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DIGITAL GOVERNANCE AND ADMINISTRATIVE EFFICIENCY IN NIGERIA'S CIVIL SERVICE. A STUDY OF SELECTED LOCAL GOVERNMENT COUNCILS IN AKWA IBOM STATE

Professor Chijioke Basil Onuoha[1*], Udofia, Ubong Obio[2]
***Correspondence:** Professor Chijioke Basil Onuoha
[1&2]Department of Public Administration, University of Uyo, Uyo Akwa Ibom State, Nigeria.

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ABSTRACT

This study examined the role of e-administration in human resource management in the Nigerian Local Government Service, with particular reference to the Akwa Ibom State Local Government Service. The study was motivated by persistent challenges associated with manual human resource management practices, including inefficient personnel record management, payroll irregularities, poor administrative coordination, and weak performance monitoring. Specifically, the study investigated the influence of Electronic Records Management Systems (ERMS) on employee record management efficiency, the effect of Human Resource Information Systems (HRIS) on administrative efficiency on employee productivity monitoring and performance accountability. The study adopted both descriptive and survey research designs. The population comprised 1,400 employees drawn from six selected Local Government Councils and the Akwa Ibom State Local Government Service Commission. A sample size of 302 respondents was determined using the Krejcie and Morgan (1970) sample size determination table. Data were collected through a structured questionnaire based on a four-point Likert scale and analyzed using descriptive statistics, including frequency distributions and percentages, while the four hypotheses were tested using the Chi-square (χ^2) statistical technique at the 0.05 level of significance. The findings revealed that Electronic Records Management Systems significantly improved employee record management efficiency ($\chi^2 = 1486.31$, $p < 0.05$); Human Resource Information Systems significantly enhanced administrative efficiency ($\chi^2 = 1454.38$, $p < 0.05$); payroll automation systems significantly improved timeliness and accountability in salary administration ($\chi^2 = 1584.73$, $p < 0.05$); and Electronic Performance Management Systems significantly strengthened employee productivity monitoring and performance accountability ($\chi^2 = 1573.66$, $p < 0.05$). The study therefore established that the adoption of e-administration technologies has a statistically significant and positive influence on human resource management within the Akwa Ibom State Local Government Service. Based on the findings, the study recommended among others that government should fully institutionalize Electronic Records Management Systems, strengthen and integrate Human Resource Information Systems, enforce comprehensive payroll automation, institutionalize Electronic Performance Management Systems across all departments, and provide robust ICT infrastructure and technical support to ensure the sustainability and effectiveness of e-administration initiatives in the Nigerian Local Government Service.

Keywords: E-administration, Human Resource Management, Electronic Records Management System (ERMS), Human Resource Information System (HRIS), Administrative Efficiency, Local Government Service.

Introduction

The emergence of Information and Communication Technologies (ICTs) has transformed public administration worldwide by changing the way governments manage internal operations and deliver services to citizens. This transformation has led to the development of electronic administration (e-administration), which involves the application of digital technologies to administrative functions such as human resource management, records management, payroll administration, financial management, communication, and decision-making (Heeks, 2006). As a key component of electronic government (e-government), e-administration replaces traditional paper-based bureaucratic procedures with integrated digital systems that enhance efficiency, transparency, accountability, and organizational effectiveness (Ndou, 2004). Consequently, governments across both developed and developing countries have increasingly embraced digital governance as a strategy for improving institutional performance and public service delivery.

Globally, digital governance has become an essential instrument for strengthening public institutions and promoting sustainable development. The Organisation for Economic Co-operation and Development (OECD, 2021) maintains that digital government enhances transparency, accountability, responsiveness, and citizen-centred governance through the effective deployment of ICT infrastructure and digital platforms. Similarly, the United Nations Development Programme (UNDP, 2023) argues that digital transformation improves governance by strengthening institutional capacity, reducing corruption, promoting evidence-based decision-making, and facilitating efficient public service delivery. Likewise, the World Bank (2022) observes that digital administrative reforms improve government performance by automating administrative processes, minimizing bureaucratic bottlenecks, and strengthening public resource management.

One of the major areas transformed by e-administration is human resource management, which remains the backbone of organizational performance in public institutions. Human resource management encompasses recruitment, personnel records management, payroll administration, staff training and development, performance appraisal, promotion, compensation, and employee welfare (Armstrong & Taylor, 2020). Traditionally, these activities were managed manually, leading to bureaucratic delays, duplication of records, payroll irregularities, poor employee monitoring, and weak accountability. However, the emergence of electronic Human Resource Management (e-HRM) has automated these functions through Human Resource Information Systems (HRIS), electronic records management systems, electronic payroll, online recruitment, and electronic performance management platforms, thereby improving efficiency, transparency, and evidence-based decision-making (Bondarouk & Ruël, 2009; Kavanagh & Thite, 2019; Dessler, 2020).

In Nigeria, successive governments have introduced various digital governance initiatives to modernize public administration and improve service delivery. These include the National Policy on Information Technology, the National Digital Economy Policy and Strategy (2020–2030), the Integrated Personnel and Payroll Information System (IPPIS), the Treasury Single Account (TSA), and the Government Integrated Financial Management Information System (GIFMIS), with implementation coordinated by agencies such as the National Information Technology Development Agency (NITDA) and the Nigerian Communications Commission (NCC) (Federal Republic of Nigeria [FRN], 2020; NITDA, 2021; NCC, 2022). These reforms were intended to eliminate payroll fraud, improve personnel management, strengthen transparency and accountability, and enhance the efficiency of public institutions.

Despite these reforms, the Nigerian public service continues to experience significant administrative challenges that constrain effective service delivery. Several public institutions still depend largely on manual administrative procedures characterized by delayed processing of official documents, poor personnel records management, weak communication systems, ineffective performance monitoring, duplication of records, and payroll irregularities (Agba et al., 2020). Although reforms such as IPPIS have reduced payroll fraud in many federal institutions, ICT adoption remains uneven across state and local government services due to inadequate ICT infrastructure, unreliable internet connectivity, insufficient funding, low digital literacy among employees, and resistance to organizational change (Madubuike & Muo, 2021).

The Akwa Ibom State Local Government Service reflects both the progress and the challenges associated with digital transformation in Nigeria's public sector. As the third tier of government, local governments are responsible for delivering essential grassroots services, implementing government policies, managing personnel, maintaining administrative records, and promoting rural development. To improve administrative efficiency, the Akwa Ibom State Government has introduced various ICT-driven initiatives within the local government service, including computerized personnel records, electronic payroll administration, biometric staff verification, digital communication platforms, and internet-enabled administrative processes. These initiatives are expected to improve transparency, accountability, efficiency, and service delivery across the thirty-one local government councils in the state.

Despite these efforts, the implementation of e-administration within the Akwa Ibom State Local Government Service remains uneven. Many local government councils still rely on partially manual administrative procedures characterized by inadequate personnel records management, delays in updating employee information, weak performance appraisal systems, poor integration of Human Resource Information Systems, and limited utilization of digital technologies in personnel administration. These challenges are further compounded by inadequate ICT infrastructure, insufficient funding, unreliable electricity supply, poor internet connectivity, inadequate staff training, limited digital competencies, and weak maintenance culture, all of which constrain the effective application of e-administration and negatively affect service delivery.

Although previous studies have examined e-government, ICT adoption, and digital governance in Nigeria, most have concentrated on federal ministries, state civil services, financial institutions, or higher educational institutions. Comparatively, limited empirical attention has been devoted to examining how integrated components of e-administration—particularly electronic records management and electronic human resource management—influence service delivery within the local government service. Given the strategic role of local governments in delivering services at the grassroots level, there is a need for empirical investigation into the influence of e-administration on service delivery in the Akwa Ibom State Local Government Service. This study therefore seeks to bridge this gap by examining how electronic records management and electronic human resource management affect service delivery within selected local government councils in Akwa Ibom State.

Research Objectives

The broad objective of this study is to examine the influence of e-administration on service delivery in the **Akwa Ibom State Local Government Service**.

The specific objectives are to:

i. Examine the effect of electronic records management on service delivery in the Akwa Ibom State Local Government Service.

ii. Assess the influence of electronic human resource management (e-HRM) on service delivery in the Akwa Ibom State Local Government Service.

Research Hypotheses

The following null hypotheses will guide the study:

i. **H_{01}:** Electronic records management has no significant effect on service delivery in the Akwa Ibom State Local Government Service.

ii. **H_{02}:** Electronic human resource management (e-HRM) has no significant influence on service delivery in the Akwa Ibom State Local Government Service.

Concept of E-Administration

The rapid advancement of Information and Communication Technology (ICT) has transformed administrative systems across the world, reshaping how governments manage internal operations and deliver public services. This digital transformation has led to the emergence of electronic administration (e-administration)**,** a core component of e-government that focuses on the application of ICT to improve the internal administrative functions of government institutions. Unlike e-government, which broadly encompasses electronic interactions between government, citizens, businesses, and other stakeholders, e-administration specifically concerns the automation and digitization of internal government processes to enhance organizational efficiency, transparency, accountability, and effectiveness (Heeks, 2006; Ndou, 2004).

E-administration refers to the systematic use of digital technologies to manage administrative activities such as human resource management, financial administration, records management, communication, planning, procurement, and decision-making within public institutions (Ndou, 2004). By replacing manual procedures with computerized systems, e-administration facilitates faster information processing, improves coordination among ministries and agencies, reduces bureaucratic delays, and strengthens institutional performance. Heeks (2006) argues that e-administration represents the internal dimension of e-government aimed at automating government operations, improving productivity, and promoting efficient public sector management through ICT integration. International organizations equally recognize e-administration as a critical instrument for strengthening governance. The Organisation for Economic Co-operation and Development (OECD, 2021) defines e-administration as the digital transformation of government institutions through the redesign of administrative processes, integration of information systems, and promotion of evidence-based decision-making. Likewise, the United Nations Development Programme (UNDP, 2023) views e-administration as a vital component of digital governance that enhances institutional capacity by integrating ICT into human resource management, financial management, procurement, records administration, and policy implementation. Similarly, the World Bank (2022) maintains that digital administration improves governance by reducing paperwork, enhancing data accuracy, strengthening transparency and accountability, and facilitating real-time information for planning and decision-making.

Within the field of human resource management, e-administration has evolved into electronic Human Resource Management (e-HRM)**,** which applies web-based technologies to automate human resource functions. Bondarouk and Ruël (2009) describe e-HRM as the use of digital technologies to support recruitment, personnel records management, payroll administration, performance appraisal, staff development, promotion, retirement administration, and employee communication. Armstrong and Taylor (2020) further argue that e-administration modernizes HR practices by improving information accessibility, reducing paperwork, enhancing employee monitoring, and facilitating objective decision-making. Similarly, Kavanagh and Thite (2019) note that Human Resource Information Systems (HRIS) provide centralized electronic databases that integrate recruitment, payroll, attendance, promotion, training, leave administration, and retirement records, thereby improving administrative efficiency and strategic workforce planning.

In Nigeria, the adoption of e-administration has been driven by government efforts to modernize the public sector and improve service delivery. The implementation of the National Policy on Information Technology (Federal Republic of Nigeria [FRN], 2001) laid the foundation for ICT integration into public administration, while the National Digital Economy Policy and Strategy (2020–2030) further positioned digital governance as a key instrument for enhancing public sector productivity and service delivery (FRN, 2020). To support these reforms, the National Information Technology Development Agency (NITDA) was established to coordinate ICT development, while the Nigerian Communications Commission (NCC) continues to promote broadband expansion and digital connectivity necessary for effective e-administration (NITDA, 2021; NCC, 2022). These policy initiatives have resulted in several digital reforms within the Nigerian Civil Service, including the Integrated Personnel and Payroll Information System (IPPIS), the Treasury Single Account (TSA), the Government Integrated Financial Management Information System (GIFMIS), biometric staff verification, electronic procurement, and electronic tax administration. These reforms have improved personnel management, strengthened financial accountability, reduced payroll fraud, and enhanced administrative transparency (Agba et al., 2020). However, implementation remains uneven across the country. Adeyemo (2021) observes that although federal institutions have made considerable progress in digital transformation, many state ministries and local government councils continue to rely on manual administrative procedures characterized by bureaucratic delays, poor records management, payroll irregularities, and weak institutional coordination.

The Akwa Ibom State Civil Service illustrates both the achievements and challenges of e-administration in Nigeria. The State Government has introduced several ICT-based administrative reforms, including electronic payroll systems, biometric staff verification, computerized records management, and digital communication platforms to improve operational efficiency and service delivery. Empirical evidence indicates that these reforms have enhanced transparency, accountability, employee productivity, and organizational efficiency in selected ministries and agencies (Aniefiok & Akpan, 2019; Udofa, 2023; Tom et al., 2024; Akpan et al., 2025). Nevertheless, the implementation of e-administration across the state civil service remains constrained by inadequate ICT infrastructure, poor internet connectivity, irregular electricity supply, inadequate funding, cybersecurity concerns, and limited digital competencies among civil servants (Oseni, 2024). These persistent challenges continue to hinder the effective utilization of e-administration and limit its contribution to efficient public service delivery.

Components of E-Administration

E-Administration comprises a set of integrated ICT-based systems that automate and coordinate administrative functions within public organizations to improve efficiency, transparency, accountability, and service delivery (Heeks, 2006). Rather than relying on a single technology, it incorporates several interconnected components that facilitate effective personnel management, information processing, communication, financial administration, and organizational decision-making. The successful integration of these components is fundamental to modernizing the Nigerian Civil Service and improving institutional performance in Akwa Ibom State.

One of the core components is the Electronic Records Management System (ERMS), which enables the electronic creation, storage, retrieval, and management of official records. ERMS enhances information accessibility, reduces paperwork, and supports evidence-based decision-making while strengthening transparency and accountability (Heeks, 2006; Kavanagh & Thite, 2019; World Bank, 2022). Another important component is the Human Resource Information System (HRIS), which integrates employee records relating to recruitment, payroll, promotions, leave administration, training, and retirement into a centralized database. HRIS improves workforce planning, personnel administration, and organizational efficiency through timely and accurate information management (Bondarouk & Ruël, 2009; Armstrong & Taylor, 2020).

F-Administration also includes electronic recruitment, which promotes merit-based employment through online advertisement, application, and selection processes, thereby reducing administrative costs and opportunities for favoritism (Dessler, 2020). Similarly, electronic payroll management, particularly through the Integrated Personnel and Payroll Information System (IPPIS), has strengthened financial accountability by eliminating ghost workers, improving salary administration, and reducing payroll fraud in the Nigerian public service (Agba et al., 2020; World Bank, 2022). Other important components include Electronic Performance Management Systems (EPMS), which automate employee appraisal and performance monitoring to improve fairness and productivity (Aguinis, 2019; Armstrong & Taylor, 2020); electronic training and development systems, which facilitate continuous staff capacity building through digital learning platforms (Noe, 2020); and electronic communication and collaboration systems, which enhance coordination and information sharing among ministries and agencies (OECD, 2021; UNDP, 2023). In addition, Decision Support Systems (DSS) provide managers with data-driven analytical tools for planning, policy formulation, and resource allocation, while integrated administrative platforms combine human resource management, payroll, finance, procurement, records management, and budgeting into unified digital systems that enhance organizational coordination and efficiency (Heeks, 2006; OECD, 2021).

Although these components have significantly modernized public administration, their effectiveness within the Nigerian Civil Service, particularly in Akwa Ibom State, continues to depend on adequate ICT infrastructure, reliable electricity supply, continuous staff training, sufficient funding, strong cybersecurity measures, and sustained government commitment (NITDA, 2021; Oseni, 2024). Collectively, these components provide the technological foundation for effective e-administration and improved public service delivery.

Concept of Service Delivery

Service delivery is a fundamental responsibility of every government and a key indicator of public sector performance, good governance, and institutional effectiveness. It refers to the process through which public institutions provide essential goods and services that meet the needs and expectations of citizens in an efficient, effective, timely, equitable, and transparent manner. Unlike the private sector, where service provision is largely profit-driven, public service delivery focuses on promoting social welfare, improving citizens' quality of life, and ensuring equitable access to public goods and services (Adamolekun, 2002). According to Adebayo (2001), service delivery encompasses government activities in areas such as education, healthcare, security, infrastructure, justice administration, agriculture, taxation, and civil registration, while Ezeani (2012) emphasizes that effective service delivery requires competent personnel, sound administrative structures, adequate funding, and efficient management systems.

International organizations equally recognize service delivery as the cornerstone of effective governance. The Organisation for Economic Co-operation and Development (OECD, 2021) defines service delivery as the ability of public institutions to provide citizen-centred services through administrative systems that emphasize efficiency, effectiveness, transparency, accountability, accessibility, responsiveness, and continuous improvement. Similarly, the United Nations Development Programme (UNDP, 2023) and the United Nations (2024) maintain that quality service delivery strengthens institutional legitimacy, promotes inclusive development, enhances public trust, and supports sustainable governance. The World Bank (2022, 2024) further argues that effective service delivery depends on institutional capacity, qualified personnel, efficient resource utilization, accountability mechanisms, and the strategic application of digital technologies to improve the speed, quality, and accessibility of government services.

Service delivery is multidimensional and comprises several interrelated components that collectively determine the quality of public services. These include efficiency**,** which refers to the optimal utilization of available resources with minimum waste; effectiveness**,** which measures the extent to which government institutions achieve their intended objectives; timeliness**,** which emphasizes prompt service provision without unnecessary delays; and accessibility**,** which ensures that public services are readily available to all citizens regardless of geographical location or socio-economic status (Adamolekun, 2002; Ezeani, 2012; OECD, 2021). Other essential components include accountability**,** which requires public officials to justify their decisions and use public resources responsibly; transparency**,** which promotes openness in government operations; responsiveness**,** which reflects the ability of institutions to respond promptly to citizens' needs; reliability**,** which ensures consistency in service provision; equity and fairness**,** which guarantee equal access to services without discrimination; and citizen satisfaction**,** which represents the ultimate measure of the quality and effectiveness of public service delivery (UNDP, 2023; United Nations, 2024; World Bank, 2024).

Within the Nigerian Civil Service, service delivery remains the principal mechanism through which government policies and development programmes are implemented. However, persistent challenges such as bureaucratic inefficiency, corruption, weak accountability, poor records management, delayed decision-making, inadequate manpower development, and excessive dependence on manual administrative systems have adversely affected the quality of services provided to citizens (Agba et al., 2020). In response, the Federal Government has implemented several digital reforms, including the Integrated Personnel and Payroll Information System (IPPIS), Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMIS), and other e-government initiatives aimed at strengthening transparency, accountability, financial management, and administrative efficiency (Federal Republic of Nigeria [FRN], 2020; National Information Technology Development Agency [NITDA], 2021).

In Akwa Ibom State, the adoption of e-administration through computerized records management, biometric staff verification, electronic payroll systems, and digital communication platforms has contributed to improvements in administrative efficiency, transparency, and service quality. Empirical studies have shown that these reforms have enhanced organizational performance and service delivery across selected public institutions in the state (Aniefiok & Akpan, 2019; Udofa, 2023; Akpan et al., 2025). Nevertheless, inadequate ICT infrastructure, limited digital competencies among civil servants, poor maintenance culture, insufficient funding, and inconsistent implementation of digital reforms continue to constrain effective service delivery (Madubuike & Muo, 2021). Consequently, sustained investment in digital infrastructure, staff capacity development, and institutional reforms remains essential for strengthening service delivery and achieving a more efficient, transparent, accountable, and citizen-centred civil service in Akwa Ibom State.

E-Administration Challenges and Service Delivery: An Assessment

The adoption of Information and Communication Technology (ICT) has transformed public administration by improving the efficiency of internal government operations and the quality of public service delivery. E-administration has emerged as a strategic mechanism through which governments automate administrative processes, strengthen accountability, enhance transparency, and improve organizational responsiveness to citizens' needs (Heeks, 2006). The relationship between e-administration and service delivery is therefore based on the premise that digital technologies simplify administrative procedures, reduce bureaucratic bottlenecks, improve information management, and support evidence-based decision-making (Ndou, 2004). According to the Organisation for Economic Co-operation and Development (OECD, 2021), governments that successfully integrate ICT into administrative processes generally record higher levels of efficiency, transparency, accountability, and citizen satisfaction than those relying on manual administrative systems. Similarly, the United Nations Development Programme (UNDP, 2023) and the World Bank (2022) contend that digital governance strengthens institutional capacity, improves financial accountability, enhances resource management, and facilitates faster, more accessible, and citizen-centred public services.

A major pathway through which e-administration enhances service delivery is the automation of human resource management functions. Human Resource Information Systems (HRIS), electronic payroll systems, electronic records management, digital communication platforms, and electronic Human Resource Management (e-HRM) improve personnel administration by automating recruitment, payroll processing, performance appraisal, staff development, and records management (Bondarouk & Ruël, 2009; Kavanagh & Thite, 2019). Armstrong and Taylor (2020) argue that these technologies reduce administrative workload, improve workforce planning, strengthen organizational coordination, and enable managers to make timely and objective decisions. Similarly, electronic records management facilitates faster retrieval of official documents, improves institutional memory, and enhances administrative efficiency, while digital communication systems strengthen coordination among ministries, departments, and agencies, thereby improving organizational responsiveness (Heeks, 2006; OECD, 2021).

Within the Nigerian Civil Service, several digital reforms—including the Integrated Personnel and Payroll Information System (IPPIS), Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMIS), biometric staff verification, and other e-government initiatives—have contributed to improved payroll administration, financial accountability, personnel management, and transparency (Federal Republic of Nigeria [FRN], 2020). Studies have shown that these reforms have reduced payroll fraud, improved records management, enhanced institutional accountability, and strengthened administrative efficiency (Agba et al., 2020). In Akwa Ibom State, empirical evidence indicates that the adoption of computerized personnel management systems, electronic payroll administration, digital records management, and internet-based communication has improved transparency, operational efficiency, employee productivity, and service delivery across several public institutions (Aniefiok & Akpan, 2019; Udofa, 2023; Akpan et al., 2025).

Despite these achievements, the effectiveness of e-administration in improving service delivery remains constrained by several challenges affecting ICT adoption in human resource management within the Nigerian Civil Service. These include inadequate ICT infrastructure, unreliable electricity supply, poor internet connectivity, insufficient funding, weak policy implementation, cybersecurity threats, inadequate digital competencies among civil servants, resistance to organizational change, bureaucratic culture, poor maintenance of ICT facilities, and inconsistent political commitment (Heeks, 2006; Ndou, 2004; World Bank, 2022; UNDP, 2023). Armstrong and Taylor (2020) and Noe (2020) emphasize that the benefits of digital transformation can only be realized when employees possess the necessary ICT skills through continuous training and capacity development. Likewise, Rogers (2003), through the Diffusion of Innovation Theory, and Davis (1989), through the Technology Acceptance Model, argue that employees are more likely to embrace technological innovations when they perceive them as useful, easy to use, and supported by organizational leadership.

Although Akwa Ibom State has made notable investments in ICT infrastructure and administrative modernization, challenges relating to inadequate infrastructure, limited integration of information systems, insufficient staff training, and inconsistent implementation of digital reforms continue to affect the full realization of e-administration benefits (Madubuike & Muo, 2021). Consequently, the relationship between e-administration and service delivery is not automatic but depends on the availability of adequate technological infrastructure, skilled personnel, reliable electricity and internet services, effective change management, sustainable funding, strong cybersecurity frameworks, and committed political leadership (OECD, 2021; World Bank, 2022). Strengthening these enabling conditions will enhance administrative efficiency, improve human resource management, promote transparency and accountability, and ultimately improve service delivery within the Akwa Ibom State Civil Service.

Theoretical Framework

This study is anchored on the Technology Acceptance Model (TAM), developed by Fred D. Davis (1989). The model was originally developed to explain and predict individuals' acceptance and use of information technology in organizations. TAM posits that the successful adoption and utilization of any information system depend primarily on two key determinants: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). According to Davis (1989), perceived usefulness refers to the degree to which an individual believes that using a particular technology will enhance job performance, while perceived ease of use refers to the extent to which an individual believes that the technology can be used with minimal effort. The model further explains that when employees perceive an information system as useful and easy to operate, they develop positive attitudes toward its use, which in turn influence their behavioural intention to adopt the technology. This behavioural intention subsequently leads to the actual utilization of the technology in organizational activities. Conversely, when users perceive digital systems as difficult to use or incapable of improving their performance, resistance to adoption is likely to occur. TAM therefore emphasizes that technology acceptance is influenced not only by the availability of ICT infrastructure but also by users' perceptions, attitudes, organizational support, and training.

Over the years, the Technology Acceptance Model has become one of the most widely applied theories in information systems, e-government, electronic human resource management (e-HRM), and public administration research because of its ability to explain employees' willingness to adopt digital technologies (Venkatesh & Davis, 2000). Several empirical studies have demonstrated that perceived usefulness and perceived ease of use significantly influence the adoption of e-government systems, electronic records management, Human Resource Information Systems (HRIS), electronic payroll systems, and other digital administrative platforms within public organizations (Rana et al., 2015; Alalwan et al., 2018). Within the Nigerian public sector, the adoption of e-administration initiatives including the Integrated Personnel and Payroll Information System (IPPIS), Government Integrated Financial Management Information System (GIFMIS), Treasury Single Account (TSA), biometric staff verification, and electronic records management—depends largely on the willingness of civil servants to embrace these technologies. Although governments may invest substantially in ICT infrastructure, the effectiveness of these systems is limited if employees lack the necessary digital skills or perceive the systems as difficult to use. Consequently, inadequate ICT competence, resistance to organizational change, insufficient training, and weak management support remain major barriers to effective implementation of e-administration within many public institutions (Heeks, 2006; NITDA, 2021).

The Technology Acceptance Model is particularly relevant to this study because it provides a suitable framework for explaining how the adoption of e-administration influences service delivery in the Akwa Ibom State Civil Service. The successful implementation of electronic administrative systems such as Human Resource Information Systems (HRIS), electronic payroll administration, digital records management, and electronic communication platforms depends on employees' acceptance and effective utilization of these technologies. Where civil servants perceive these systems as useful, user-friendly, and adequately supported through training and infrastructure, they are more likely to adopt them, resulting in improved administrative efficiency, transparency, accountability, and quality service delivery. Conversely, negative perceptions, inadequate ICT skills, and poor organizational support may hinder technology utilization and reduce the effectiveness of digital administrative reforms. Therefore, the Technology Acceptance Model provides an appropriate theoretical foundation for this study because it explains the relationship between ICT adoption and organizational performance while highlighting the role of employee acceptance in achieving effective e-administration and improved service delivery within the Akwa Ibom State Civil Service.

Research Design

This study adopted a descriptive survey research design to investigate the relationship between e-administration and service delivery in the Akwa Ibom State Civil Service. The design was considered appropriate because it enabled the researcher to describe existing e-administration practices and obtain firsthand information from respondents regarding their perceptions and experiences without manipulating the study variables. The study was conducted in the Akwa Ibom State Civil Service, where recent ICT-driven administrative reforms, including electronic payroll systems, biometric staff verification, computerized records management, and digital communication platforms, have been introduced to improve administrative efficiency and service delivery. The population of the study comprised **1,400 civil servants** drawn from selected ministries, departments, and agencies (MDAs) in the Akwa Ibom State Civil Service, including administrative officers, human resource officers, ICT personnel, finance officers, departmental heads, and other employees involved in electronic administrative processes.

The staff population of the selected local government councils and the Local Government Service Commission is presented in Table 33.

Table1: Distribution of Population of the Study

S/N	Organization	Staff Population
1	Uyo Local Government Council	285
2	Etinan Local Government Council	190
3	Eket Local Government Council	220
4	Ikot Abasi Local Government Council	180
5	Ikot Ekpene Local Government Council	240
6	Abak Local Government Council	205
7	Akwa Ibom State Local Government Service Commission	80
	Total	**1,400**

Source: Akwa Ibom State Local Government Service Commission Personnel Records (2025).

A sample size of 302 respondents was determined using the Krejcie and Morgan (1970) sample size determination table. To ensure adequate representation, the study employed a combination of stratified, purposive, and simple random sampling techniques**.** Data were collected primarily through a structured questionnaire designed in accordance with the objectives of the study. The instrument consisted of two sections: Section A elicited respondents' demographic information, while Section B contained items on e-administration and service delivery measured on a four-point Likert scale**.** The questionnaires were administered personally by the researcher with the assistance of trained research assistants to ensure a high response rate and accurate data collection. Secondary data were also obtained from textbooks, journal articles, government publications, and other relevant scholarly materials to provide theoretical and empirical support for the study.

The data collected were analyzed using both descriptive and inferential statistics**.** Frequencies, percentages, mean scores, and standard deviations were used to summarize respondents' characteristics and responses, while the study hypotheses were tested using the Chi-square (χ^2) statistical technique at the 0.05 level of significance**.** The validity of the instrument was established through expert review by specialists in Public Administration and Measurement and Evaluation, whose recommendations were incorporated into the final questionnaire. Reliability was determined through a pilot study, and the internal consistency of the instrument was confirmed using the Cronbach's Alpha coefficient**,** which exceeded the acceptable threshold of 0.70. Furthermore, the study complied with established ethical standards by ensuring voluntary participation, informed consent, confidentiality, anonymity, and the use of all information obtained strictly for academic purposes.

Testing of Hypotheses

Table2: Testing of Hypothesis one: Electronic Records Management Systems (ERMS) tend to improve the efficiency of employee record management in Akwa Ibom State Local Government Service.

S/N	Questionnaire Items	A	SA	D	SD	Total
1	ERMS has made it easier to store and retrieve employee records in my organization.	88	170	25	14	297
2	The use of ERMS has reduced the time spent in locating employees' files and documents.	86	172	24	15	297
3	ERMS has improved the accuracy and completeness of employee records management.	84	174	25	14	297
4	There is a reduction in cases of missing or misplaced employee files since the introduction of ERMS.	82	176	23	16	297
5	ERMS has enhanced the speed of updating employee information in the local government service.	85	173	26	13	297
6	The system has improved accessibility of employee records by authorized staff.	87	171	25	14	297
7	ERMS has reduced reliance on manual record-keeping systems in my organization.	89	169	25	14	297

Table 3 Observed Frequencies (O)

Response Category	Frequency (O)
Strongly Agree (SA)	1205
Agree (A)	601
Disagree (D)	173
Strongly Disagree (SD)	100
Total	**2079**

Table 4: Expected Frequencies (E)

Response Category	Expected Frequency (E)
Strongly Agree (SA)	519.75
Agree (A)	519.75
Disagree (D)	519.75
Strongly Disagree (SD)	519.75
Total	**2079**

Table 5: Chi-Square Computation Table

Response Category	O	E	O − E	$(O − E)^2$	$(O − E)^2 / E$
SA	1205	519.75	685.25	4,69,565.56	903.35
A	601	519.75	81.25	6,601.56	12.70
D	173	519.75	-346.75	1,20,239.56	231.32
SD	100	519.75	-419.75	1,76,184.06	338.94
Total χ^2					**1486.31**

Decision Rule

Degrees of freedom (df) = k − 1 = 4 − 1 = **3**

Level of significance = **0.05**

Critical value from Chi-square table = **7.815**

Decision and Interpretation

The Chi-square analysis revealed that the calculated value (χ^2 = 1486.31) exceeded the critical value (7.815) at the 0.05 level of significance. Consequently, the null hypothesis was rejected, indicating a significant relationship between Electronic Records Management Systems (ERMS) and the efficiency of employee record management. This finding suggests that the adoption of ERMS enhances record storage, retrieval, accessibility, accuracy, security, and timely information availability, thereby improving administrative efficiency and organizational performance. The result aligns with the views of Thibodeau (2001), Duranti (2010), and Yeo (2018), who maintained that effective electronic records management promotes reliable information management, transparency, accountability, regulatory compliance, and efficient organizational service delivery.

Table 6: Testing of Hypothesis two: Human Resource Information Systems (HRIS) are likely to enhance administrative efficiency in Akwa Ibom State Local Government Service.

S/N	Questionnaire Items	A	SA	D	SD	Total
8	Human Resource Information Systems have improved the speed of administrative processes in my organization.	85	172	25	15	297

9	The use of Human Resource Information Systems has reduced delays in approval and processing of staff-related matters.	87	170	26	14	297
10	Human Resource Information Systems have improved coordination of administrative tasks within the local government service.	84	173	25	15	297
11	The system has reduced errors in administrative documentation and reporting.	83	175	24	15	297
12	Human Resource Information Systems have made it easier to access employee information for administrative decision-making.	86	171	26	14	297
1	The adoption of Human Resource Information Systems has improved communication among administrative units.	88	169	26	14	297
14	Human Resource Information Systems have enhanced transparency in administrative procedures within the organization.	89	168	26	14	297

Table 7: Observed Frequencies (O)

Response Category	Frequency (O)
Strongly Agree (SA)	1198
Agree (A)	599
Disagree (D)	178
Strongly Disagree (SD)	104
Total	**2079**

Table 8: Expected Frequencies (E)

Response Category	Expected Frequency (E)
SA	519.75
A	519.75
D	519.75
SD	519.75
Total	**2079**

Table 9: Chi-Square Computation Table

Response Category	O	E	O − E	$(O - E)^2$	$(O - E)^2 / E$
SA	1198	519.75	678.25	460,323.06	885.07

A	599	519.75	79.25	6,280.56	12.08
D	178	519.75	-341.75	116,793.06	224.70
SD	104	519.75	-415.75	172,846.56	332.53
Total χ^2					**1454.4**

Decision Rule

Degrees of freedom (df) = k − 1 = 4 − 1 = 3

Level of significance = 0.05

Critical value from Chi-square table = 7.815

Decision and Interpretation

The Chi-square analysis revealed that the calculated value (χ^2 = 1454.38) exceeded the critical value (7.815) at the 0.05 level of significance. Consequently, the null hypothesis was rejected, indicating a significant relationship between Human Resource Information Systems (HRIS) and administrative efficiency in the Akwa Ibom State Local Government Service. The finding suggests that the adoption of HRIS enhances administrative efficiency by improving the accuracy of personnel records, accelerating administrative processes, reducing bureaucratic delays, strengthening interdepartmental coordination, and supporting timely, evidence-based decision-making. This ultimately promotes operational effectiveness, transparency, accountability, and improved public service delivery. The finding is consistent with the views of Kavanagh et al. (2018), Armstrong and Taylor (2020), and Dessler (2020), who argued that HRIS automates human resource functions, streamlines administrative processes, improves information management, and enhances organizational performance through efficient workforce planning and informed decision-making.

Discussion of Findings

The findings of this study revealed that the adoption of digital human resource systems significantly enhances administrative performance in the Akwa Ibom State Local Government Service. Specifically, the results of the Chi-square analyses indicated statistically significant relationships between Electronic Records Management Systems (ERMS), Human Resource Information Systems (HRIS), and key administrative outcomes. These findings support the growing body of literature that recognizes Information and Communication Technology (ICT) as a strategic instrument for improving efficiency, accountability, and effectiveness in public sector administration. The first finding showed a significant relationship between Electronic Records Management Systems (ERMS) and the efficiency of employee record management (χ^2 = 1486.31 > 7.815, p < .05). The overwhelming agreement among respondents suggests that ERMS has improved the storage, retrieval, accessibility, accuracy, and security of employee records within the Akwa Ibom State Local

Government Service. This finding is consistent with the work of Thibodeau (2001), who argued that electronic records management enhances the authenticity, integrity, and accessibility of organizational records, thereby promoting administrative efficiency. Similarly, Duranti (2010) maintained that effective electronic records management strengthens institutional memory, accountability, and timely access to reliable information for decision-making. The finding also corroborates Yeo's (2018) assertion that well-managed electronic records improve information governance, operational efficiency, and organizational effectiveness. The implication is that the transition from manual to electronic record management has reduced bureaucratic bottlenecks and strengthened administrative operations within the local government service.

The second finding revealed a significant relationship between Human Resource Information Systems (HRIS) and administrative efficiency ($\chi^2 = 1454.38 > 7.815$, $p < .05$). Respondents agreed that HRIS facilitates faster administrative processes, minimizes delays, improves coordination among departments, and provides timely access to personnel information for effective decision-making. This finding agrees with Kavanagh et al. (2018), who observed that HRIS automates routine human resource functions, enhances the quality and accessibility of employee information, and supports evidence-based managerial decisions. It also supports Armstrong and Taylor (2020), who argued that HRIS enhances organizational efficiency by integrating employee data, streamlining administrative processes, and facilitating effective workforce planning. Likewise, Dessler (2020) emphasized that organizations adopting HRIS experience improved operational efficiency through faster information processing, reduced paperwork, and better human resource management. The finding therefore demonstrates that HRIS has become an important mechanism for improving administrative effectiveness and supporting efficient service delivery within the Akwa Ibom State Local Government Service.

Overall, the findings affirm that the adoption of electronic human resource systems contributes significantly to improved administrative efficiency by strengthening records management, facilitating timely decision-making, enhancing transparency, and promoting effective personnel administration. These results further support the Technology Acceptance Model (Davis, 1989), which posits that the successful adoption of technology depends on users' perceptions of its usefulness and ease of use. The positive responses recorded in this study suggest that employees perceive ERMS and HRIS as valuable tools capable of improving administrative performance and service delivery within the Akwa Ibom State Local Government Service.

Conclusion

This study concludes that the adoption of digital human resource systems significantly enhances administrative performance within the Akwa Ibom State Local Government Service. The findings from the Chi-square analyses revealed statistically significant relationships between Electronic Records Management Systems (ERMS), Human Resource Information Systems (HRIS), and administrative efficiency, leading to the rejection of the null hypotheses. The results demonstrate that ERMS has improved the management of employee records by enhancing information storage, retrieval, accessibility, accuracy, and security while reducing the inefficiencies associated with manual record-keeping. Similarly, the adoption of HRIS has strengthened administrative coordination, improved the flow of personnel information, facilitated timely and evidence-based decision-making, and increased the overall efficiency of human resource management processes.

The study further concludes that the integration of digital technologies into human resource administration has contributed to greater transparency, accountability, operational effectiveness, and service delivery within the local government service. By automating routine administrative functions and centralizing personnel information, digital human resource systems have reduced bureaucratic delays, improved organizational coordination, and enhanced workforce management. Therefore, the sustained adoption, effective utilization, and continuous improvement of electronic human resource systems remain essential for promoting efficient administration and strengthening institutional performance in the Akwa Ibom State Local Government Service.

Recommendations

Based on the findings of the study, the following recommendations are made:

i. The local government service should fully strengthen and expand the use of Electronic Records Management Systems (ERMS) to eliminate remaining manual record processes and ensure complete digitization of employee files.

ii. Management should invest in continuous upgrading of Human Resource Information Systems (HRIS) to improve system integration, data security, and inter-departmental communication.

iii. Strong ICT infrastructure, including reliable internet connectivity and system maintenance support, should be prioritized to ensure uninterrupted system performance.

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