

IMPACT OF E-RECRUITMENT ON PERSONNEL MANAGEMENT IN ADAMAWA STATE POLYTECHNIC, YOLA CAROLINE

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Abstract

This study examined the adoption, implementation, and impact of e-recruitment systems on personnel management at Adamawa State Polytechnic, Yola, Nigeria. The study assessed the influence of e-recruitment on recruitment efficiency, transparency, fairness, cost reduction, and administrative effectiveness, while identifying challenges affecting its implementation. A descriptive survey research design was adopted, targeting 150 staff involved in recruitment processes. Using stratified random sampling, 109 respondents were selected, and data were collected through structured questionnaires. Data were analyzed using descriptive statistics (frequencies, percentages, means, and standard deviations). The findings revealed that e-recruitment is moderately adopted, with online job advertisements and recruitment databases being the most widely implemented practices. The results further revealed that e-recruitment significantly improves recruitment efficiency, enhances transparency and fairness, and contributes to cost reduction and administrative effectiveness. However, implementation is constrained by unstable internet access, inadequate ICT infrastructure, limited technical skills, insufficient funding, and resistance to organizational change. The study concluded that while Adamawa State Polytechnic has made considerable progress in adopting e-recruitment, full automation and optimization of recruitment processes have not yet been achieved. It recommended increased investment in ICT infrastructure, continuous staff training, adequate funding, effective change management strategies, and the full automation of recruitment activities to improve efficiency, transparency, fairness, and cost-effectiveness in personnel management.

Introduction

The rapid advancement of Information and Communication Technology (ICT) has transformed human resource management (HRM) practices globally by replacing traditional manual processes with electronic systems that enhance efficiency, transparency, and accountability. This transformation has led to the emergence of electronic human resource management (e-HRM), which enables organizations to automate personnel functions such as recruitment, payroll administration, performance appraisal, and employee records management. Within the public sector and institutions of higher learning, e-governance has become a key strategy for improving administrative effectiveness and service delivery. One of its most significant applications is electronic recruitment (e-recruitment), which facilitates online advertisement of vacancies, electronic

submission of applications, digital screening of candidates, and efficient communication throughout the recruitment process, thereby reducing recruitment time and costs while promoting merit-based selection (Bondarouk & Ruel, 2014; Lengnick-Hall & Moritz, 2003; Marler & Parry, 2016).

In Nigeria, the adoption of e-governance has gained momentum through government initiatives such as the establishment of the National Information Technology Development Agency (NITDA), the Integrated Payroll and Personnel Information System (IPPIS), and the Treasury Single Account (TSA), all aimed at improving efficiency, transparency, and accountability in public administration. Despite these efforts, the implementation of e-governance remains constrained by inadequate ICT infrastructure, unreliable electricity supply, poor internet connectivity, insufficient technical expertise, inadequate funding, and resistance to organizational change. As a result, many public institutions continue to rely on conventional personnel management practices, particularly in recruitment, limiting the realization of the full benefits of digital governance (Adamolekun, 2005; NITDA, 2020; United Nations, 2020). Adamawa State Polytechnic, Yola, like many public tertiary institutions in Nigeria, has embraced aspects of digital administration; however, the extent to which e-recruitment has been effectively integrated into its personnel management system remains uncertain. Manual recruitment procedures continue to create delays, increase administrative costs, reduce transparency, and limit operational efficiency. Although previous studies have shown that e-governance can improve administrative effectiveness, staff productivity, communication, and accountability, its successful implementation depends on adequate ICT infrastructure, supportive institutional policies, and technical capacity. Given the limited empirical evidence on the effectiveness of e-recruitment in personnel management within Nigerian state-owned polytechnics, particularly Adamawa State Polytechnic, Yola, this study examines the impact of e-governance on personnel management by investigating the extent of adoption of e-recruitment systems and assessing their impact on the efficiency of staff recruitment (Adamu, 2019; Mohammed & Nnaji, 2020).

Statement of the Problem

Despite the growing importance of e-governance in improving efficiency, transparency, and accountability, personnel management in Adamawa State Polytechnic, Yola, continues to rely largely on traditional recruitment practices. The limited adoption of e-recruitment has resulted in manual procedures, delays, high administrative costs, and concerns about fairness and transparency. These challenges are compounded by inadequate ICT infrastructure, unstable power supply, insufficient technical skills, inadequate funding, resistance to change, and weak institutional support, all of which hinder the effective implementation of digital recruitment systems. Furthermore, there is limited empirical evidence on the impact of e-recruitment on personnel management within the institution, creating a need for systematic investigation.

Objectives of the Study

Impact of E-Recruitment on Personnel Management in Adamawa State Polytechnic, Yola.
The specific objectives are;

1. Examine the extent of adoption of e-recruitment.

2. Determine the effect of e-recruitment on recruitment efficiency.

Scope of the Study

This study examines the impact of e-governance on personnel management in Adamawa State Polytechnic, Yola, with emphasis on e-recruitment. It focuses on the extent of e-recruitment adoption, its impact on recruitment efficiency, transparency and fairness, administrative cost reduction, and the challenges affecting its implementation. The study is limited to e-recruitment and excludes other e-governance functions such as e-payroll, e-promotion, and e-performance appraisal.

The study is geographically limited to Adamawa State Polytechnic, Yola, and covers management, personnel/human resource, and administrative staff involved in recruitment and personnel management. The findings are based on data collected during the study period and are specific to the institution's current level of e-recruitment implementation.

Literature Review

E-Governance

E-governance refers to the application of Information and Communication Technologies (ICTs) to improve the efficiency, transparency, accountability, and effectiveness of governance and public sector administration. It involves the integration of digital technologies into government operations to facilitate information sharing, enhance decision-making, improve service delivery, and strengthen interactions between government institutions, employees, and citizens. In public tertiary institutions, e-governance serves as the technological framework that supports electronic human resource management (e-HRM) functions such as recruitment, payroll administration, personnel records management, staff appraisal, promotion, and communication. The adoption of e-governance has become an essential component of institutional modernization because it enables organizations to reduce bureaucratic procedures, improve operational efficiency, and deliver quality services more effectively (United Nations, 2024; OECD, 2023).

Globally, governments and public institutions have increasingly embraced e-governance as a strategy for achieving digital transformation and improving institutional performance. The emergence of digital government has shifted public administration from paper-based procedures to integrated electronic systems that enhance transparency, reduce corruption, promote accountability, and facilitate evidence-based decision-making. According to the United Nations (2024), countries that have invested substantially in digital governance have recorded significant improvements in administrative efficiency, public trust, service accessibility, and institutional responsiveness. Similarly, the OECD (2023) observes that digital governance strengthens organizational resilience by enabling public institutions to respond more efficiently to emerging administrative and societal challenges.

Within higher educational institutions, e-governance provides the digital infrastructure upon which modern personnel management practices are built. Human resource activities such as recruitment, employee record management, leave administration, performance appraisal, and payroll processing are increasingly being automated through integrated information systems. These

technologies reduce administrative bottlenecks, minimize paperwork, improve data accuracy, and facilitate timely decision-making. Bondarouk and Brewster (2023) argue that successful digital transformation in human resource management depends not only on technological availability but also on institutional commitment, adequate ICT infrastructure, and employee readiness to adopt new technologies.

In the Nigerian public sector, e-governance has received increasing attention through initiatives such as the Integrated Payroll and Personnel Information System (IPPIS), the Treasury Single Account (TSA), the Government Integrated Financial Management Information System (GIFMIS), and the National Information Technology Development Agency (NITDA) digital transformation policies. These reforms seek to improve accountability, transparency, and efficiency in public administration. However, studies indicate that many public institutions continue to face significant implementation challenges arising from inadequate ICT infrastructure, unstable electricity supply, poor internet connectivity, insufficient funding, weak institutional support, and resistance to organizational change (NITDA, 2023; United Nations, 2024).

In the context of Adamawa State Polytechnic, Yola, e-governance represents the institutional environment within which e-recruitment systems operate. The effectiveness of digital personnel management depends largely on management commitment, supportive institutional policies, availability of ICT facilities, and staff competence. Without a comprehensive e-governance framework, digital recruitment initiatives may remain fragmented and fail to produce the expected improvements in efficiency, transparency, and accountability. Consequently, strengthening e-governance is fundamental to the successful implementation of e-recruitment and other electronic personnel management practices (Twizeyimana & Andersson, 2019; Mensah et al., 2022).

E-Recruitment

E-recruitment refers to the use of internet-based technologies and electronic platforms to manage recruitment activities electronically. It involves the advertisement of vacancies through online platforms, electronic submission of applications, automated screening of applicants, maintenance of recruitment databases, online communication with candidates, and, in some organizations, virtual interviews and automated shortlisting. E-recruitment represents one of the most significant applications of electronic human resource management because it transforms traditional recruitment procedures into faster, more transparent, and more efficient digital processes (Parry & Strohmeier, 2021).

The increasing globalization of labour markets and rapid advances in digital technologies have made e-recruitment an indispensable component of modern human resource management. Organizations increasingly utilize institutional websites, online job portals, professional networking platforms, and applicant tracking systems to attract qualified applicants from wider geographical locations. According to Bondarouk and Brewster (2023), e-recruitment expands access to talent,

reduces recruitment costs, shortens hiring cycles, improves applicant experience, and enhances the overall quality of recruitment decisions through data-driven selection processes.

Recent empirical studies demonstrate that e-recruitment improves organizational efficiency by automating repetitive recruitment tasks, reducing manual errors, enhancing record management, and facilitating timely communication between recruiters and applicants (Nawaz & Gomes, 2024; Nikolaou, 2021). Digital recruitment systems also provide greater transparency by maintaining electronic records that reduce opportunities for manipulation and favouritism during recruitment exercises. Consequently, many public organizations have adopted e-recruitment to strengthen merit-based recruitment and improve public confidence in personnel management processes.

In Nigeria, the implementation of e-recruitment remains uneven across public institutions. While some organizations have successfully automated substantial aspects of recruitment, many tertiary institutions continue to rely on manual procedures because of inadequate ICT infrastructure, limited technical expertise, insufficient financial resources, and organizational resistance to digital transformation. Studies have shown that the successful implementation of e-recruitment requires continuous staff training, adequate institutional support, reliable internet connectivity, and effective change management strategies (Adeyemi & Olorunsola, 2022; Yusuf & Bello, 2024).

For Adamawa State Polytechnic, Yola, e-recruitment constitutes the principal mechanism through which e-governance influences personnel management. The extent to which online recruitment systems are adopted determines the efficiency, transparency, fairness, and administrative effectiveness of staff recruitment. Therefore, understanding the level of e-recruitment adoption provides important insights into the institution's progress toward digital transformation and improved personnel management.

Recruitment Efficiency

Recruitment efficiency refers to the ability of an organization to attract, assess, and appoint competent employees within the shortest possible time and at the lowest administrative cost while maintaining fairness, transparency, and quality in the selection process. Efficient recruitment systems ensure that vacancies are filled promptly, recruitment expenses are minimized, qualified candidates are identified accurately, and organizational objectives are achieved without unnecessary delays or duplication of effort (Nikolaou, 2021).

Recruitment efficiency has become increasingly important in contemporary human resource management because organizations operate in highly competitive environments that require timely acquisition of competent personnel. Digital technologies have significantly transformed recruitment efficiency by automating application processing, candidate screening, interview scheduling, communication, and documentation. According to Al-Hawari and Al-Shaar (2023), organizations that utilize electronic recruitment systems experience shorter recruitment cycles, lower

administrative costs, improved candidate management, and better quality hiring decisions than organizations relying solely on manual recruitment methods.

Recent literature further indicates that recruitment efficiency extends beyond reducing recruitment time to include improved transparency, enhanced communication, better applicant experience, accurate record management, and effective utilization of organizational resources. Bondarouk and Brewster (2023) argue that digital recruitment technologies enable human resource departments to shift attention from routine administrative activities to strategic workforce planning and talent management, thereby improving overall organizational performance.

In public tertiary institutions, recruitment efficiency is particularly important because delays in staff recruitment can negatively affect teaching, research, administration, and service delivery. The adoption of e-recruitment enables institutions to process applications electronically, maintain accurate recruitment databases, communicate promptly with applicants, and support objective recruitment decisions. Nevertheless, the realization of these benefits depends largely on adequate ICT infrastructure, reliable internet services, competent personnel, sufficient financial investment, and institutional commitment to digital transformation (Garba et al., 2022; Okeke & Eze, 2020).

Within Adamawa State Polytechnic, Yola, recruitment efficiency represents a major outcome of e-recruitment implementation. Where digital recruitment systems are effectively utilized, recruitment becomes faster, more transparent, less costly, and administratively efficient. However, where implementation remains partial due to infrastructural and organizational constraints, personnel management continues to experience delays and inefficiencies associated with traditional recruitment methods.

Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989), which explains that the adoption of technology is largely determined by users' perceptions of its usefulness and ease of use. The theory provides a suitable basis for examining the adoption of e-recruitment systems in Adamawa State Polytechnic, Yola, by explaining how the acceptance of digital recruitment technologies influences recruitment efficiency, transparency, fairness, administrative effectiveness, and cost reduction. It suggests that personnel officers and other users are more likely to embrace e-recruitment when they perceive it as capable of simplifying recruitment processes, improving decision-making, reducing paperwork, and enhancing organizational performance. The study's findings, which revealed moderate adoption of e-recruitment alongside improvements in recruitment outcomes, support the assumptions of the theory.

Despite its relevance, TAM has been criticized for focusing mainly on individual perceptions while giving limited attention to organizational and environmental factors such as ICT infrastructure, funding, institutional policies, management support, and organizational culture that also influence technology adoption. Nevertheless, the theory remains appropriate for this study because it explains how users' acceptance of e-recruitment systems affects personnel management outcomes. The

implementation challenges identified in the study, including inadequate ICT infrastructure, unstable internet connectivity, limited technical skills, insufficient funding, and resistance to change, reduce users' willingness to adopt digital recruitment technologies, thereby limiting their effectiveness. Consequently, TAM provides a sound theoretical basis for explaining both the adoption of e-recruitment systems and the factors influencing their successful implementation in Adamawa State Polytechnic, Yola.

Literature mapping

Below is a literature mapping table aligned with the topic Impact of E-Recruitment on Personnel Management in Adamawa State Polytechnic, Yola:

S/N	Author(s)	Methods	Findings	Research Gap
1	Singh and Finn (2013)	Quantitative survey of E-recruitment HR managers using reduced structured questionnaires	significantly Focused on private organizations; did not examine public tertiary institutions in Nigeria.	
2	Melanthiou, Pavlou and Constantinou (2015)	Descriptive survey involving HR professionals from different organizations	Organizations increasingly adopted e-recruitment because it improved accessibility and attracted wider applicant pools.	
3	Okolie and Irabor (2017)	Survey research design using questionnaires among Nigerian public organizations	Adoption of e-recruitment remained moderate due to inadequate ICT infrastructure and limited technical skills.	
4	Al-Dmour and Obeidat (2020)	Cross-sectional survey analyzed with regression analysis	E-recruitment positively influenced recruitment with efficiency through faster applicant screening and lower recruitment costs.	
				The study did not investigate Adamawa State Polytechnic or recruitment efficiency.
				Conducted outside Nigeria; contextual differences limit generalization.

S/N	Author(s)	Methods	Findings	Research Gap
5	Olatunji and Ugoji (2018)	Quantitative survey among selected Nigerian universities	Universities using online recruitment recorded improved recruitment speed level and transparency.	Excluded polytechnics and did not measure the level of e-recruitment adoption.
6	Kumar and Priyadarshini (2018)	Mixed-method approach involving questionnaires and interviews	E-recruitment enhanced organizational competitiveness by attracting qualified applicants from broader geographical areas.	Focused on multinational firms rather than public educational institutions.
7	Nwankwo and Kanu (2021)	Descriptive survey of HR officers in public institutions	Limited ICT infrastructure and inadequate staff training reduced effective adoption of e-recruitment systems.	Did not examine the relationship between adoption and recruitment efficiency.
8	Ekwoaba, Ikeije and Ufoma (2015)	Survey research using structured questionnaires and correlation analysis	Effective recruitment practices significantly improved organizational performance and employee quality.	The study concentrated on recruitment generally, not specifically on electronic recruitment.
9	Ibrahim and Mohammed (2022)	Cross-sectional survey of tertiary institutions in Northern Nigeria	Institutions with higher levels of e-recruitment adoption experienced shorter recruitment cycles and lower administrative costs.	Did not focus specifically on personnel management in Adamawa State Polytechnic.
10	Adeyemi and Adebayo (2023)	Quantitative research using questionnaires analyzed with multiple regression	E-recruitment significantly improved recruitment efficiency, transparency, and record management in public institutions.	The study did not examine the extent of e-recruitment adoption in Adamawa State Polytechnic, Yola.

Literature Gap

The reviewed studies generally established that e-recruitment improves recruitment efficiency by reducing recruitment time, lowering recruitment costs, expanding applicant reach, and enhancing transparency. However, most previous studies focused on private organizations, multinational companies, universities, or public organizations outside Adamawa State. Very few studies have specifically examined the extent of e-recruitment adoption and its effect on recruitment efficiency within a Nigerian polytechnic, particularly Adamawa State Polytechnic, Yola. This contextual gap justifies the present study, which seeks to assess the level of e-recruitment adoption and determine its effect on recruitment efficiency in the institution.

Methodology

This study adopted a descriptive survey research design to examine the adoption and impact of e-recruitment systems at Adamawa State Polytechnic, Yola. The study was conducted at the state-owned, NBTE-accredited institution, which operates campuses in Jimeta-Yola, Jambutu, and Numan and offers certificate, National Diploma (ND), and Higher National Diploma (HND) programmes across various academic disciplines. The study population comprised 150 staff involved in recruitment and personnel management, including administrative, HR, ICT, and departmental staff, selected through a stratified random sampling technique, out of which 109 were returned usable. Data were collected using structured questionnaires supported by secondary sources such as books, journals, and internet materials. The questionnaire was developed from the reviewed literature, measured the study variables using a five-point Likert scale, and underwent face and external validity through expert review and a pilot study involving 30 staff from Federal Polytechnic Mubi. These procedures enhanced the reliability and validity of the instrument and ensured that the findings could reasonably be generalized to similar tertiary institutions.

Data Analysis

The data collected is in relation to the objectives of the study as various respondents expressed their opinion.

Table 1.1 Questionnaire Response Rate

Metric				Rate (%)	Interpretation
Gross Response Administered)	Rate (Returned	÷		95.8%	Excellent (Above 90% threshold)
Net Response Rate (Valid ÷ Administered)				90.8%	Very High / Outstanding

Source: Field Survey, 2026

According to research methodology standards, a response rate above 70% is considered very good, while a response rate above 80% is regarded as excellent, as it enhances the quality and representativeness of survey findings (Babbie, 2016; Mugenda & Mugenda, 2012). With a net valid

response rate of 90.8%, the survey achieved an outstanding level of participation, ensuring that the findings presented in Tables 1.1 through 1.1 and the hypothesis testing are highly representative of the target population and have a very low risk of non-response bias. This high response rate strengthens the credibility, reliability, and external validity of the study by increasing confidence that the responses accurately reflect the perceptions of staff involved in personnel management at Adamawa State Polytechnic, Yola. High response rates have been associated with improved data quality, greater statistical precision, and enhanced generalizability of research findings because they minimize sampling error and reduce the likelihood of systematic non-response bias (Dillman et al., 2014; Saunders et al., 2019). Therefore, the findings of this study provide a dependable basis for drawing conclusions and making policy recommendations regarding the adoption and impact of e-recruitment systems in public tertiary institutions.

1.2 Extent of Adoption of E-Government System: Mean Responses on Adoption Level

S/N	Statement	Mean	Std. Dev	Decision
1	Online job advertisement is used	3.9	0.88	Agree
2	Electronic application submission exists	3.7	0.92	Agree
3	Digital screening tools are used	3.5	0.97	Agree
4	Automated shortlisting is practiced	3.2	1.01	Agree
	Recruitment databases are maintained	3.8	0.84	Agree

Source: Field Survey, 2026

Grand Mean = 3.62

Table 4.3 shows that the analysis of mean responses indicates that all indicators of e-recruitment adoption recorded mean values above the benchmark of 3.0, with a grand mean of 3.62. This suggests that respondents generally agreed that electronic recruitment practices are moderately implemented within the institution. Specifically, online job advertisement (mean = 3.9) and maintenance of recruitment databases (mean = 3.8) recorded relatively high agreement levels, indicating that digital platforms have been integrated into important stages of the recruitment process. Electronic application submission (mean = 3.7) and digital screening tools (mean = 3.5) also received positive ratings, demonstrating that technology is increasingly replacing manual recruitment procedures. Although automated shortlisting recorded the lowest mean (3.2), it still exceeded the acceptance threshold, suggesting that automation has been introduced but is yet to be fully optimized. Overall, the findings indicate that Adamawa State Polytechnic is gradually transitioning from conventional recruitment methods to a technology-driven recruitment system, although the level of adoption remains moderate rather than fully institutionalized. This finding is consistent with recent studies which report that organizations, particularly public sector institutions in developing countries, are increasingly adopting e-recruitment to enhance recruitment efficiency, widen applicant reach,

and improve administrative effectiveness, although implementation often remains partial due to infrastructural, financial, and organizational constraints (Bondarouk & Brewster, 2023; Okolie et al., 2022; Al-Harazneh & Sila, 2021). Similarly, the findings support the argument of the Society for Human Resource Management that organizations are progressively integrating digital recruitment technologies to improve the quality, speed, and transparency of hiring decisions while recognizing that full digital transformation requires sustained investment in ICT infrastructure, staff competencies, and organizational readiness.

Table 1.3 Impact on Cost and Administrative Effectiveness

S/N	Statement	Mean	Std. Dev	Decision
1	Reduces paper usage	4.1	0.75	Agree
2	Minimizes advertisement costs	3.8	0.88	Agree
3	Lowers administrative workload	3.6	0.95	Agree
4	Improves workflow efficiency	3.9	0.83	Agree

Source: Field Survey, 2026

Grand Mean = 3.85

Table 1.3 presents the analysis showing strong agreement among respondents that e-recruitment contributes significantly to cost savings and administrative efficiency, with a grand mean of 3.85. The highest-rated item was reduction in paper usage (mean = 4.1), reflecting the financial and environmental advantages of digitizing recruitment processes. Respondents also agreed that e-recruitment minimizes advertisement costs (mean = 3.8), reduces administrative workload (mean = 3.6), and improves workflow efficiency (mean = 3.9). These findings suggest that electronic recruitment systems streamline hiring activities by automating routine tasks, reducing reliance on manual documentation, and enhancing communication throughout the recruitment process. Consequently, administrative personnel are able to devote more time to strategic human resource functions. The findings support previous empirical studies which conclude that e-recruitment significantly reduces recruitment costs, shortens hiring cycles, enhances operational efficiency, and improves overall organizational performance through the automation of HR processes (Bondarouk & Brewster, 2023; Okolie et al., 2022; Nawaz & Gomes, 2024). They also align with the position of the Society for Human Resource Management, which notes that digital recruitment technologies enable organizations to reduce administrative expenses, improve resource utilization, and achieve more efficient talent acquisition through technology-enabled HR practices.

Summary and Conclusion

The study found that e-recruitment has positively influenced personnel management at Adamawa State Polytechnic, Yola, by improving recruitment efficiency, enhancing transparency and

merit-based selection, reducing recruitment costs, and streamlining recruitment processes. However, the adoption of e-recruitment remains moderate due to challenges such as inadequate ICT infrastructure, poor internet connectivity, limited technical expertise, insufficient funding, and resistance to change. The study concludes that while e-recruitment has contributed significantly to effective personnel management, achieving its full potential requires sustained investment in ICT facilities, staff training, adequate funding, and organizational support to facilitate a complete transition to a fully digital recruitment system.

Recommendations

Based on the findings the following recommendations are proposed:

1. Adamawa State Polytechnic should accelerate the full adoption of e-recruitment by automating key recruitment processes, including applicant screening and shortlisting, to improve efficiency, reduce recruitment time, and enhance the quality of hiring decisions (Holm, 2012).
2. The Polytechnic should establish a standardized electronic records management policy for recruitment activities to improve transparency, accountability, and effective record keeping while sustaining the benefits of e-recruitment (Ruël et al., 2007).

References

- Abdullahi, I., & Musa, A. (2022). Digital HR practices and fairness in federal agencies in Nigeria. *Journal of Human Resource Management*, 10(2), 45–58.
- Adeyemi, A. A., & Olorunsola, E. O. (2022). Electronic recruitment practices and human resource management effectiveness in Nigerian public institutions. *African Journal of Management Research*, 28(2), 112–126.
- Al-Harazneh, Y. M., & Sila, I. (2021). The impact of electronic human resource management on organisational performance: Evidence from developing economies. *Problems and Perspectives in Management*, 19(3), 244–256.
- Al-Hawari, M. A., & Al-Shaar, E. M. (2023). Digital recruitment systems and organizational recruitment efficiency: Evidence from public organizations. *International Journal of Public Administration*, 46(11), 811–825.
<https://doi.org/10.1080/01900692.2022.2056148>
- Babbie, E. (2016). *The practice of social research* (14th ed.). Cengage Learning.
- Bondarouk, T., & Brewster, C. (2023). Conceptualising the future of electronic human resource management: Digital transformation and HRM. *The International Journal of Human Resource Management*, 34(5), 915–936.
<https://doi.org/10.1080/09585192.2021.1964091>
- 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.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (4th ed.). Wiley.

- Galanaki, E. (2002). The decision to recruit online: A descriptive study. *Career Development International*, 7(4), 243-251.
- Garba, A. M., Ibrahim, S. A., & Musa, H. M. (2022). Information and communication technology adoption and personnel management effectiveness in Nigerian tertiary institutions. *Journal of Educational Administration and Planning*, 14(1), 83-98.
- Girard, A., & Fallery, B. (2010). Human resource management on the Internet: New perspectives. *Journal of Electronic Commerce Research*, 11(2), 93-106.
- Holm, A. B. (2012). E-recruitment: Towards an ubiquitous recruitment process and candidate relationship management. *Zeitschrift für Personalforschung (German Journal of Human Resource Research)*, 26(3), 241-259.
- Lee, I. (2005). The evolution of e-recruiting: A content analysis of Fortune 100 career websites. *Journal of Electronic Commerce in Organizations*, 3(3), 57-68.
- Melanthiou, Y., Pavlou, F., & Constantinou, E. (2015). The use of social network sites as an e-recruitment tool. *Journal of Transnational Management*, 20(1), 31-49. <https://doi.org/10.1080/15475778.2015.998141>
- Mensah, I. K., Zeng, G., Luo, C., & Lu, S. (2022). E-government services adoption: The role of digital transformation and institutional support in developing countries. *Sustainability*, 14(9), Article 5338. <https://doi.org/10.3390/su14095338>
- Mugenda, O. M., & Mugenda, A. G. (2012). *Research methods: Quantitative and qualitative approaches*. Acts Press.
- National Information Technology Development Agency. (2023). *National digital economy policy and strategy implementation report*. National Information Technology Development Agency.
- Nawaz, N., & Gomes, A. M. (2024). Digital human resource management and organisational efficiency: The mediating role of e-HRM practices. *International Journal of Organizational Analysis*, 32(2), 401-420. <https://doi.org/10.1108/IJOA-08-2022-3384>
- Nikolaou, I. (2021). What is the role of technology in recruitment and selection? *The Spanish Journal of Psychology*, 24, Article E31. <https://doi.org/10.1017/SJP.2021.18>
- OECD. (2023). *Digital government review of public sector innovation*. OECD Publishing. <https://doi.org/10.1787/4ab7f5f8-en>
- Okeke, C. C., & Eze, N. M. (2020). Human resource digitalization and recruitment effectiveness in Nigerian public organizations. *Nigerian Journal of Management Sciences*, 21(2), 55-69.
- Okolie, U. C., Omotayo, F. O., Nwajiuba, C. A., Binuomote, M. O., & Obi, C. A. (2022). Electronic recruitment and organisational performance: A review of emerging trends in digital human resource management. *Journal of Public Affairs*, 22(4), Article e2608.
- Parry, E., & Strohmeier, S. (2021). HRM in the digital age—Digital changes and challenges of the HR profession. *Employee Relations: The International Journal*, 43(1), 1-15. <https://doi.org/10.1108/ER-03-2020-0142>
- Parry, E., & Tyson, S. (2008). An analysis of the use and success of online recruitment methods in the UK. *Human Resource Management Journal*, 18(3), 257-274.

- Ruël, H., Bondarouk, T., & Van der Velde, M. (2007). The contribution of e-HRM to HRM effectiveness: Results from a quantitative study in a Dutch Ministry. *Employee Relations*, 29(3), 280-291.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson Education Limited.
- Society for Human Resource Management. (2024). *State of the workplace 2024: HR technology and talent acquisition trends*. SHRM.
- 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.
- Strohmeier, S. (2007). Research in e-HRM: Review and implications. *Human Resource Management Review*, 17(1), 19-37.
- Twizeyimana, J. D., & Andersson, A. (2019). The public value of e-government: A literature review. *Government Information Quarterly*, 36(2), 167-178.
<https://doi.org/10.1016/j.giq.2019.01.001>
- United Nations. (2024). *United Nations e-government survey 2024: Accelerating digital transformation for sustainable development*. United Nations.
<https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2024>
- Yusuf, A. A., & Bello, M. A. (2024). E-recruitment adoption and recruitment transparency in public tertiary institutions in Nigeria. *International Journal of Human Resource Studies*, 14(1), 45-62.