

ELECTRONIC RESOURCES MANAGEMENT, INTERNET INFORMATION SEARCH SKILLS, AND LIBRARIANS' JOB PERFORMANCE IN FEDERAL UNIVERSITIES IN SOUTH-EAST NIGERIA

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Abstract

This study investigated the relationships among electronic resources management (ERM) skills, internet information search skills (IISS), and librarians' job performance in federal universities in South-East Nigeria. Adopting a correlational research design, the study covered the entire population of 145 professional librarians drawn from five federal universities in the region. Data were collected using a structured questionnaire based on a four-point Likert scale. Pearson Product Moment Correlation and coefficients of determination (r^2) were used to answer the research questions, while the t-test of significance of correlation was applied to test the hypotheses at the 0.05 level of significance. The findings revealed strong, positive, and statistically significant relationships between ERM skills and job performance, as well as between IISS and job performance. Librarians with higher competencies in managing electronic resources and executing effective internet searches demonstrated improved efficiency, accuracy, and quality of service delivery. The study concludes that digital competencies are significant predictors of librarians' job performance in academic libraries. It therefore recommends sustained professional development programmes focusing on ERM and advanced internet search strategies to enhance librarians' effectiveness in federal universities.

Keywords: Electronic resources management; Internet information search skills; Librarians; Job performance

Introduction

The contemporary academic information environment is characterized by an unprecedented growth in digital information resources, networked technologies, and

web-based scholarly communication platforms. University libraries across the globe have transitioned from print-dominated collections to hybrid and increasingly digital ecosystems that rely heavily on electronic journals, online databases, institutional repositories, open-access resources, and cloud-based library management systems (Broughton, 2019; Owolabi, 2021). Within this evolving landscape, academic librarians are no longer custodians of physical collections alone but are strategic information professionals expected to manage complex electronic resources infrastructures and provide advanced information retrieval support to diverse user communities (George, Okwu, & Ogunbodede, 2022; Ubogu, 2022).

Electronic Resources Management (ERM) has emerged as a critical functional area in academic librarianship, encompassing the processes of selection, acquisition, licensing, access configuration, usage monitoring, troubleshooting, evaluation, and long-term preservation of electronic information resources (Broughton, 2019; Akwang & Udoh, 2024). Effective ERM requires not only technical competence but also analytical and decision-making skills that enable librarians to maximize value from costly electronic subscriptions and ensure seamless access for users (Owolabi, 2021; Ovie & Emumejakpor, 2024). Inadequate ERM practices may result in access disruptions, underutilization of resources, and diminished return on institutional investment in digital collections (Basahuwa, Unegbu, & Babalola, 2020; Ubogu, 2022).

Closely related to ERM is internet information search skills (IISS), which refer to librarians' ability to strategically locate, retrieve, evaluate, and synthesize information from the internet and web-based databases using appropriate search tools, techniques,

and evaluation criteria (Adejumo, 2022; Sambo, Gbntogo-Saghenen, & Eda, 2021). These skills include proficiency in advanced database searching, application of Boolean logic, use of controlled vocabularies, citation tracking, and critical appraisal of online scholarly content (George et al., 2022; Nwali & Ngwuchukwu, 2024). As primary intermediaries between users and digital information systems, librarians' effectiveness in these areas directly influences the quality of research support, reference services, and information literacy instruction provided within academic institutions (Tomomowo-Ayodele, 2021; Bankole et al., 2024).

In developing countries such as Nigeria, reliance on electronic information resources has intensified due to rising subscription costs, declining print acquisitions, and growing demand for remote access to scholarly materials (Owolabi, 2021; Otu, 2024). Federal universities in South-East Nigeria have invested substantially in electronic databases and ICT infrastructure through government funding and consortium arrangements; however, the extent to which these investments translate into improved library services depends largely on librarians' competencies in managing electronic resources and executing effective internet-based information searches (Akwang & Udoh, 2024; Nwali & Ngwuchukwu, 2024). Empirical evidence indicates that disparities in digital skills, limited access to continuous professional development, and infrastructural constraints continue to affect librarians' capacity to fully exploit electronic resources for optimal service delivery (Basahuwa et al., 2020; Ubogu, 2022).

Librarians' job performance in academic institutions is increasingly evaluated based on their ability to support teaching, learning, and research through efficient

information organization, rapid retrieval of relevant resources, user education, and proactive management of digital collections (George et al., 2022; Ubogu, 2022). Previous studies have established links between ICT competence and job performance; however, fewer studies have simultaneously examined electronic resources management skills and internet information search skills as joint predictors of librarians' job performance, particularly within the context of federal universities in South-East Nigeria (Agim & Azolo, 2021; Nwali & Ngwuchukwu, 2024).

Against this background, this study investigates the relationships among electronic resources management skills, internet information search skills, and librarians' job performance in federal universities in South-East Nigeria. By situating the study within the international discourse on information resource management and digital librarianship, the findings contribute empirical evidence relevant to the *International Journal of Information Resource Management*, particularly by demonstrating how investments in human capacity development in ERM and IISS can enhance performance outcomes and service quality in academic libraries operating in resource-constrained environments (Davis, 1989; Bankole et al., 2024).

Statement of the Problem

The effective management of electronic resources and proficiency in internet information search skills are crucial for librarians to meet the demands of modern academic digitized environments. Librarians are expected not only to analyze users' information needs, acquire and provide access to resources, but also to instruct users in locating and evaluating information. However, many librarians continue to face

challenges in managing electronic collections and navigating digital platforms effectively. Deficiencies in electronic resource management and internet search skills have been linked to reduced job performance and weakened service delivery in academic libraries. This situation is particularly evident in Nigerian federal university libraries, where infrastructural limitations and skill gaps hinder librarians' ability to provide seamless digital services. Consequently, this study investigates the level of electronic resource management and internet search skills among librarians in federal universities in Southeast Nigeria, and examines their relationship with job performance and service delivery

Research Questions

1. What is the relationship between electronic resources management skills and the job performance of librarians in the federal universities studied?
2. What is the relationship between internet information search skills and the job performance of librarians in the federal universities studied?

Hypotheses

1. There is no significant relationship between electronic resources management skills and the job performance of librarians in the federal universities studied.
2. There is no significant relationship between internet information search skills and the job performance of librarians in the federal universities studied.

Review of Related Literature

Electronic Resources Management Skills and Librarians' Job Performance

Digital literacy, particularly competence in electronic resources management, has become a core requirement for effective service delivery in academic libraries. ERM encompasses activities such as licensing, access configuration, usage evaluation, troubleshooting, and long-term preservation of digital content (Broughton, 2019). Akwang and Udoh (2024) emphasized that effective management of electronic information resources is indispensable for librarians supporting research and academic productivity in university libraries. In a related study, Ubogu (2022) found that ICT competencies, including ERM skills, significantly predicted librarians' job performance in Nigerian university libraries.

Agim and Azolo (2021) reported that librarians with higher levels of digital literacy demonstrated greater efficiency and productivity in academic library operations. Similarly, Ovie and Emumejakpor (2024) established a significant positive relationship between librarians' digital skills and effective electronic resources management in federal universities in South-South Nigeria. These findings suggest that ERM skills enhance librarians' capacity to organize, maintain, and provide seamless access to electronic collections, thereby improving overall job performance.

Internet Information Search Skills and Librarians' Job Performance

Internet information search skills constitute another critical dimension of digital competence for academic librarians. These skills involve the use of search engines, online databases, Boolean logic, controlled vocabularies, and evaluation criteria to retrieve relevant and credible information. Adejumo (2022) noted that proficiency in

online searching significantly enhances librarians' effectiveness in supporting teaching and research activities.

Empirical studies have consistently demonstrated positive relationships between IISS and job performance. George et al. (2022) found that librarians' web search strategies and information literacy skills significantly influenced their ability to provide accurate and timely information services. Nwali and Ngwuchukwu (2024) similarly reported that digital literacy and internet search proficiency had a significant positive effect on librarians' job performance in government-owned universities in South-East Nigeria. Sambo, Gbntogo-Saghenen, and Eda (2021) further observed that strong internet search skills facilitate increased access to and utilization of electronic resources, thereby enhancing service quality in academic libraries.

Librarians' Job Performance in the Digital Environment

Librarians' job performance in academic institutions reflects the extent to which professional responsibilities such as information organization, user education, research support, and digital collection management are effectively fulfilled. Owolabi (2021) observed that inadequate ICT and search skills often limit librarians' ability to exploit advanced database functionalities, resulting in reduced service delivery. Otu (2024) identified gaps in the use of specialized academic platforms among Nigerian academic librarians, which may weaken institutional research support. Collectively, these studies underscore the centrality of ERM and IISS in enhancing librarians' job performance in contemporary academic environments.

Theoretical Framework

This study anchored on the Technology Acceptance Model (TAM) proposed by Davis (1989), which posits that the adoption and use of technology are largely determined by users' perceptions of its usefulness and ease of use. In the context of this study, librarians are more likely to adopt and effectively use electronic resources and internet search technologies when they perceive them as beneficial and user-friendly. Such acceptance is expected to translate into improved job performance through enhanced efficiency, accuracy, and service quality.

Methodology

A correlational research design was adopted to examine the relationships among ERM skills, IISS, and librarians' job performance. The population comprised 145 professional librarians from five federal universities in South-East Nigeria: Michael Okpara University of Agriculture, Umudike (25); Federal University of Technology, Owerri (48); University of Nigeria, Nsukka (44); Nnamdi Azikiwe University, Awka (24); and Alex Ekwueme Federal University, Ndufu-Alike (4). Given the manageable population size, a census enumeration technique was employed.

Data were collected using a structured questionnaire developed in line with the research questions and validated by experts in library and information science. All 145 copies of the questionnaire were administered and retrieved, yielding a 100% response rate. Pearson Product Moment Correlation was used to analysed the data, while the t-test of significance of correlation was applied to test the hypotheses at the 0.05 level.

Results and Discussion

What is the coefficient of relationship between electronic resources management skills and job performance of librarians in the federal universities studied?

Table 1: Summaries of Pearson Product Moment Correlation Statistics used to analyze the relationship between electronic resources management skills (X) and job performance (Y) of librarians in federal universities studied.

V	N	Σ	R	MR	DR	Remarks
X	145	2354	0.642	High	Positive	High
Y	145	9298				Positive Relationship

Size (N), Summation (Σ), Pearson r (R), Magnitude of Relationship (MR), Direction of Relationship (DR) and Remarks

Table 1 presents evidence of a strong positive association between electronic resources management skills and the job performance of librarians in the federal universities under study.

The findings revealed a strong positive relationship between ERM skills and librarians' job performance ($r = 0.642$), indicating that improved ERM competencies are associated with higher performance levels. The relationship was statistically significant, leading to the rejection of the null hypothesis. This finding is consistent with Basahuwa, Unegbu, and Babalola (2020) and Asibi, Ojokuku, and Udoh (2023), who reported that ICT and electronic resources management skills significantly enhance librarians' service delivery and productivity.

Ho₁: The coefficient of relationship between electronic resources management skills and job performance of librarians in the federal universities studied is not significant.

Table 2: Summaries of t-test of simple linear correlation used to test the coefficient of relationship between electronic resources management skills and job performance of librarians in federal universities studied.

V	N	Σ	R	A	Df	t _{cal}	t _{tab}	Decision
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X	145	2354						
			0.642	0.05	143	10.018	1.96	Reject
Y	145	9298						

Variables (V) Sample Size (N), Summation (Σ), Coefficient of Relationship (R), Alpha Level (α), Degree of Freedom (DF) and t-test of Significance of Simple Linear Correlation between two Variables

Table 2 presents the summary of the t-test analysis on the simple linear relationship between electronic resources management skills and librarians' job performance. With 143 degrees of freedom, the calculated t-value (10.018) exceeded the critical t-value (1.96). Since the calculated value is greater than the tabulated value, the null hypothesis was rejected. Hence, the coefficient of relationship between electronic resources management skills and job performance of librarians is significant.

RQ₂: What is the coefficient of relationship between internet information search skills and job performance of librarians in the federal universities studied?

Table 3: Summaries of Pearson Product Moment Correlation Statistics used to analyze the relationship between information search skills (X) and job performance (Y) of librarians in the federal universities studied.

V	N	Σ	R	MR	DR	Remarks
X	145	2288				High
			0.670	High	Positive	Positive
Y	145	9298				Relationship

Sample Size (N), Summation (Σ), Pearson r (R), Magnitude of Relationship (MR), Direction of Relationship (DR) and Remarks

Similarly, a strong positive relationship was found between IISS and job performance ($r = 0.670$), which was also statistically significant. This result corroborates the findings of Tomomowo-Ayodele (2021) and Nwali and Ngwuchukwu (2024), who demonstrated that digital literacy and internet search proficiency significantly predict librarians' job performance. The results suggest that librarians with

advanced search skills are better equipped to navigate electronic resources and provide high-quality information services.

Ho₂: The coefficient of relationship between information search skills and job performance of librarians in the federal universities studied is not significant.

Table 4: Summaries of t-test of simple linear correlation used to test the coefficient of relationship between information search skills and job performance of librarians in the federal universities studied.

V	N	Σ	R	A	Df	t _{cal}	t _{tab}	Decision
X	145	2288	0.670	0.05	143	10.801	1.96	Reject Ho ₄
Y	145	9298						

Key: Variables (V) Sample Size (N), Summation (Σ), Coefficient of Relationship (R), Alpha Level (α), Degree of Freedom (DF) and t-test of Significance of Simple Linear Correlation between two Variables

Table 4 presents the results of the t-test analysis examining the significance of the relationship between internet information search skills and librarians' job performance. With 143 degrees of freedom, the calculated t-value ($t = 10.801$) exceeded the critical t-value of 1.96 at the 0.05 level of significance. Consequently, the null hypothesis was rejected, indicating that the relationship between information search skills and librarians' job performance in federal universities in South-East Nigeria is statistically significant.

Recommendations

1. University management should institutionalize regular training and retraining programmes on electronic resources management for librarians.
2. Library administrators should develop structured capacity-building modules on advanced internet search strategies and database use.

3. Professional bodies such as the Nigerian Library Association (NLA), Librarians' Registration Council of Nigeria (LRCN), and the National Universities Commission (NUC) should integrate ERM and advanced internet search competencies into librarianship accreditation and certification standards.

Conclusion

The effectiveness of academic librarians increasingly relies on their ability to efficiently manage electronic resources and perform advanced internet searches. As modern academic libraries depend more on digital collections, these skills are crucial for supporting teaching, learning, and research. While ICT competencies enhance job performance and service quality, challenges such as limited training, inadequate infrastructure, and uneven digital skills hinder full engagement. Strengthening these competencies through ongoing capacity building and institutional support is essential to improve resource utilization, user satisfaction, and reinforce academic libraries' role as knowledge hubs.

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