ARTIFICIAL INTELLIGENCE AND HUMAN RESOURCE PLANNING IN RITMAN UNIVERSITY, IKOT EKPENE, AKWA IBOM STATE, NIGERIA

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ABSTRACT

Overtimes, the introduction and usage of Artificial Intelligence in the Nigerian universities has been seen as a transformational strategy of eliminating traditional methods and adopting modern and scientific method in solving organizational challenges towards the attainment of it goals. The study focused on Artificial Intelligence and human resource planning in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria, as the specific objectives of the study were to examine the impacts of Artificial Intelligence on recruitment exercise and to examine the impacts of Artificial Intelligence on staff attendance at work. The study adopted the multiplier effect theory and modernization theory as the theoretical frameworks while, the descriptive and survey method was used as the research design while primary and secondary sources of data were employed in the study. The Pearson Product Moment Correlation- PPMC was used to analyze the data gathered. From the findings, it was revealed among others that the introduction of Artificial Intelligence in Ritman University has provided the management of Ritman University with needed information of staff attendance for human resource planning. Based on the findings, the study recommends among others that the management of Ritman University should always liaise and consult the human resource department, before taking any decision related to employees of the University.

KEYWORDS: Artificial Intelligence, Human Resource Planning, Staff Attendance, Recruitment

Background to the study

The introduction and advent of Artificial Intelligence (AI) has significantly transformed human resource administration, particularly in areas such as recruitment and employee monitoring. AI-driven recruitment tools are increasingly being adopted by organizations to streamline hiring processes, improve candidate screening, and reduce bias (Upadhyay & Khandelwal, 2018). These systems utilize algorithms to analyze résumés, assess applicant compatibility, and even conduct

preliminary interviews using chatbots or video analysis, thereby enhancing efficiency and accuracy in talent acquisition (Black & Van Esch, 2020). Furthermore, AI can support data-driven decision-making, allowing recruiters to focus more on strategic aspects of hiring rather than manual screening tasks (Nawaz, Gomes, & Raza, 2022).

Again, the use of AI in monitoring staff attendance has gained prominence, especially with the rise of remote and hybrid work models. AI-powered attendance systems can automatically track employee check-ins, work hours, and productivity levels through facial recognition, biometric systems, or digital time-logging platforms (Wang & Wang, 2021). These technologies help reduce instances of time theft, enhance accountability, and ensure real-time tracking of workforce activities (Kraus et al., 2021). However, concerns about employee privacy, surveillance, and ethical use of AI remain critical considerations (Miller, 2021). Overall, while AI presents immense potential to revolutionize recruitment and attendance management, its successful implementation depends on balancing technological efficiency with ethical and human-centric approaches.

Since its establishment on November 23, 2015, Ritman University, a private institution located in Ikot Ekpene, Akwa Ibom State, Nigeria, has committed itself to providing entrepreneurial-oriented education and producing graduates equipped for global competitiveness (Eyo, et al., 2026).The university offers programmes across the Faculties of Natural and Applied Sciences, Humanities, and Social and Management Sciences, with a strong emphasis on digital literacy, innovation, and experiential learning. Human resource planning (HRP) in higher education refers to the systematic forecasting and management of staffing needs, both in terms of numbers and skills, to ensure institutions have the right human capital to realize their academic and strategic goals. In Nigeria, universities often face challenges in HRP, including inadequate funding, staff shortages, brain drain, a mismatch between staff competencies and evolving institutional needs, and limited investment in training and technology (Binns, 2018).

Meanwhile, Artificial Intelligence (AI) technologies such as predictive analytics, machine learning, and data mining are increasingly recognized globally as tools that can enhance HRP by enabling more accurate forecasting of personnel needs, identifying skills gaps, optimizing recruitment, improving retention, and automating administrative HR functions. Although AI adoption in HRP is more advanced in developed economies, there is growing interest and emerging applications in Nigeria, particularly in sectors like healthcare and social services, which point to the potential of such technologies for broader institutional use. However, the adoption of AI in HRP within Nigerian higher education faces significant impediments. Poor infrastructure, in particular unreliable power supply and internet connectivity, outdated technology, lack of skilled personnel, limited financial resources, and resistance to change are among the frequently cited obstacles. Given its mission of fostering innovation and employing modern curricula, Ritman University appears well-positioned to benefit from integrating AI into its HR planning processes. Yet, there is a paucity of empirical research examining the extent to which private universities in Nigeria, especially younger ones, are leveraging AI for HRP or what specific constraints and enabling factors they face in doing so. This study aims to fill that gap by investigating how AI could be used to improve human resource planning at Ritman University, assessing both potentials and challenges in the local setting.

Statement of the problem

Although AI-driven recruitment tools such as automated resume screening, predictive analytics, and virtual interview systems are being increasingly adopted in Nigeria to speed up hiring, reduce administrative burdens, and improve candidate matching, there are concerns that such tools may inadvertently perpetuate bias, reduce transparency in decision-making, and erode candidate trust. Specifically, many human resource managers report that while AI reduces the time and cost of selection, it also may discriminate against non-standard profiles (e.g., candidates from less prestigious institutions or with atypical employment histories), thereby reducing diversity and disadvantaging certain groups.

Consequently, there is a need to understand how AI adoption in recruitment at institutions like Ritman University influences fairness, efficiency, quality of hires, and whether staff perceptions and institutional capacity mitigate or exacerbate negative effects.

While AI-based attendance systems (e.g., biometric recognition, facial recognition, fingerprint scanning, AI-powered dashboards, or real-time monitoring) promise enhanced accuracy, reduced falsification of attendance records, and efficiency gains in managing time and compliance, their implementation raises concerns about employee privacy, autonomy, and psychological effects. Strict or pervasive monitoring may generate stress, reduce morale, and perhaps even provoke resistance among staff, which could negatively affect staff retention, job satisfaction, or willingness to comply, thereby undermining the very attendance improvements the technology aims to deliver. There is thus a problem in ensuring that AI tools for attendance do not simply impose surveillance, but are implemented in ways that support trust, fairness, and organizational culture, especially in settings like university environments, where staff engagement and dignity are important.

Objectives of the Study

The main objective of the study was to examine the effects of Artificial Intelligence and Human Resource Planning in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria, while the specific objectives of the study was to:

1. To examine the relationship between Artificial Intelligence and clock in attendance in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria
2. To find out the relationship between Artificial Intelligence and recruitment exercise in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria.

Research Questions

The following research questions was used to guide the research work

1. What is the relationship between Artificial Intelligence and clock in attendance in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria
2. What is the relationship between Artificial Intelligence and recruitment exercise in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria.

Research Hypotheses

Ho_1: There is no significant relationship between Artificial Intelligence and clock in attendance in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria

Ho_2 There is no significant relationship between Artificial Intelligence and recruitment exercise in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria

Scope of the Study

Content Scope: the content scope of this study was effects of Artificial Intelligence and Human Resource Planning in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria.

Geographical scope: The geographical concentration of the study was Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria.

Unit Scope: The unit cope for this study was (274) being the total number of staff in Ritman University

Variables scope: The study covers Artificial Intelligence, Human Resource Planning, recruitment, staff attendance at work.

The concept of Artificial Intelligence

Artificial Intelligence (AI) has experienced rapid and expansive growth in both theoretical foundations and practical applications over the past decade. For example, a bibliometric analysis of over 13,000 papers from 2012–2021 shows that AI and information processing publications have grown steadily, with a marked surge after 2020. This growth has been particularly strong in sub-fields such as deep learning, feature extraction, and machine learning more broadly (De la et al., 2024).

Dwivedi et al. (2021) observed that in information systems (IS) research, AI's role has been increasingly emphasized, but concerns have arisen regarding whether the field is building cumulatively. A systematic review of IS research between 2005 and 2020 identified 98 primary studies out of nearly 1,900, highlighting both the benefits of AI (e.g., automation, decision-support) and major gaps in business value demonstration and theoretical grounding. Explainability has become a major theme in AI research, especially as complex models (e.g., deep neural networks) are used in high-stakes domains such as healthcare, finance, and autonomous systems. Vilone & Longo (2020) systematically classified explainable AI (XAI) methods and their evaluations into clusters, and more recently, Mersha et al. (2024) provided a survey highlighting the need for rigorous mathematical formulations, accountability, and fairness.

Human Resource Planning

Human Resource Planning (HRP) is a strategic process that ensures an organization has the right number of people, with the right skills, in the right roles, at the right time. According to Reilly (2003), HRP is critical in aligning workforce requirements with organizational goals, especially in dynamic business environments. It involves forecasting future human resource needs, analyzing the current workforce, identifying gaps, and developing strategies to address those gaps (Wright & McMahan, 2011).

The role of HRP has undergone significant evolution due to globalization, technological advancements, and increased competition. Contemporary studies emphasize the strategic dimension of HRP, highlighting its contribution to organizational agility and competitive advantage (Saha et al., 2021). Jackson and Schuler (1990) argue that integrating HR planning with business strategy leads to more effective resource allocation and improved organizational performance.

Workforce analytics and AI-driven tools have enhanced the precision of HR forecasting and planning. According to Boudreau and Ramstad (2007), strategic talent analytics enable

organizations to prioritize high-value roles and align HR activities more effectively with strategic outcomes. Recent trends also emphasize scenario planning and dynamic modeling to respond to uncertain environments, especially post-COVID-19 (Boxall & Purcell, 2016). Again, several challenges remain. Studies note difficulties in accurately predicting long-term human capital needs due to fast-changing technology, shifting employee expectations, and labor market volatility (Noe et al., 2020). Furthermore, small and medium enterprises (SMEs) often lack the structured frameworks or resources to implement effective HRP (Kumari, 2012). Effective Human Resource Planning is not merely about headcount forecasting but is increasingly integrated with broader strategic planning and talent management practices. The functions and role of human resource planning are equally for the purpose of advancing human resource development, also known as manpower development. The introduction of artificial intelligence into Ritman University is a major benefit for manpower development in Ritman University (Eyo et al. 2024).

Recruitment Exercise

Recruitment is a fundamental component of Human Resource Management (HRM), aimed at attracting and selecting the most suitable candidates to fulfill organizational needs. A recruitment exercise typically includes job analysis, advertising the vacancy, shortlisting candidates, interviewing, and making job offers (Armstrong & Taylor, 2020). Effective recruitment ensures that organizations acquire talent aligned with their goals and culture, ultimately contributing to improved performance and competitiveness (Breaugh, 2008).

Traditionally, recruitment relied heavily on print advertising and employee referrals. However, the digital transformation has reshaped the process significantly. The emergence of e-recruitment platforms, social media, and AI-based applicant tracking systems has improved efficiency, widened talent pools, and reduced costs (Holm, 2012). According to Nikolaou (2014), online recruitment allows organizations to reach passive job seekers and enhances employer branding.

Yet, research highlights that the effectiveness of recruitment is not solely dependent on the tools used but also on strategy and candidate experience. Poorly designed recruitment exercises can lead to high turnover, poor performance, or legal challenges (Chapman & Webster, 2003). A strategic recruitment process includes forecasting labor needs, aligning with business strategy, and considering diversity and inclusion (Ployhart, 2006). Again, post-COVID-19 trends show a shift toward remote and hybrid recruitment practices. Virtual interviews, digital onboarding, and AI-driven assessments have become common, raising new concerns around bias, fairness, and data privacy (Dineen & Soltis, 2011). Studies also note that while automation increases efficiency, it may depersonalize the process, potentially affecting candidate perceptions and employer reputation (Stone et al., 2015). Recruitment exercises are evolving from administrative procedures to strategic functions. To remain competitive, organizations must balance technology adoption with human-centered design, ensuring that recruitment processes are efficient, inclusive, and aligned with long-term talent strategies.

Artificial Intelligence and Human Resource Planning

Human Resource Planning (HRP) involves forecasting an organization's future human capital needs, analyzing current workforce, identifying gaps (in numbers, skills, and competencies), and formulating strategies to fill those gaps (through recruitment, training, redeployment, etc.). Artificial Intelligence (AI) refers to technologies (machine learning, predictive analytics, natural language processing, etc.) that can help automate, optimize, and provide insights for decision-making in HRP (Eyo, et al., 2026).

Artificial Intelligence (AI) is increasingly transforming how organizations approach Human Resource Planning (HRP), offering tools that can automate, predict, and optimize workforce-related decisions. HRP involves forecasting the number and types of employees and organization will need in the future, ensuring the right people are in the right roles at the right time (Armstrong & Taylor, 2020). In academic institutions like Ritman University, which must regularly adapt to staff retirements, student growth, and new academic programs, HRP is essential for long-term sustainability and service delivery.

AI technologies such as predictive analytics, natural language processing, and machine learning can support HR planning by analyzing workforce trends, predicting turnover, and identifying future staffing needs (Boudreau & Ramstad, 2007). For example, AI systems can forecast which departments at Ritman University may face lecturer shortages based on retirement patterns, or analyze staff performance data to suggest areas for training and development. This allows for more strategic talent management, aligning human capital planning with the university's academic goals. AI can assist in automating time-consuming HR tasks such as data entry, attendance tracking, and performance evaluation, freeing HR professionals to focus on strategic planning and faculty engagement (Stone et al., 2015). In the context of universities, where human relationships and teaching quality are crucial, AI can be used not to replace, but to augment decision-making and administrative efficiency, implementing AI for HRP at Ritman University is not without challenges. Academic institutions, especially in developing countries, often lack the digital infrastructure and clean historical data needed for effective AI deployment (Johns, 2008). Additionally, ethical concerns such as data privacy, algorithmic bias, and transparency must be considered carefully, especially when AI systems are used to make decisions about recruitment, promotions, or retirements (Dineen & Soltis, 2011). Resistance to technology from staff, cost of system implementation, and limited local expertise in AI are also potential barriers for Ritman University. Yet, with the right investment in data management, capacity building, and stakeholder engagement, AI can become a powerful tool for modernizing HR practices in the university.

Artificial Intelligence and Recruitment Exercise

Recruitment is a critical component of human resource management, aimed at attracting and selecting candidates who fit the organizational goals and culture. In academic institutions like Ritman University, recruitment affects not only administrative efficiency but also teaching quality and research output. Traditionally, recruitment processes in universities involve manual job posting, application screening, interviewing, and final selection. However, the rise of Artificial Intelligence (AI) has introduced new tools and methods to make these exercises more efficient, data-driven, and objective (Nikolaou, 2014).

AI can assist in various stages of the recruitment exercise. For instance, AI-powered applicant tracking systems (ATS) can automatically scan and rank CVs based on predefined criteria, thereby reducing time and bias in shortlisting (Chapman & Webster, 2003). Natural language processing tools can analyze language in cover letters and academic portfolios to assess alignment with institutional goals. In the context of Ritman University, such tools could significantly improve efficiency in hiring faculty members, administrative staff, and technical personnel by focusing on both qualifications and cultural fit. AI can support decision-making by predicting a candidate's future performance or turnover risk based on historical hiring and performance data (Dineen & Soltis, 2011). For example, using machine learning, the university can analyze patterns from past hires to refine its recruitment strategies, ensuring that selected candidates are not only qualified but likely to stay and contribute long-term. To this, the use of AI in recruitment at Ritman University must be approached cautiously. One major concern is

algorithmic bias AI systems can unintentionally favor or disfavor certain groups if trained on biased historical data (Binns, 2018). This is particularly problematic in university settings where diversity, equity, and academic freedom are valued. Additionally, overreliance on automation may depersonalize the process, leading to poor candidate experiences and the loss of potentially valuable applicants who do not conform to standard data patterns (Stone et al., 2015). Another challenge is the digital readiness of the institution. For AI to be effective, Ritman University would need to ensure it has digitized HR data, reliable internet infrastructure, and trained HR personnel to interpret AI-generated insights. Cost is also a factor, as implementing AI tools particularly advanced or custom systems can be expensive and resource-intensive.

Theoretical Frameworks

Socio-Technical Systems Theory by Eric Trist and Kurt Lewin in the 1950

The Socio-Technical Systems Theory was originally proposed by Eric Trist **and** Kurt Lewin in the 1950**.** Eric Trist, in particular, is often credited as a key proponent of the theory, which was developed during his work with the Tavistock Institute in London.

The integration of Artificial Intelligence (AI) and human resource planning at Ritman University can be theoretically understood through the lens of the Socio-Technical Systems Theory, the Technology Acceptance Model (TAM), and the Human Capital Theory.

Firstly, the Socio-Technical Systems (STS) Theory posits that for any technological system to be successful, both the social and technical aspects must be jointly optimized (Trist & Bamforth, 1951). In the context of Ritman University, implementing AI-based attendance systems such as facial recognition or predictive attendance tracking requires not just the installation of the technology, but also alignment with staff behavior, organizational policies, and institutional culture. The effectiveness of AI in improving attendance management therefore depends on how well the system is integrated into existing social structures within the university.

Secondly, the Technology Acceptance Model (TAM) developed by Davis (1989) provides a framework for understanding how Ritman University staff might respond to AI attendance systems. TAM suggests that two key factors perceived usefulness and perceived ease of use determine whether individuals accept and use a new technology. If staff perceive the AI system as useful in reducing administrative errors and promoting fairness, and if it is user-friendly, they are more likely to adopt it. Conversely, resistance may arise if the technology is seen as invasive or too complex, which could hinder its effectiveness.

Finally, the Human Capital Theory (Becker, 1964) underlines the importance of investing in the skills and productivity of employees. Accurate and AI-enhanced attendance tracking allows HR managers to identify absenteeism patterns, monitor punctuality, and implement supportive policies such as flexible schedules or wellness programs. By doing so, the institution protects and enhances its human capital ensuring that both teaching and non-teaching staff remain productive, present, and engaged. Together, these theories form the foundation for understanding how AI can be effectively deployed to manage staff attendance at Ritman University. The STS theory emphasizes the need for harmony between people and technology; TAM explains user behavior toward AI adoption; and Human Capital Theory highlights the broader goal of optimizing workforce potential.

Modernization theory propounded by Walt W. Rostow in 1950

Modernization theory suggests that society's progress through stages of development by adopting new technologies and organizational practices to improve efficiency and growth. In the aspect of Ritman University, applying this theory means that embracing artificial intelligence in

human resource planning represents a step toward modernization. By integrating AI tools for recruitment, employee performance management, and workforce analytics, the university moves from traditional HR methods to more advanced, data-driven processes. This modernization improves decision-making, enhances staff productivity, and supports strategic workforce development, helping Ritman University align with global standards and foster sustainable institutional growth. Through AI-driven HR planning, the university not only modernizes its operations but also builds a foundation for continuous innovation and competitiveness in higher education

Methodology

The study adopted the descriptive survey research design because it is suitable for gathering data from the target population. Information were research questions through a well-structured questionnaire through Google form pattern. Thereafter, information collected were used in presenting the results of the study. The study population for the research was 270 from staff of Ritman University using Pearson Product Moment Correlation- PPMC as a method of data analysis.

Data Presentation and Analysis

Table 1 Showing Distribution of Questionnaire

Correctional centers	**Frequency**	**Percentage**
Teaching staff	130	37%
Non- Teaching staff	170	63%
Total	**300**	**100%**

Tables 2. Responses on Artificial Intelligence and human resource planning

S/N	**Questions**	**S/A**	**A**	**D**	**S/D**	**TOTAL (%)**
1.	Staff clock in while coming for work and clock out at the close of work	**250 (75%)**	**50 (25%)**	**0**	**0**	**300 100%)**
2	The clock in machine help in analysis of staff attendance at work	**290 (95%)**	**10 (5%)**	**0**	**0**	**300 (100%)**
3	Recruitment exercise of staff is now digital and online for apllicant	**320 (60%)**	**80 (40%)**	**0**	**0**	**300 100%)**
4	The clock machine assist in providing information to the human resource department for planning	**50 (25)**	**250 (75)**	**0**	**0**	**300 (100%)**
5	Staff attendance at work has increase as a result of the introduction of the clock in machine	**280 (90%)**	**20 (10%)**	**0**	**0**	**300 (100%)**

The table above shows the questions which were subjected to the questionnaire and with the help of research assistant, presented in Google form which facilitated the collected of the questionnaire and the computation was thereafter done as shown above.

Test of Hypotheses

Ho_1: There is no significant relationship between Artificial Intelligence and recruitment exercise in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria

Testing of Hypotheses

Table 3. Kruskal Wallis evaluation on relationship between Artificial Intelligence and recruitment exercise in Ritman University, Ikot Ekpene, Akwa Ibom State, Nigeria (n = 300).

Modules	**N**	**Mean**	**Mode**
Clock in machine =	75	0.71	5
Recruitment exercise	75	0.68	5
Online Portal Registration	75	0.67	5
Staff attendance	75	0.60	5

The analysis of the Kruskal Wallis evaluation on the relationship between Artificial Intelligence and recruitment exercise in Ritman University (n = 300), of the insights modules: attendance clock machine, Recruitment exercise The results from the Kruskal Wallis model provided valuable evidence regarding variables on Artificial Intelligence enhances human resource planning- staff attendance at work and recruitment exercise in Ritman University, the analysis showed an a significant association, between Artificial Intelligence and recruitment exercise in Ritman University, rating the module positively ineffective (FCPP = -0.95, $p < 0.05$) on staff attendance. Similarly, at (FCPP = -0.89, $p < 0.01$), findings suggest a positive significant correlation between Artificial Intelligence enhances human resource planning- staff attendance at work and recruitment exercise

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.842[a]	.708	.697	2.00994	2.349

a. Predictors: (Constant), Artificial Intelligence (lecturers clock in)

b. Dependent Variable: human resource planning

Source: Researcher's Computation (2025)

Table 4. Model Summary

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	745.721	3	248.574	61.530	.000[b]
	Residual	307.029	76	4.040		
	Total	1052.750	79			

a. Dependent Variable: human resource planning

b. Predictors: (Constant), Artificial Intelligence lecturers clock in attendance

Source: Researcher's Computation (2025)

Table 5: Model Summary

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.586	1.309		1.212	.229		
Artificial Intelligence	.598	.139	.581	4.288	.000	.209	4.792
lecturers clock in	.200	.141	.172	1.413	.162	.259	3.854
	.159	.116	.133	1.366	.176	.403	2.484

a. Dependent Variable: human resource planning

Source: Researcher's Computation (2025)

Discussion of Findings

From the findings of the study, through the use of Kruskal Wallis analysis, on how Artificial Intelligence enhance human resource planning- staff attendance at work and recruitment exercise (n = 300), it was discovered that Artificial Intelligence has enhance human resource planning- staff attendance at work and recruitment exercise. Findings also showed an a significant association between Artificial Intelligence and human resource planning- as staff reports to work daily and early comparing to when there was no clock in machine, rating the module positively ineffective (FCPP = -0.94, $p < 0.05$) on staff attendance. Similarly, at (FCPP = -0.72, $p < 0.01$), findings suggest a positive significant correlation between recruitment exercise and human resource planning, which is in support with work of Armstrong, & Taylor, (2020).

CONCLUSION

This study has examined the role of Artificial Intelligence (AI) in enhancing Human Resource Planning, with a specific focus on staff attendance management and recruitment processes at Ritman University. The findings indicate that AI integration into HR functions significantly improves operational efficiency, decision-making accuracy, and overall workforce management.

In the area of staff attendance, AI-driven biometric systems and attendance analytics have minimized time theft, improved punctuality, and provided real-time tracking that helps HR managers make data-driven decisions on staffing and performance. Meanwhile, in recruitment, AI tools such as applicant tracking systems (ATS), resume screening algorithms, and predictive analytics have shortened the hiring cycle, reduced human bias, and ensured that the most qualified candidates are identified based on data-driven criteria.

RECOMMENDATIONS

Based on the study's findings, the following recommendations are proposed for Ritman University to fully harness the potential of AI in HR planning:

1. Ritman University should invest in modern AI-based Human Resource Information Systems (HRIS) that integrate attendance tracking, performance evaluation, and recruitment management into a single platform.

2. AI systems should be regularly reviewed to assess their effectiveness, identify potential biases or flaws, and make improvements based on feedback and technological advancements.
3. That the management of Ritman University should always consult the human resource department before taking or making any policy, considering coordinated approach between the IT and HR departments which will ensure the seamless integration and maintenance of AI technologies.

REFERENCES

Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice* (15th ed.). Kogan Page.

Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of vocational behavior, 62*(2), 341–356.

Binns, R. (2018). Fairness in machine learning: Lessons from political philosophy. *Proceedings of the 2018 conference on fairness, accountability and transparency*, 149–159.

Black, J. S., & van Esch, P. (2020). AI-enabled recruiting: What is it and how should a manager use it? *Business horizons, 63*(2), 215–226.

Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *The Quarterly Journal of Economics, 130*(1),

Boudreau, J. W., & Ramstad, P. M. (2007). *Beyond HR: The new science of human capital*. Harvard Business School Press.

Boxall, P., & Purcell, J. (2016). *Strategy and human resource management* (4th ed.). Palgrave Macmillan.

Breaugh, J. A. (2008). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review, 18*(3), 103–118.

Cascio, W. F., & Boudreau, J. W. (2016). The search for global competence: From international HR to talent management. *Journal of World Business, 51*(1), 103– 114.

Chapman, D. S., & Webster, J. (2003). The use of technologies in the recruiting, screening, and selection processes for job candidates. *International Journal of Selection and Assessment, 11*(2-3), 113–120.

Davey, M. M., Cummings, G., Newburn-Cook, C. V., & Lo, E. A. (2009). Predictors of nurse absenteeism in hospitals: A systematic review. *Journal of Nursing Management, 17*(3), 312–330.

De la Torre-López, M. J., Pérez-Aguera, J. R., & Gutiérrez-Salcedo, M. (2024). Artificial Intelligence and Systematic Literature Reviews: A Survey of the Last 15 Years. *arXiv preprint* arXiv:2401.10917.

Dineen, B. R., & Soltis, S. M. (2011). Recruitment: A review of research and emerging directions. In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology: Vol. 2. Selecting and Developing Members for the Organization* (pp. 43–66).

Dwivedi, Y. K., Hughes, D. L., Baabdullah, A. M., Ribeiro-Navarrete, S., Giannakis, M., Al-Debei, M. M., & Wamba, S. F. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management, 57* (10), 79-94

Eyo, U. E., Umo, I. E. & Effiong, U. A. (2024). Manpower development and organizational performance in Nigerian public and private universities; a case study of university of Uyo and Ritman university (2010 – 2024). *International journal of academic anthology, United States* .8(1) 53-66.

Eyo, Uforo Etim, Sunday E. Ibanga and Ofonmbuk E. Atakpa. (2026). Remuneration and Employee Service Delivery in Ritman University, Ikot Ekpene L.G.A, Akwa Ibom State, Nigeria. *Universal Academic Journal of Education, Science and Technology*. 7(1) 39-51

Holm, A. B. (2012). E-recruitment: Towards a ubiquitous recruitment process and candidate relationship management. *Zeitschrift für Personalforschung, 26*(3), 241–259.

Jackson, S. E., & Schuler, R. S. (1990). Human resource planning: Challenges for industrial/organizational psychologists. *American Psychologist, 45*(2), 223–239.

Johns, G. (2008). Absenteeism and presenteeism: Not at work or not working well. In C. L. Cooper & J. Barling (Eds.), *The SAGE Handbook of Organizational Behavior: Volume I - Micro Approaches* (pp. 160–177)..

Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior, 31*(4), 519–542. https://doi.org/10.1002/job.630

Kraus, S., Schiavone, F., Pluzhnikova, A., & Invernizzi, A. C. (2021). Digital transformation in healthcare: Analyzing the current state-of-research. *Journal of Business Research, 12*(3), 557–567.

Kumari, N. (2012). A study of human resource planning in the banking sector in India. *International Journal of Marketing and Technology, 2*(8), 235–243.

Mersha, A., Etemad, A., & Al-Fuqaha, A. (2024). Explainable Artificial Intelligence (XAI): A Survey of Approaches, Challenges, and Future Directions.

Miller, K. (2021). The ethics of workplace surveillance: A critical review. *Journal of Business Ethics, 168*(3), 535–548.

Mutsuddi, I. (2016). Enhancing employee attendance through biometric technology: A case study. *International Journal of Management and Applied Research, 3*(1), 26–36.

Nawaz, N., Gomes, A. M., & Raza, H. (2022). Artificial intelligence in recruitment: An overview of current practices and future directions. *International Journal of Human Resource Studies, 12*(1), 101–119.

Nikolaou, I. (2014). Social networking web sites in job search and employee recruitment. *International Journal of Selection and Assessment, 22*(2), 179–189.

Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2020). *Fundamentals of human resource management* (8th ed.). McGraw-Hill Education.

Ployhart, R. E. (2006). Staffing in the 21st century: New challenges and strategic opportunities. *Journal of Management, 32*(6), 868–897.

Reilly, P. (2003). *Guide to workforce planning in local authorities*. Institute for Employment Studies.

Ribeiro-Navarrete, S., Saura, J. R., & Palos-Sánchez, P. R. (2024). A generative artificial intelligence topic modeling framework for literature reviews in business, management and accountability. *Heliyon, 10*(1), e18217.

Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson.

Saha, S. K., Gregar, A., & Saha, S. (2021). Human resource planning: A strategic approach to organizational success. *International Journal of Business and Management, 16*(1), 1–12.

Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review, 25*(2), 216–231.

Upadhyay, A. K., & Khandelwal, K. (2018). Applying artificial intelligence: Implications for recruitment. *Strategic HR Review, 17*(5), 255–258.

Wang, Y., & Wang, Y. (2021)