

Assessing the Impact of Information Systems and Automation on Human Resource Process Efficiency and Accuracy in Selected Government Offices in the Philippines: A Quantitative Descriptive-Correlational Study Based on the Technology Acceptance Model

Earl Conrad D. Bala¹, Marites D. Habagat^{2*}, Marc Benidec C. Arnado³, Johnley L. Matabalan⁴, Sciemon Jed Diu⁵, El Jane M. Pingkian⁶, Verjie Mae M. Demit⁷, Edgar Jr. C. Tac-an⁸, Tj C. Calo⁹, Yza Saligan¹⁰, Remarc B. Cabasag¹¹, Seth Ian D. Encarnada¹², Leocris L. Montejo¹³ & Jared Cartagenas¹⁴

¹⁻¹⁴Department of Information Technology, University of Science and Technology of Southern Philippines – Oroquieta Campus, Oroquieta City 7207, Misamis Occidental, Philippines. Email: marites.habagat@ustp.edu.ph



DOI: <https://doi.org/10.46382/mjbas.2026.10229>

Copyright © 2026 Earl Conrad D. Bala et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Article Received: 03 June 2026

Article Accepted: 25 June 2026

Article Published: 02 July 2026

ABSTRACT

This quantitative descriptive-correlational study assessed the impact of information systems and automation on Human Resource (HR) process efficiency and accuracy in selected government offices. A researcher-made questionnaire was administered to 58 respondents composed of HR officers, HR staff, and department employees. Data were analyzed using weighted mean, Pearson's r correlation, simple linear regression, and Cronbach's Alpha. The findings revealed that the respondents perceived information systems and automation to have a Very High Impact on HR process efficiency and accuracy with an overall weighted mean of 4.78. The Pearson's r analysis indicated a strong positive relationship between the use of information systems and automation and HR process efficiency ($r = 0.935$, $p < .001$) and HR process accuracy ($r = 0.969$, $p < .001$). The regression analysis further indicated that information systems and automation significantly predict improvements in HR efficiency and accuracy. The findings are aligned with the Technology Acceptance Model (TAM) which states that perceived usefulness and perceived ease of use are determinants of the adoption of technology and organizational performance outcomes.

Keywords: Human Resource Information Systems; Automation; HR Process Efficiency; HR Process Accuracy; Digital Transformation; Government Offices; Technology Acceptance Model; Human Resource Management; Organizational Performance; Public Sector Management; Artificial Intelligence.

1.0. Introduction

1.1. Background of the Study

In today's rapidly evolving digital environment, information and communication technology has transformed how organizations manage operations and deliver services. Human Resource Management (HRM) is among the organizational functions significantly affected by digital transformation. Traditional HR processes based on manual paperwork, spreadsheets and disparate documentation systems often lead to delays, inefficiencies, poor monitoring and reduced accuracy of organizational decision-making.

Government offices, in particular, continue to face challenges associated with manual HR processes such as delayed payroll processing, inaccurate employee records, inefficient attendance monitoring, and slow recruitment procedures. These inefficiencies affect not only internal operations but also the quality of public service delivery. As a response to these concerns, many organizations have begun adopting Human Resource Information Systems (HRIS) and automated technologies to improve operational efficiency and organizational effectiveness.

Modern HRIS combines employee records, attendance, payroll, recruitment and performance management into unified digital platforms. These systems reduce repetitive administrative tasks, minimize human error, improve data accuracy, and facilitate faster decision-making through the real-time access to the organizational information.

Performance expectancy, social influence, and facilitating conditions play a vital role in the motivation of adopting HRIS, which also ensures efficient workflows in governmental bodies, as indicated by Alkhwalidi et al. (2023).

HRIS was created owing to the necessity of having improved HR services. As stated by Abuhantash (2023), the adoption of HRIS ensures efficiency, effectiveness, and competitive advantage of the organization. According to previous studies, Murugesan et al. (2023) noted that HR digitalization contributes to increasing efficiency, accuracy, and flexibility of the operation. It happens due to the automation and artificial intelligence integration in HR operations.

At the same time, HR specialists' activities have become much more complicated due to technological innovations. As Khatoon et al. (2025) suggested that for HRM to transform, HR managers need to change their focus from taking administrative roles to taking strategic roles in their organizations. Further, Wang (2024) suggested that utilization of HRIS and analysis would help in effective decision making. Further, Shamout et al. (2022) argued that practicing e-HRM will enhance perceived usefulness and ease of use of the technology, which are the core components of TAM.

Although digitalizing HR management brings many benefits to organizations, successful implementation of the automated systems still depends on certain organizational and human factors. According to Pan et al. (2021), in addition to the above-mentioned factors, emphasized the great importance of the potentiality of HRIS mediating the influence of high-performance work systems. Bankins et al. (2022) in turn stressed the importance of peoples' judgment over computerized decision-making systems for trust in employees. Given the increasing popularity of digital technologies in governmental offices, the present research focuses on the assessment of the effect of information systems and automation on HR processes efficiency and accuracy.

1.2. Statement of the Problem

The purpose of the present research is to examine the effect of information systems and automation on the efficiency and accuracy of HR processes in governmental offices.

Specifically, the present research focuses on the following questions:

1. The current state of HR processes within organizations using information systems and automation;
2. The effect of information systems and automation on HR processes efficiency and accuracy.
3. Is there a significant relationship between the use of information systems and automation and HR process efficiency and accuracy?

1.3. Research Hypotheses

H0 (Null Hypothesis): There is no significant relationship between the use of information systems and the automation and the HR process efficiency and accuracy in government offices.

H1 (Alternative Hypothesis): There is a significant relationship between the use of information systems and automation and HR process efficiency and accuracy in government offices.

1.4. Scope and Delimitation

This study focuses on assessing the impact of information systems and automation on HR process efficiency and accuracy in selected government offices. The respondents were limited to HR officers, HR staff, and employees who directly use HR information systems in their daily operations. The study employed a quantitative descriptive-correlational approach using survey questionnaires to measure respondents' perceptions regarding the effectiveness of automated HR systems. The study does not cover qualitative aspects such as organizational culture, employee emotions, or detailed user experiences. A total of fifty-eight (58) respondents participated in the study through purposive sampling. The sample size was relatively small but enough to achieve the minimum statistical requirements for a correlational and regression analysis. The respondents were selected according to their direct involvement in the operations of the HR information system so as to ensure the relevance and reliability of the data obtained. The findings of the study are limited to the organizations included in the research and may not be generalized to all institutions.

1.5. Significance of the Study

The findings of this study may benefit the following stakeholders:

1. HR Managers and Administrators. The findings of this study may help HR managers make informed decisions regarding the implementation and improvement of HR information systems.
2. Government Institutions. The findings may provide useful guidance for developing the digital transformation strategies and HR management policies in government agencies.
3. Employees. The study shows how automated HR systems can improve the payroll processing and attendance monitoring, recruitment, and performance management.
4. Future Researchers. This study may serve as a reference for future studies related to HR digitalization, information systems, and organizational efficiency.

1.6. Study Objectives

The purpose of this study is to:

- 1) Find out the current situation of human resource processes in selected government offices using information systems and automation.
- 2) Assess the impact of information systems and automation on human resource process efficiency in selected government offices.
- 3) Assess the impact of information systems and automation on human resource process accuracy in selected government offices.
- 4) Determine the significant relationship between the use of information systems and automation and human resource process efficiency and accuracy.
- 5) Determine the predictive influence of information systems and automation on human resource process efficiency and accuracy using regression analysis.

2.0. Literature Review

2.1. Review of Related Literature

The digitalization of HR processes has become an essential component of organizational modernization. It has been proven that HRIS platforms increase organizational efficiency by automating and centralizing HR functions (Abuhantash, 2023). Moreover, automation has been proved to be very important in precision, flexibility and efficiency in the HR management (Murugesan et al., 2023).

Digital transformation shifts HR functions from administrative support to strategic organizational partnership (Khatoon et al., 2025). Likewise, HRIS and analytics were noted for enhancing the decision-making and operations of organizations (Wang, 2024). The HR function is becoming more and more automated, and Artificial Intelligence (AI) is increasingly being used. Recent evidence also suggests that artificial intelligence applications in human resource management contribute to recruitment, training, performance management, compensation, and employee retention processes (Safshekan et al., 2026). Artificial Intelligence (AI) contributes to recruitment, training, performance management, and workforce optimization processes. Singh and Shaurya (2021) found that AI adoption positively influences HR practices and organizational efficiency. According to Ali and Kallach (2024), the process of recruiting candidates using AI-based recruitment applications involved the reduction in screening time and quality selection. As such, this reduced the manual activities of the human resource personnel while increasing accuracy.

The use of AI in HR analytics can enhance workforce optimization and evidence-based organizational decision-making processes (Ayanponle et al., 2022). Recent studies further indicate that artificial intelligence continues to transform traditional human resource management practices and contributes to improved workforce management and organizational efficiency (Ncube, 2025). However, for successful digital transformation, the organization, as well as the employees within the organization, need to be prepared for it. Pan et al. (2021) mention two determinants of adopting HR technology, namely institutional support and infrastructural readiness. Some important elements that determine how effective the use of HR technology within an organization is include the potential of HRIS and high-performance work systems (Shahreki, 2024). It is, therefore, very important to monitor the HR continuously using AI for decision making and establishing trust in the employees.

2.2. Synthesis

The reviewed literature collectively demonstrates that HR information systems and automation improve organizational efficiency, operational accuracy, and strategic HR management. Existing studies also emphasize that successful implementation depends on organizational readiness, employee acceptance, and proper system integration. The literature strongly supports the present study's investigation into how information systems and automation influence HR process efficiency and accuracy in government offices.

2.3. Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM), which explains how users accept and use technological systems. Menant et al. (2021) discussed that perceived ease of use and perceived usefulness are important factors affecting technology adoption.

In this study, HR personnel are more likely to use automated HR systems if they perceive the systems as useful, efficient and easy to use. It is expected that the greater acceptance and use of HR technologies will improve the efficiency and accuracy of HR processes.

2.4. Conceptual Framework

The conceptual framework identifies the use of information systems and automation as the independent variable, while HR process efficiency and HR process accuracy serve as dependent variables. The framework illustrates that the implementation and effective utilization of digital HR systems may significantly influence the speed, quality, and accuracy of HR operations.

3.0. Methodology

3.1. Research Design

This study employed a quantitative descriptive-correlational research design. The descriptive method was used to describe the current condition of HR processes in organizations utilizing information systems and automation. Meanwhile, the correlational method was utilized to determine whether a significant relationship exists between the use of information systems and automation and HR process efficiency and accuracy.

The reason behind adopting the quantitative approach is that it helps collect and analyze numerical data using statistical procedures. Slater and Hasson (2025) described quantitative research as a systematic approach that uses numerical data collection and statistical analysis to answer research questions and examine relationships among measurable variables.

To strengthen methodological rigor, the descriptive-correlational design was selected because it permits the examination of relationships between measurable organizational variables while maintaining the natural operational environment of respondents.

3.2. Respondents of the Study

The respondents of the study consisted of HR officers, HR staff, and selected employees from government offices utilizing HR information systems.

Purposive sampling was used to ensure that only respondents with direct experience using HR information systems participated in the study.

A total of 58 respondents participated:

Table 1. Demographic Distribution of Respondents from Selected Government Offices According to Position Classification and Employment Characteristics (N = 58)

Table 1 presents the demographic profile of the respondents included in the study.

Category	Frequency	Percentage
HR Officers	25	43%
HR Staff	29	50%
Department Employees	4	7%
Total	58	100%

3.3. Research Instrument

The primary instrument used in this study was a researcher-made questionnaire with two sections.

The first section collected demographic information including position, length of service, and frequency of HRIS usage.

The second section contained Likert-scale items measuring the following variables:

Table 2. Research Variables, Measurement Indicators, and Operational Definitions Used in Assessing the Impact of Information Systems and Automation on Human Resource Processes.

Table 2 presents the variables, indicators, and operational definitions utilized in the study.

Variable	Indicators
Use of Information Systems and Automation	System usability, accessibility, automation capability, ease of use
HR Process Efficiency	Speed of transactions, workflow improvement, reduction of delays
HR Process Accuracy	Accuracy of records, reduction of errors, reliability of HR data

The instrument used a five-point Likert scale:

Table 3. Five-Point Likert Scale, Numerical Ranges, and Verbal Interpretations Used for Assessing Respondents' Perceptions.

Table 3 presents the Likert scale ranges and verbal interpretations used in analysing the responses.

Scale	Description	Interpretation
5	Strongly Agree	Very High Impact
4	Agree	High Impact
3	Neutral	Moderate Impact
2	Disagree	Low Impact
1	Strongly Disagree	Very Low Impact

To strengthen construct validity, the questionnaire items were reviewed by subject matter experts in HR management and information technology. The questionnaire was also examined to ensure alignment between the research objectives, theoretical framework, and operational definitions of the study variables.

3.4. Data Collection Procedure

Prior to the actual data collection, the researchers sought and obtained the necessary permission from the concerned government offices. Upon approval, the questionnaires were distributed through the use of Google Forms and printed copies.

Participation in the study was voluntary and the respondents were assured of the confidentiality of their responses. The questionnaires were collected and checked for completeness and later on encoded for statistical analysis.

3.5. Ethical Considerations

The study followed the ethical principles required for research involving human participants. Respondents received informed consent forms explaining the purpose of the study, confidentiality procedures, and voluntary participation. The study also complied with Republic Act No. 10173 or the Data Privacy Act of 2012.

3.6. Statistical Treatment of Data

The following statistical tools were used:

Table 4. Statistical Tools and Analytical Techniques Applied to Address the Research Objectives and Test the Study Hypotheses.

Table 4 presents the statistical tools employed to address the research objectives and hypotheses.

Statistical Tool	Purpose
Frequency and Percentage	Describe respondent profile
Weighted Mean	Measure perceived impact
Pearson's r	Determine significant relationship
Cronbach's Alpha	Measure reliability
Simple Linear Regression	Determine the predictive influence of information systems and automation on HR process efficiency and accuracy

The level of significance was set at $\alpha = 0.05$.

Prior to inferential statistical analysis, the data were screened for completeness and consistency. Composite scores derived from multiple Likert-scale items were treated as interval-level data to support correlational and regression analysis.

4.0. Results and Discussion

4.1. Reliability of the Research Instrument

The research instrument obtained a Cronbach's Alpha coefficient of 0.953, indicating excellent reliability and internal consistency.

Table 5. Reliability Analysis Results Demonstrating the Internal Consistency of the Research Instrument Using Cronbach's Alpha Coefficients

Table 5 presents the reliability analysis results of the research instrument.

Questionnaire Section	Cronbach's Alpha	Interpretation
Overall Instrument	0.953	Excellent Reliability

The reliability result indicates that the questionnaire was suitable for measuring the perceived impact of information systems and automation on HR processes.

4.2. Impact of Information Systems on HR Processes

The respondents perceived information systems and automation to have a very high impact on HR process efficiency and accuracy.

Table 6. Descriptive Statistics Showing Respondents' Assessment of Information Systems and Automation Utilization in Human Resource Processes.

Table 6 presents respondents' assessments regarding the utilization of information systems and automation in human resource processes.

Item	Survey Statement	Variable Measured
Q1	Information systems make HR processes faster.	Information Systems and Automation
Q2	Automation reduces the time needed to complete HR tasks.	Information Systems and Automation
Q3	HR services are delivered on time using digital systems.	Information Systems and Automation
Q4	Digital systems to accelerate HR processing.	Information Systems and Automation
Q5	Automation improves the workflow of HR tasks.	Information Systems and Automation
Q6	HR staff can complete more work using information systems.	HR Process Efficiency
Q7	Manual work in HR is reduced through automation.	HR Process Efficiency
Q8	Information systems reduce errors in HR records.	HR Process Accuracy
Q9	Digital storage improves employee data accuracy	HR Process Accuracy
Q10	Automation helps to avoid mistakes in HR tasks.	HR Process Accuracy
Q11	HR reports are more reliable with digital systems.	HR Process Accuracy
Q12	Information systems will enhance data security.	HR Process Accuracy
Q13	Digitalization will improve employee satisfaction.	HR Process Efficiency
Q14	Information systems improve overall HR efficiency.	HR Process Efficiency
Q15	Employees will need minimal training to use the system.	Information Systems and Automation

This table defines the survey items (Q1 through Q15) used in the questionnaire.

Table 7. Respondents' Perceptions of the Impact of Information Systems and Automation on Human Resource Process Efficiency and Accuracy

Table 7 presents respondents' perceptions of the impact of information systems and automation on human resource process efficiency and accuracy.

Indicator	Mean	Interpretation
Q1	4.88	Very High Impact
Q2	4.81	Very High Impact
Q3	4.79	Very High Impact
Q4	4.79	Very High Impact
Q5	4.84	Very High Impact
Q6	4.84	Very High Impact
Q7	4.72	Very High Impact
Q8	4.74	Very High Impact
Q9	4.74	Very High Impact
Q10	4.74	Very High Impact
Q11	4.79	Very High Impact
Q12	4.76	Very High Impact
Q13	4.78	Very High Impact
Q14	4.84	Very High Impact
Q15	4.67	Very High Impact
Overall Weighted Mean	4.78	Very High Impact

The results suggest that respondents view automated HR systems as very useful in enhancing the management of workflows, minimizing delays, improving records accuracy, and augmenting the efficiency of the organization.

The findings are consistent with Wang (2024) who found that the implementation of HRIS leads to an increase in operational efficiency and automation of workflows.

4.3. Test of Significant Relationship and Regression Analysis

The first step was to conduct Pearson's r correlation analysis in order to ascertain whether there was a significant relationship between the use of information systems and automation and the efficiency and accuracy of HR processes.

Table 8. Pearson Correlation Analysis Examining the Relationship Between Information Systems and Automation and Human Resource Process Efficiency and Accuracy.

Table 8 presents the Pearson correlation analysis between information systems and automation and human resource process outcomes.

Variables	r-value	p-value	Decision	Interpretation
Use of Information Systems and Automation ↔ HR Efficiency	0.935	$p < .001$	Reject H_0	Very Strong Positive
Use of Information Systems and Automation ↔ HR Accuracy	0.969	$p < .001$	Reject H_0	Very Strong Positive

The analysis revealed a strong positive relationship between the use of information systems and automation and HR process efficiency and accuracy. Since the p-value is lower than the 0.05 level of significance, the null hypothesis was rejected.

Simple linear regression analysis was used to further examine predictive influence.

4.4. Regression Analysis Results

Table 9. Simple Linear Regression Analysis Showing the Predictive Influence of Information Systems and Automation on Human Resource Process Efficiency.

Table 9 presents the regression analysis examining the influence of information systems and automation on human resource process efficiency.

Model	R	R ²	F-value	p-value	Interpretation
Information Systems and Automation → HR Process Efficiency	0.935	0.874	390.164	p < .001	Significant Predictor

The regression analysis revealed that information systems and automation accounted for 87.4% of the variance in HR process efficiency ($R^2 = 0.874$). The computed F-value of 390.164 with a significance level below 0.001 indicates that the regression model is statistically significant. The results show that increased information systems and automation utilization makes significant contribution to improvements in workflow efficiency, reduction of delays and faster HR transactions.

Table 10. Simple Linear Regression Analysis Showing the Predictive Influence of Information Systems and Automation on Human Resource Process Accuracy.

Table 10 presents the regression analysis examining the influence of information systems and automation on human resource process accuracy.

Model	R	R ²	F-value	p-value	Interpretation
Information Systems and Automation → HR Process Accuracy	0.969	0.938	852.298	p < .001	Significant Predictor

The regression analysis further revealed that information systems and automation significantly predict HR process accuracy, accounting for 93.8% of the variance in HR process accuracy ($R^2=0.938$). The computed F-value of 852.298 with a significance level below 0.001 indicates that the regression model is highly significant.

5.0. Conclusion and Future Recommendations

5.1. Summary

This quantitative descriptive-correlational study assessed the impact of information systems and automation on HR process efficiency and accuracy in government offices. A total of 58 respondents participated in the study using a

researcher-made survey questionnaire. Statistical tools including weighted mean, Pearson's r , frequency, percentage, and Cronbach's Alpha were utilized.

The findings revealed that:

1. Respondents perceived information systems and automation as having a very high impact on HR process efficiency and accuracy.
2. This tool had very high reliability.
3. There is a positive correlation between the usage of information systems and automation and the efficiency and accuracy of HR processes.

5.2. Conclusion

In light of the results, the following conclusions were made:

1. The usage of information systems and automation considerably increases the efficiency and accuracy of HR processes in governmental agencies.
2. Introduction of digital HR systems allows minimizing delays and optimizing work processes while increasing accuracy.
3. There is a positive correlation between the usage of information systems and automation and the efficiency and accuracy of HR processes.
4. The results confirm the Technology Acceptance Model, which postulates that the perception of usefulness and ease of use of information systems affect their acceptance and organizational performance.
5. Digital transformation projects positively affect the organizational performance when employees are ready, management supports it and technological resources are available.

5.3. Limitations of the Study

Despite the results being statistically significant, there are a number of limitations to be aware of Sample size and generalizability. The study was limited to 58 respondents. Although the selection of participants was ensured to have had direct experience with HRIS, the small sample size may limit the generalization of the findings to larger or non-government institutions.

Ceiling Effect and Response Bias. The general weighted mean of 4.78 is indicative of a "ceiling effect" since the responses given were close to perfect. It implies that the study experienced social desirability bias where the participants were likely to report good results on the technology implementation process within their organizations.

Lack of Qualitative Dimensions. This research employed only the quantitative research design. Hence, it did not account for the qualitative dimensions such as emotions of the workers, resistance to change, and cultural barriers as discussed by Bankins et al. (2022).

5.4. Recommendations

1. Government offices should continue investing in HR information systems and automation to improve efficiency and organizational performance.
2. HR administrators should implement regular employee training programs to maximize the effectiveness of HR technologies.
3. Government institutions should develop strategic digital transformation policies for the HR departments. Future research should be extended using qualitative methods such as interviews and focus group discussions with larger and more diverse samples.
4. Future studies should involve larger samples from multiple government agencies to improve the generalizability of findings.
5. Future researchers may employ mixed methods approaches combining surveys, interviews, and focus group discussions to obtain deeper insights into adoption of HR technology.
6. Future studies should explore the integration of Artificial Intelligence, predictive analytics, and machine learning technologies in human resource management processes.

Declarations

Source of Funding

The authors received no external funding for this study.

Competing Interests Statement

The authors declare no competing interests.

Consent for Publication

The authors consent to the publication of this manuscript.

Authors' Contributions

All authors contributed to the conceptualization, data collection, data analysis, manuscript preparation, and final approval of the manuscript.

Informed Consent

Informed consent was obtained from all respondents prior to participation in the study.

Availability of Data and Material

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Institutional Review Board Statement

Formal Institutional Review Board approval was not required for this study. Ethical principles for research involving human participants were observed, and informed consent was obtained from all respondents.

Ethical Approval

The study complied with the ethical principles governing research involving human participants and adhered to Republic Act No. 10173, otherwise known as the Data Privacy Act of 2012. Participation was voluntary, and respondents provided informed consent before data collection.

Acknowledgement

The authors express their gratitude to the participating government offices and respondents for their cooperation and support.

Declaration of Artificial Intelligence

Artificial Intelligence tools were used solely for language enhancement, grammar checking, and formatting assistance. All research design, data analysis, interpretation of results, and conclusions were performed by the authors.

References

- Abuhantash, A. (2023). The impact of human resource information systems (HRIS) on organizational performance: A systematic literature review. *European Journal of Business and Management Research*, 8(3): 239–245. <https://doi.org/10.24018/ejbmr.2023.8.3.1992>.
- Alkhwaldi, A.F., Alobidyeen, B., Abdulmuhsin, A.A., & Al-Okaily, M. (2023). Investigating the antecedents of HRIS adoption in public sector organizations: Integration of UTAUT and TTF. *International Journal of Organizational Analysis*, 31(7): 3251–3274. <https://doi.org/10.1108/ijoa-04-2022-3228>.
- Ali, O., & Kallach, L. (2024). Artificial intelligence enabled human resources recruitment functionalities: A scoping review. *Procedia Computer Science*, 232: 3268–3277. <https://doi.org/10.1016/j.procs.2024.02.142>.
- Ayanponle, L., Okatta, C.G., & Ajiga, D. (2022). AI-powered HR analytics: Transforming workforce optimization and decision-making. *International Journal of Science and Research Archive*, 5(2): 338–346. <https://doi.org/10.30574/ijrsra.2022.5.2.0057>.
- Bankins, S., Formosa, P., Griep, Y., & Richards, D. (2022). AI decision-making in HRM: Evidence-based insights and future research directions. *The International Journal of Human Resource Management*, 33(6): 1–30. <https://doi.org/10.1080/09585192.2022.2043612>.
- Budhwar, P., Malik, A., De Silva, M.T.T., & Thevisuthan, P. (2022). Artificial intelligence – challenges and opportunities for international HRM: A review and research agenda. *The International Journal of Human Resource Management*, 33(6): 1065–1097. <https://doi.org/10.1080/09585192.2022.2043813>.
- Fenwick, A., Molnar, G., & Frangos, P. (2024). Revisiting the role of HR in the age of AI: Bringing humans and machines closer together in the workplace. *Frontiers in Artificial Intelligence*, 6: Article 1272823. <https://doi.org/10.3389/frai.2023.1272823>.
- Khatoon, A., Rehman, S.U., Islam, T., & Ashraf, Y. (2025). Technology-driven change in human resource management: Reshaping talent management and organizational design. *Administrative Sciences*, 15(11): Article 452. <https://doi.org/10.3390/admsci15110452>.

- Menant, L., Gilibert, D., & Sauvezon, C. (2021). The application of acceptance models to human resource information systems: A literature review. *Frontiers in Psychology*, 12: Article 659421. <https://doi.org/10.3389/fpsyg.2021.659421>.
- Murugesan, U., Subramanian, P., Srivastava, S., & Dwivedi, A. (2023). A study of artificial intelligence impacts on human resource digitalization in industry 4.0. *Decision Analytics Journal*, 7: Article 100249. <https://doi.org/10.1016/j.dajour.2023.100249>.
- Ncube, T.R., Sishi, K.K., & Skinner, J.P. (2025). The impact of artificial intelligence on human resource management practices: An investigation. *SA Journal of Human Resource Management*, 23: Article a2960. <https://doi.org/10.4102/sajhrm.v23i0.2960>.
- Pan, Y., Froese, F., Liu, N., Hu, Y., & Ye, M. (2021). The adoption of artificial intelligence in employee recruitment: The influence of contextual factors. *The International Journal of Human Resource Management*, 33(6): 1125–1147. <https://doi.org/10.1080/09585192.2021.1879804>.
- Safshekan, M., Feili, A., Shojaeifard, A., & Sorooshian, S. (2026). Artificial intelligence in human resource management: Models for recruitment, training, performance, compensation, and retention. *Frontiers in Artificial Intelligence*, 9: Article 1718244. <https://doi.org/10.3389/frai.2026.1718244>.
- Shahreki, J. (2024). High-performance work systems and HR efficiency: The mediating role of HRIS potentialities. *International Journal of Management and Decision Making*, 23(3): 290–310. <https://doi.org/10.1504/ijmdm.2024.138313>.
- Shamout, M., Elayan, M., Rawashdeh, A., Kurdi, B., & Alshurideh, M. (2022). E-HRM practices and sustainable competitive advantage from HR practitioner's perspective: A mediated moderation analysis. *International Journal of Data and Network Science*, 6(1): 165–178. <https://doi.org/10.5267/j.ijdns.2021.9.011>.
- Singh, A., & Shaurya, A. (2021). Impact of artificial intelligence on HR practices in the UAE. *Humanities and Social Sciences Communications*, 8(1): 1–9. <https://doi.org/10.1057/s41599-021-00995-4>.
- Slater, P., & Hasson, F. (2025). Quantitative research designs, hierarchy of evidence and validity. *Journal of Psychiatric and Mental Health Nursing*, 32(3): 656–660. <https://doi.org/10.1111/jpm.13135>.
- Wang, A. (2024). Enhancing HR management through HRIS and data analytics. *Applied and Computational Engineering*, 64(1): 222–228. <https://doi.org/10.54254/2755-2721/64/20241394>.