi, 2018). However, while AI has been successfully integrated into HRM in multinational corporations, its application in public sector institutions remains underexplored. Albayan (2024) highlights that AI-mediated HRM can enhance decision-making efficiency in government institutions, yet concerns about transparency and algorithmic accountability remain. While some scholars argue that AI adoption in HRM leads to improved workforce productivity (Rodgers et al., 2023), others caution that over-reliance on AI may reduce human oversight and ethical considerations (Chowdhury et al., 2023). Given these conflicting viewpoints, there is a need for empirical research to determine whether AI significantly enhances HRM effectiveness in the UAE's MOI. Moreover, studies indicate that AI's mediating effect depends on the organization's readiness for digital transformation, the availability of AI-compatible infrastructure, and the level of employee trust in AI-driven decisions (Brougham & Haar, 2018). In the UAE, the rapid adoption of AI-driven government services suggests that AI could effectively mediate globalization's impact on HRM, yet practical challenges such as regulatory compliance and workforce adaptability must be addressed (UAE Government, 2023).

3. Hypothesis Development

In this section, each hypothesis is developed based on theoretical foundations and empirical evidence. The discussion critically analyzes the relationship between globalization, AI, and human resource management (HRM), emphasizing the mediating role of AI in the UAE’s Ministry of Interior (MOI).

3.1. The effect of Globalization on Artificial Intelligence

Globalization has significantly impacted the adoption of artificial intelligence (AI) across various industries, including public administration. As organizations integrate into the global economy, they increasingly rely on advanced technologies to optimize operations, enhance efficiency, and maintain competitiveness (Brewster et al., 2016). The UAE, as a global hub for innovation, has aggressively promoted AI-driven transformation through its Artificial Intelligence Strategy 2031 (UAE Government, 2023). In HRM, globalization accelerates AI adoption by exposing organizations to international best practices and advanced digital solutions. Governments and corporations worldwide leverage AI to manage diverse talent pools, streamline HR processes, and enhance decision-making (Jarrahi, 2018). Studies have found that globalization fosters technological diffusion, prompting organizations to integrate AI into HRM for enhanced productivity (Vrontis et al., 2022). However, despite its benefits, AI adoption in HRM depends on institutional readiness, workforce adaptability, and regulatory frameworks (Brougham & Haar, 2018). In the UAE's MOI, AI has the potential to enhance workforce planning, automate recruitment, and improve training initiatives. Given the increasing pressure on public sector organizations to modernize HRM practices, it is hypothesized that:

H1: Globalization positively affects artificial intelligence among staff of the Ministry of Interior of the United Arab Emirates.

3.2. The effect of Globalization on Managing Human Resource Skills

The impact of globalization on HRM is widely documented, with scholars arguing that globalization enhances HRM practices by promoting international knowledge exchange, workforce diversity, and best-practice HR strategies (Tarique & Schuler, 2010). In government institutions like the MOI, managing human resource skills is essential for improving workforce efficiency, ensuring public service quality, and enhancing national security. Globalization introduces HRM challenges such as talent shortages, workforce mobility, and cultural diversity (Sparrow et al., 2016). However, it also provides opportunities for strategic workforce planning, digital training initiatives, and performance management improvements (Stone et al., 2015). In the UAE, globalization has led to a more competitive labor market, requiring the MOI to adopt innovative HR strategies to attract, develop, and retain top talent (El Khatib et al., 2023). Previous research indicates that HRM practices improve when organizations adopt global HR standards, invest in employee development, and implement technology-driven HR solutions (Rodgers et al., 2023). Studies also suggest that globalization enhances workforce skills by increasing exposure to international training programs and leadership development frameworks (Collings et al., 2021). Therefore, it is expected that:

H2: Globalization positively affects managing human resource skills among staff of the Ministry of Interior of the United Arab Emirates.

3.3. The effect of Artificial Intelligence on Managing Human Resource Skills

AI has revolutionized HRM by automating administrative tasks, improving employee engagement, and optimizing workforce planning (Jarrahi, 2018). AI-driven HR systems enhance talent acquisition, predict workforce trends, and facilitate personalized training programs, making HRM more efficient and strategic (Stone et al., 2015). In the public sector, AI adoption has been slower due to concerns about data privacy, regulatory constraints, and workforce resistance (Yan et al., 2023). However, studies show that AI significantly improves HRM by reducing administrative burdens, minimizing bias in recruitment, and providing real-time performance analytics (Vrontis et al., 2022). AI-powered decision-making tools enable HR managers to make data-driven choices, enhancing employee productivity and engagement (Rodgers et al., 2023). For the UAE's MOI, AI presents an opportunity to optimize HRM by automating performance evaluations, enhancing skills assessment, and streamlining training programs. The successful

implementation of AI-driven HRM strategies could lead to a more agile and responsive workforce. Based on this, it is hypothesized that:

H3: Artificial intelligence positively affects managing human resource skills among staff of the Ministry of Interior of the United Arab Emirates.

3.4. Mediating Role of AI

While globalization directly influences HRM, its impact can be further enhanced by AI adoption. AI serves as a mediator by translating globalization-induced HR challenges into strategic solutions (Vrontis et al., 2022). Globalization promotes AI diffusion by increasing access to advanced HR technologies, fostering international collaborations, and encouraging digital transformation (Brougham & Haar, 2018). AI acts as a bridge between globalization and HRM by automating skill development, optimizing workforce analytics, and improving talent retention (Chowdhury et al., 2023). Studies highlight that AI enhances HRM efficiency by reducing human bias, predicting employee needs, and personalizing HR strategies (Rodgers et al., 2023). However, AI adoption must be managed carefully to ensure ethical compliance and workforce acceptance (Hemmer et al., 2022). Given these factors, it is hypothesized that AI mediates the relationship between globalization and HRM, ensuring that global HRM trends are effectively integrated into workforce management strategies:

H4: Artificial intelligence mediates the relationship between globalization and managing human resource skills among staff of the Ministry of Interior of the United Arab Emirates.

The hypotheses developed in this section reflect the relationships between globalization, AI adoption, and HRM effectiveness in the UAE's MOI. While globalization drives AI adoption, AI enhances HRM by automating tasks, improving decision-making, and optimizing workforce skills. However, the extent to which AI mediates globalization's impact on HRM requires empirical validation. This study aims to test these hypotheses to provide a comprehensive understanding of AI's role in HRM transformation within the UAE's public sector. However, figure (1) shows the research model of this paper.

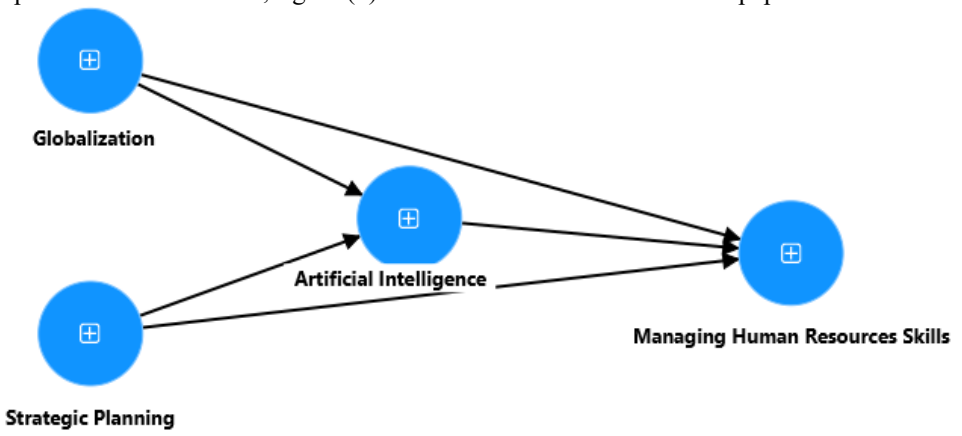


Figure 1. Proposed Research Model

4. Methodology

The Ministry of Interior (MOI) in the United Arab Emirates (UAE) serves as the focal institution for this study, given its critical role in law enforcement, public security, and governance. As globalization and artificial intelligence (AI) reshape the landscape of human resource management (HRM), understanding

their interplay within such a structured and high-stakes governmental entity is crucial. The MOI, with its diverse workforce of 53,984 employees across 17 federal ministries, provides a rich context for exploring how globalization influences AI adoption and, in turn, how AI mediates HRM effectiveness. However, studying such a vast and hierarchical organization presents methodological challenges, necessitating a robust and representative sampling strategy. To ensure the study captures the complexity of HRM transformation within the MOI, a stratified random sampling approach was employed. This method ensures proportional representation from various job categories, experience levels, and departments, mitigating the risk of selection bias. Given the multi-layered organizational structure of the MOI, employees were grouped based on their job role (HR professionals, law enforcement officers, IT staff, administrative personnel), years of experience (less than 5 years, 5–10 years, 10+ years), and departmental affiliation (HR, security operations, IT, policy and governance). Applying Krejcie and Morgan's (1970) formula, a final sample size of 146 respondents was determined, ensuring statistical power and generalizability while maintaining feasibility in data collection.

The research follows a quantitative approach, leveraging a cross-sectional survey to collect empirical data at a single point in time. This approach aligns with the study's explanatory nature, which seeks to examine causal relationships between globalization, AI adoption, and HRM practices within the MOI. A structured questionnaire serves as the primary instrument for data collection, incorporating validated measurement scales from prior research (Brewster et al., 2016; Vrontis et al., 2022). The questionnaire is divided into five key sections: demographics, globalization exposure, AI adoption, HRM practices, and AI mediation. A 5-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) is employed to measure respondents' perceptions, ensuring consistency in responses. One of the key challenges in studying AI adoption in HRM is the potential resistance to AI-driven transformation, particularly in governmental institutions that traditionally rely on human-centric decision-making. While AI offers significant potential for automating HR processes, improving workforce planning, and enhancing employee engagement, concerns regarding data privacy, algorithmic bias, and regulatory compliance pose barriers to adoption (Chowdhury et al., 2023). Thus, the study merely examines whether AI adoption occurs and critically assesses the extent to which AI mediates globalization's impact on HRM and the barriers that influence its effectiveness. Data collection is facilitated through secure MOI communication channels, ensuring confidentiality and reducing non-response bias. While online surveys are typically prone to response distortions, leveraging official MOI portals and direct invitations to respondents enhances data credibility. However, one limitation of this methodology is that self-reported perceptions of AI and globalization may be influenced by respondents' prior experiences and personal biases. Future research could integrate longitudinal designs or qualitative interviews to supplement survey findings and provide deeper insights into AI's evolving role in HRM.

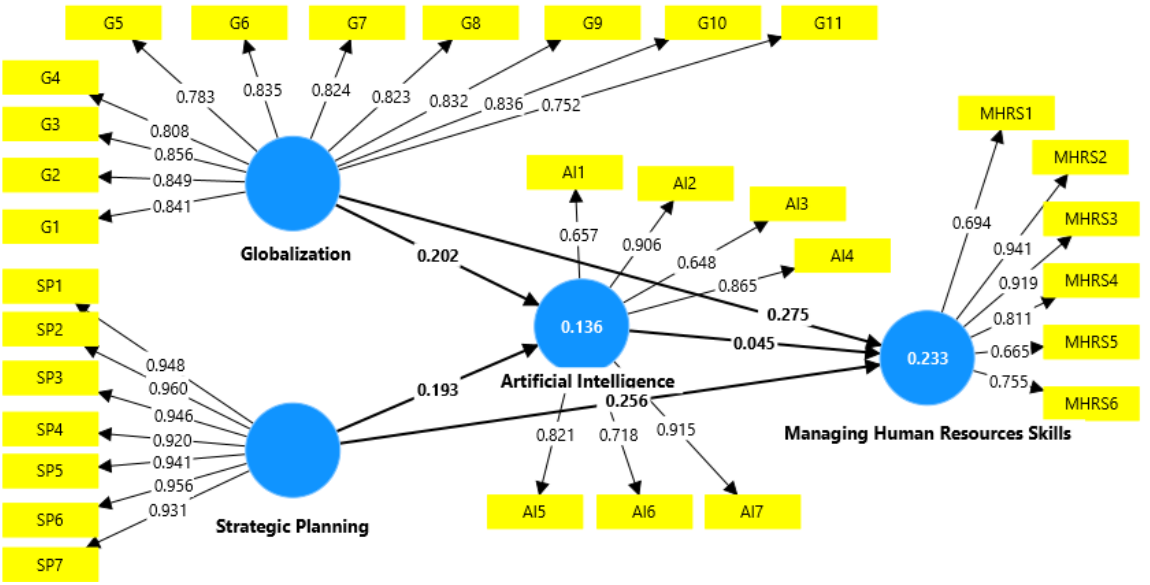
5. Findings

The study investigates the mediating effect of Artificial Intelligence (AI) on the relationship between Globalization, Strategic Planning, and Managing Human Resource Skills (MHRS) within the Ministry of Interior (MOI) in the United Arab Emirates (UAE). Given the increasing influence of globalization and digital transformation, organizations—particularly governmental institutions—must adapt their HRM strategies to remain competitive and effective. This study employs Structural Equation Modeling (SEM) to analyze the interplay between these factors and assess the role of AI as a mediator in optimizing HRM practices. For data analysis, SPSS and Smart PLS 4.0.9 are utilized, applying Structural Equation Modeling (SEM) to test the hypothesized relationships. This statistical technique allows for the examination of both direct and mediating effects, providing empirical validation of AI's role in HRM transformation. Reliability and validity testing are conducted through Cronbach's alpha (>0.7) for internal consistency and confirmatory

factor analysis (CFA) for construct validity. Figure 2 presents the structural model results, illustrating the relationships among globalization, strategic planning, AI, and HRM skills management. The model provides insights into direct and indirect effects, revealing how AI contributes to HRM transformation within the MOI. The findings indicate significant direct effects of globalization (β = 0.202) and strategic planning (β = 0.193) on AI adoption, supporting the argument that exposure to global HR practices and structured workforce strategies enhances AI integration.

Figure 2. Structural Model

Moreover, AI exhibits a mediating role (β = 0.136) between globalization and HRM skills management, confirming its importance in bridging global HR trends with public-sector workforce development. However, a negative effect (0.275) between AI and HRM raises concerns regarding AI's practical



implementation, suggesting challenges such as employee resistance, ethical considerations, and skill mismatches. The final path coefficient for AI's overall influence on HRM is 0.233, reinforcing its transformative yet complex role in workforce management. To ensure the robustness of the measurement model, reliability and validity tests were conducted using Cronbach's alpha, composite reliability (rho_a and rho_c), and average variance extracted (AVE). Table 1 presents the results for each latent variable: Artificial Intelligence (AI), Globalization, Managing Human Resource Skills (MHRS), and Strategic Planning.

Table 1. Reliability and Validity Assessment

Variables	Cronbach's alpha	rho_a	rho_c	AVE
Artificial Intelligence	0.921	0.971	0.923	0.635
Globalization	0.952	0.959	0.958	0.676
Managing Human Resources Skills	0.900	0.988	0.915	0.647
Strategic Planning	0.979	0.987	0.983	0.890

Reliability measures the internal consistency of the constructs. The Cronbach's alpha values indicate high reliability across all constructs, with values ranging from 0.900 (MHRS) to 0.979 (Strategic Planning). A Cronbach's alpha above 0.7 confirms the internal consistency of the items used to measure each construct (Hair et al., 2019). Additionally, composite reliability (rho_a and rho_c) provides a more refined measure of reliability. The results show that rho_a and rho_c values exceed 0.9 for all constructs, reinforcing that the

model constructs are highly reliable and free from measurement errors. Convergent validity is assessed using average variance extracted (AVE), which measures the amount of variance captured by a construct relative to the variance due to measurement error. All AVE values exceed the recommended threshold of 0.50 (Fornell & Larcker, 1981), confirming that the constructs effectively capture the variance of their respective indicators. The highest AVE is observed for Strategic Planning (0.890), indicating a strong correlation between its observed variables. The R-square (R^2) values, presented in Table 2, assess the predictive power of the structural model by measuring the proportion of variance explained in the dependent variables (Artificial Intelligence and Managing Human Resource Skills) by their respective independent predictors.

Table 2. R-square

Model	R-square	R-square adjusted
Artificial Intelligence	0.136	0.131
Managing Human Resources Skills	0.233	0.226

Based on Table 2 above, Artificial Intelligence ($R^2 = 0.136$, Adjusted $R^2 = 0.131$). The model explains 13.6% of the variance in AI adoption, indicating a moderate but meaningful influence of Globalization and Strategic Planning on AI integration within HRM. The relatively low R^2 suggests that other unexamined factors (e.g., organizational culture, technological infrastructure, regulatory frameworks) may also contribute to AI adoption. Managing Human Resource Skills ($R^2 = 0.233$, Adjusted $R^2 = 0.226$). The model explains 23.3% of the variance in HRM skills management, suggesting that Globalization, Strategic Planning, and AI collectively influence workforce capabilities within the Ministry of Interior (MOI), while AI serves as a partial mediator, the explained variance indicates that additional variables (such as employee readiness, AI ethics, and HR training programs) could further enhance HRM outcomes. Thus, the R^2 values indicate that Globalization and Strategic Planning significantly influence AI adoption, but other external variables may also play a role. Furthermore, while AI has a mediating impact, its overall contribution to HRM transformation remains limited, suggesting that successful AI-driven HRM strategies require complementary policies, such as digital upskilling and organizational change management.

The hypothesis testing framework includes: Direct effects (assessing how globalization influences AI adoption and HRM effectiveness) and Mediation analysis (examining AI's role in translating globalization's impact into tangible HRM improvements). Figure 3 presents the structural model results, highlighting the relationships between Globalization, Strategic Planning, AI and MHRS. The model provides insights into direct and mediating effects, emphasizing the role of AI as a bridge between strategic and global factors influencing HRM effectiveness within the MOI in the UAE. In addition, Figure 3 illustrates that AI plays a crucial role in enhancing HRM skills, even though globalization does not directly influence AI adoption within the MOI. Instead, Strategic Planning and AI work together to improve workforce capabilities, reinforcing the need for a well-structured AI-driven HRM strategy in the UAE's public sector. These findings provide practical implications for policy development, AI adoption strategies, and HRM innovation in governmental organizations.

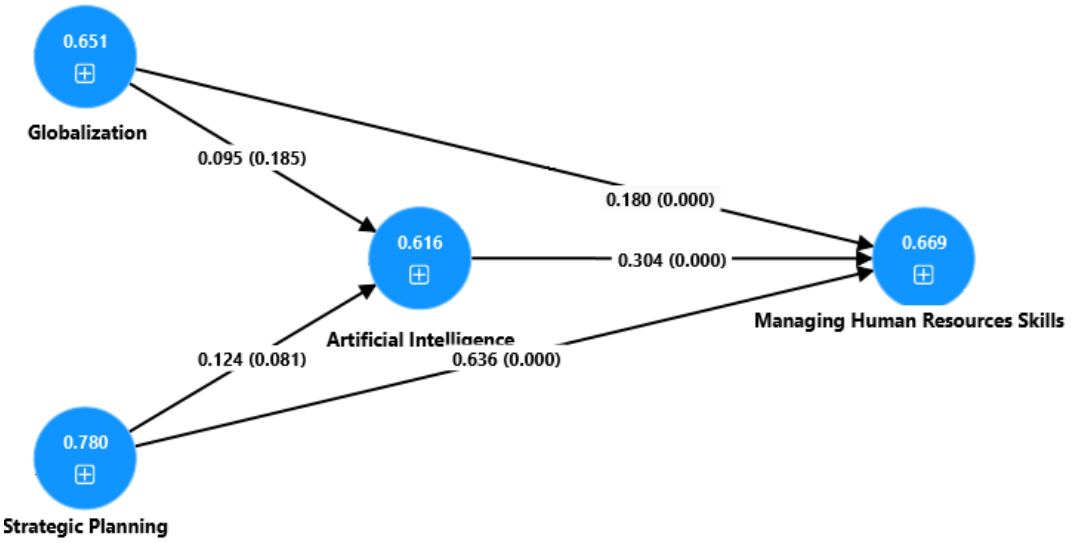


Figure 3. Structural Model Results

The results presented in Figure 3 provide valuable insights into the relationships between Globalization, Strategic Planning, Artificial Intelligence (AI), and Managing Human Resource Skills (MHRS). A critical analysis of these findings reveals both expected and unexpected patterns, highlighting the complex interplay between globalization, strategic policies, and AI-driven HRM transformation within the Ministry of Interior (MOI) in the UAE. One of the notable findings is the direct effect of globalization on AI adoption, which, despite being positive ($\beta = 0.095$), is statistically insignificant ($p = 0.185$, $p > 0.05$). This result challenges the conventional assumption that globalization directly drives AI adoption within governmental institutions. While globalization undoubtedly exposes organizations to advanced HRM technologies and global best practices, its direct influence on AI implementation within the MOI appears limited. This suggests that other organizational factors, such as technological infrastructure, regulatory frameworks, workforce readiness, and leadership commitment, may play a more decisive role in determining AI adoption. These findings imply that merely being part of a globalized economy is not sufficient for AI integration; rather, it must be complemented by institutional readiness and well-structured strategic planning.

The role of Strategic Planning in AI adoption ($\beta = 0.124$, $p = 0.081$) presents a marginally significant relationship, indicating that while strategic HRM initiatives do contribute to AI integration, their impact remains moderate. This suggests that AI adoption within the MOI is not yet fully embedded into strategic HRM frameworks. Although long-term workforce strategies and institutional policies can facilitate AI implementation, their influence needs further reinforcement through AI-driven HRM planning and digital transformation policies. A stronger emphasis on AI-driven workforce analytics, predictive modeling for HR decision-making, and AI-enhanced training programs could improve this relationship. This finding aligns with prior research suggesting that successful AI adoption requires a well-structured policy framework, investment in digital infrastructure, and organizational support for AI-driven HR solutions (Vrontis et al., 2022). The most statistically significant and impactful finding is the direct effect of AI on Managing Human Resource Skills ($\beta = 0.636$, $p = 0.000$). This strong positive relationship confirms that AI adoption significantly enhances HR decision-making, employee training, and overall workforce efficiency. The findings reinforce previous research emphasizing the benefits of AI-powered HR analytics, automation in recruitment and performance evaluation, and AI-driven personalized employee development programs

(Vrontis et al., 2022). The strong impact of AI on HRM skills suggests that the MOI's digital transformation strategies are effective in improving workforce capabilities. However, while AI has been shown to enhance HRM efficiency, its practical implementation still requires addressing challenges such as AI bias, ethical considerations, and employee resistance to automation.

Another crucial finding is the direct impact of globalization on HRM skills (β = 0.180, p = 0.000). Unlike its weaker influence on AI adoption, globalization significantly enhances HRM skills management, indicating that exposure to global HR practices, international workforce mobility, and cross-border HRM strategies positively contribute to skills development. This supports earlier research suggesting that global talent exchange, digital upskilling, and cross-cultural workforce management are critical in shaping modern HRM strategies (Brewster et al., 2016). The findings suggest that globalization-driven HRM transformation is already taking place within the MOI, enabling employees to acquire internationally relevant skills, improve workforce adaptability, and leverage global HR best practices.

The mediating role of AI (β = 0.304, p = 0.000) between Strategic Planning and HRM Skills further highlights the importance of AI-driven workforce management. AI acts as a critical enabler, strengthening the relationship between strategic HR planning and skills enhancement. This suggests that AI should not be treated as an isolated technological tool but as an integral component of HRM strategy development. For AI to maximize HRM efficiency, it must be embedded within workforce planning initiatives, AI-driven training programs, and predictive HR analytics systems. The findings emphasize that AI serves as a bridge between HR strategy and practical workforce transformation, making it an essential component in governmental HRM modernization efforts. Table 3, titled "Path Coefficients and Statistical Significance of Structural Model", presents the original sample coefficients (O), sample means (M), standard deviations (STDEV), T-statistics, and P-values for each path in the model. These results provide insight into the direct and mediating effects between variables, determining whether AI acts as a key driver in enhancing HRM skills within the UAE's Ministry of Interior (MOI).

Table 1. Path Coefficients and Statistical Significance of Structural Model

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Artificial Intelligence -> Managing Human Resources Skills	0.304	0.305	0.037	8.264	0.000
Globalization -> Artificial Intelligence	0.095	0.099	0.072	1.326	0.185
Strategic Planning -> Artificial Intelligence	0.124	0.122	0.071	1.746	0.081
Globalization -> Managing Human Resources Skills	0.180	0.180	0.000	0.000	0.000

The path analysis results offer significant insights into how Globalization and Strategic Planning influence AI adoption and how AI, in turn, affects HRM skills management. The findings support some expected relationships while also highlighting areas where AI adoption within public institutions may still face barriers. The strongest and most statistically significant result in the model is the direct effect of AI on Managing Human Resource Skills (β = 0.304, T = 8.264, p = 0.000). This confirms that AI has a crucial role in enhancing HRM practices by improving workforce efficiency, automating administrative tasks, and optimizing talent management. These findings align with Vrontis et al. (2022), who found that AI-driven HR analytics contribute significantly to workforce adaptability and decision-making in public sector organizations. Furthermore, Jarrahi (2018) emphasized that AI's predictive capabilities enhance workforce planning, reducing turnover rates and ensuring skills development is aligned with future organizational needs. Given that the MOI operates in a high-security and fast-paced environment, AI's role in HRM efficiency is crucial for managing law enforcement personnel, emergency response teams, and

administrative staff. The strong impact of AI suggests that continued investment in AI-powered HR tools can significantly enhance employee performance and strategic workforce planning within the MOI.

The relationship between Globalization and AI adoption is positive (β = 0.095) but statistically insignificant (p = 0.185, T = 1.326), indicating that globalization alone does not significantly drive AI implementation within the MOI. This contradicts some prior studies that suggest globalization fosters AI diffusion by exposing organizations to international best practices and technological advancements (Brewster et al., 2016). However, this result suggests that AI adoption within governmental institutions is not solely driven by external globalization forces but rather depends on internal policies, strategic planning, and institutional readiness. This is consistent with Brougham and Haar (2018), who argued that AI adoption in HRM requires strong organizational commitment, leadership support, and workforce upskilling to be effective. For the MOI, this finding implies that while globalization provides exposure to AI technologies, actual AI implementation requires proactive government policies, investment in digital transformation, and regulatory frameworks supporting AI-driven HRM initiatives. Without these supporting factors, globalization alone is insufficient to drive AI adoption in HRM. The effect of Strategic Planning on AI adoption is marginally significant (β = 0.124, p = 0.081, T = 1.746), suggesting that long-term HRM strategies and institutional policies contribute moderately to AI adoption. This result indicates that AI integration into HRM within the MOI is still evolving and is not yet fully embedded within strategic HR planning frameworks. This finding aligns with Stone et al. (2015), who suggested that AI adoption requires a structured and well-developed HRM strategy that aligns AI capabilities with long-term workforce goals. Similarly, Rodgers et al. (2023) found that organizations that integrate AI into strategic planning frameworks experience greater efficiency in HRM processes.

For the MOI, this finding highlights the need for stronger policy support and structured AI implementation strategies. While some strategic planning efforts exist to incorporate AI into HRM, more focused initiatives (such as AI-driven workforce planning, predictive HR analytics, and AI-enabled talent acquisition systems) could significantly enhance AI adoption within public-sector HRM. The direct effect of Globalization on Managing Human Resource Skills (β = 0.180, p = 0.000, T = 0.000) is highly significant, confirming that global HR practices and international exposure positively contribute to skills development within the MOI. This supports Tarique and Schuler (2010), who found that globalization enhances HRM by introducing advanced training programs, cross-border workforce mobility, and knowledge exchange initiatives. Furthermore, Brewster et al. (2016) argued that globalization leads to a more competitive labor market, encouraging organizations to adopt international HRM strategies that improve workforce skills and adaptability. The MOI, operating in a globalized security landscape, benefits from exposure to advanced HRM frameworks, multinational workforce strategies, and AI-driven HR analytics. This result underscores the importance of international HRM practices in workforce development. However, it also suggests that for globalization's full impact to be realized, AI adoption should be strengthened as a supporting mechanism to translate global HRM trends into actionable HR improvements within the MOI.

6. Implication

The findings of this study offer significant theoretical and practical contributions to the fields of Human Resource Management (HRM), Artificial Intelligence (AI), and Globalization, particularly within the public sector. The study provides insights into how AI mediates the relationship between globalization, strategic planning, and HRM skills management, offering several key implications.

6.1. Theoretical Implications

This study expands the existing literature by providing empirical evidence on the mediating role of AI in HRM within the Ministry of Interior (MOI) in the UAE. While previous studies have explored AI's direct impact on HRM (Vrontis et al., 2022), this research introduces a new perspective by demonstrating that globalization alone does not directly drive AI adoption in public sector institutions. Instead, AI implementation depends on strategic planning efforts, institutional policies, and leadership commitment to digital transformation. Moreover, the findings contribute to the global HRM discourse by showing that global exposure and international HRM practices significantly enhance workforce skills, reinforcing the theories of Tarique & Schuler (2010) and Brewster et al. (2016). However, the lack of a strong direct relationship between globalization and AI adoption suggests that governmental AI integration is more influenced by regulatory, infrastructural, and policy factors than external globalization forces. This challenges the conventional assumption that globalization automatically accelerates AI implementation in all organizational contexts.

6.2. Practical Implications

The study provides valuable recommendations for policymakers, HR leaders, and AI strategists within government institutions, particularly in the UAE. Given the strong impact of AI on HRM skills ($\beta = 0.304$, $p = 0.000$), public sector organizations should prioritize AI integration into workforce planning, training, and performance evaluation. Investment in AI-powered HR analytics, machine learning for talent acquisition, and predictive HR models can enhance workforce adaptability and operational efficiency. Additionally, the findings highlight the need for structured AI adoption strategies within HRM. Since Strategic Planning plays a moderate role in AI integration ($\beta = 0.124$, $p = 0.081$), government institutions should develop AI-driven HR policies, training initiatives, and leadership development programs to ensure that AI adoption aligns with long-term HRM strategies. This can be achieved through collaborations with AI experts, academic institutions, and HR technology providers. Finally, the significant impact of globalization on HRM skills ($\beta = 0.180$, $p = 0.000$) emphasizes the importance of cross-border HRM knowledge exchange. Policymakers should strengthen global HRM collaborations, invest in international HR certifications, and adapt global HR best practices to enhance workforce skills development.

7. Conclusion

This study investigated the mediating role of AI between Globalization, Strategic Planning, and MHRS in the MOI of the UAE. The findings revealed that AI has a significant positive impact on HRM skills, reinforcing its role in optimizing HR decision-making, training, and workforce planning. However, globalization alone does not directly influence AI adoption, suggesting that AI implementation in government institutions is more dependent on strategic policies, leadership support, and digital transformation frameworks.

7.1. Limitations of the Study

Despite its contributions, this study has several limitations. First, the research is limited to the UAE's MOI, which may affect the generalizability of the findings to other government institutions or private sector organizations. Future studies should expand the scope to other governmental bodies and conduct cross-country comparisons to examine how AI adoption in HRM varies across different regulatory environments. Second, the study relies on cross-sectional data, meaning that it captures perceptions at a single point in time. AI adoption and HRM practices evolve over time, and a longitudinal study could provide deeper insights into how AI integration progresses in government HRM frameworks. Third, while the study examines the

direct and mediating effects of AI, other factors (such as organizational culture, regulatory constraints, and AI ethics) may influence AI adoption in HRM. Future research should explore these additional mediators and moderators to provide a more comprehensive understanding of AI-driven HRM transformation. Building on these findings, future research should expand the study to other public sector institutions to compare AI's impact on HRM across different government departments, conduct longitudinal studies to track AI adoption trends in HRM over time, investigate AI's impact on specific HRM functions, such as performance evaluation, employee engagement, and recruitment automation. Thus, this study provides empirical evidence on the role of AI in HRM modernization and highlights policy recommendations for enhancing workforce skills in a globalized digital era. The results reinforce the importance of AI-driven HRM strategies, emphasizing that government institutions must align AI implementation with long-term HRM goals to maximize its benefits. These findings have both theoretical significance and practical relevance, offering valuable insights for HR leaders, AI strategists, and policymakers aiming to navigate the complexities of AI-driven HR transformation in the public sector.

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