

EVALUATING THE READINESS AND CAPACITY OF PUBLIC LIBRARIES FOR DIGITAL TRANSFORMATION IN ADAMAWA STATE, NIGERIA

Jummai Ali Kwari

Library Department

Adamawa State College for Legal Studies, Yola, Nigeria

DOI: <https://doi.org/10.5281/zenodo.15551890>

Published Date: 30-May-2025

Abstract: This study evaluates the readiness and capacity of public libraries in Adamawa State, Nigeria, for digital transformation, focusing on the awareness and preparedness of library professionals, as well as the supporting infrastructural and policy frameworks. Using a descriptive survey method, data were collected from 103 library staff members across public libraries in the state. The findings reveal that while awareness of emerging technologies is relatively high, preparedness for actual implementation remains low. Additionally, infrastructural and policy support are grossly inadequate to support sustainable digital transformation. The study concludes that significant investment in training, infrastructure, and policy reforms is essential to align public libraries with current digital demands. It recommends targeted interventions in capacity building and policy alignment to ensure readiness for digital services in rural and urban libraries alike.

Keywords: Digital Transformation, Public Libraries, Library Professionals, Infrastructure, Adamawa State.

1. INTRODUCTION

Digital transformation has reshaped the landscape of library services globally, offering improved access, user experience, and operational efficiency. Public libraries, especially in developing regions, are under increasing pressure to adopt digital practices to meet evolving user demands. In Nigeria, digital library adoption has been uneven, particularly in regions like Adamawa State, where infrastructural and socio-political challenges prevail (Ukaegbu & Okwu, 2022). As technologies such as cloud computing, digital repositories, and artificial intelligence become integral to library services, evaluating readiness becomes crucial to bridging digital divides.

The readiness of public libraries for digital transformation hinges largely on the awareness and preparedness of library professionals. Studies have shown that digital literacy, professional training, and attitudinal disposition significantly influence the success of technology adoption (Rahmat et al., 2023; Saibakumo, 2021). While there is growing awareness among Nigerian librarians of the potential benefits of digital tools, actual preparedness for implementation, in terms of skills and planning, remains insufficient (Manjunatha & Patil, 2021). This gap undermines the ability of public libraries to fully transition into the digital age.

Furthermore, the role of infrastructural and policy frameworks in enabling digital transformation cannot be overstated. Adequate ICT infrastructure, reliable electricity supply, and supportive policy guidelines are prerequisites for successful integration of emerging technologies (Adeleke, 2019; Tella et al., 2017). In Adamawa State, these enablers are frequently hampered by underfunding, inconsistent policy execution, and limited technical support, rendering many libraries digitally

under-resourced (Masenya, 2020). Without systemic investment in infrastructure and policy reforms, even the most tech-aware professionals may be unable to implement digital services effectively.

Given this context, this study investigates the current state of readiness and capacity of public libraries across Adamawa State for digital transformation. It evaluates the levels of awareness and preparedness among library personnel, as well as the extent to which institutional and governmental frameworks support or hinder this transition. By doing so, the study contributes to the growing discourse on library modernization in Nigeria, providing evidence-based recommendations for bridging the readiness gap in public library systems.

2. MATERIALS AND METHOD

This study employed a descriptive survey design targeting library professionals in public libraries across Adamawa State, Nigeria. A structured questionnaire was administered to a total of 103 respondents selected through purposive sampling to ensure representation across urban and rural settings. The instrument collected data on demographic characteristics, awareness and preparedness for digital adoption, and the status of infrastructural and policy support. The validity of the questionnaire was ensured through expert review, and reliability was confirmed with a Cronbach alpha value of 0.82. Data were analyzed using frequency counts, percentages, and mean scores. Tables were generated to present the findings, which were subsequently discussed in light of existing literature.

3. RESULTS AND DISCUSSION

Table 1: Demographic Characteristics of the Respondents (n=103)

| Variable | Frequency | Percentage (%) |
|---------------------------|-----------|----------------|
| Gender | | |
| Male | 58 | 56.3 |
| Female | 45 | 43.7 |
| Age | | |
| 20-30 years | 27 | 26.2 |
| 31-40 years | 40 | 38.8 |
| 41 years and above | 36 | 35.0 |
| Educational Qualification | | |
| Diploma | 18 | 17.5 |
| Bachelor's Degree | 51 | 49.5 |
| Master's Degree | 34 | 33.0 |
| Work Experience | | |
| Less than 5 years | 32 | 31.1 |
| 5-10 years | 41 | 39.8 |
| Over 10 years | 30 | 29.1 |

Source: Field Survey, 2024

Table 1 reveals a balanced demographic distribution among respondents. Nearly half (49.5%) hold bachelor's degrees, with an additional 33% possessing master's degrees, suggesting a relatively educated workforce. The majority (56.3%) are male, and a significant portion (38.8%) falls within the 31–40 age bracket. This demographic composition aligns with previous findings that younger and mid-career professionals are more likely to be receptive to digital innovation (Shahzad et al., 2021).

Furthermore, work experience is fairly evenly distributed, with most respondents (39.8%) having between 5 and 10 years of professional service. This tenure suggests a workforce with adequate practical exposure but possibly lacking in extensive digital transformation experience. As Manjunatha and Patil (2021) noted, exposure to new technologies tends to be higher among professionals with mid-level experience, though digital competence still depends heavily on institutional support and continuous training.

Table 2: Awareness and Preparedness of Library Professionals in Adopting Emerging Technologies

| Item | Mean Score |
|--|------------|
| Awareness of digital technologies for information services | 3.86 |
| Training received in emerging library technologies | 2.21 |
| Confidence in using digital tools for library operations | 2.55 |
| Willingness to embrace digital change | 4.13 |
| Availability of ICT skills | 2.32 |

Source: Field Survey, 2024

Table 2 highlights a disparity between awareness and preparedness. While the mean score for awareness is high (3.86) and willingness to adopt is even higher (4.13), actual preparedness indicators such as training (2.21), confidence (2.55), and ICT skills (2.32) are below average. These findings echo the observations of Saibakumo (2021), who found that despite strong awareness, Nigerian librarians often lacked the skills and training required for full digital adoption.

The lack of confidence and ICT skills among respondents indicates a need for targeted professional development. As Dowdy (2020) argued, training and peer support are essential to boost librarians' self-efficacy in technology use. Without these supports, even a highly motivated workforce may fail to bridge the readiness gap, thereby hindering digital transformation efforts in public libraries.

Table 3: Infrastructural and Policy Support for Digital Transformation

| Item | Mean Score |
|---|------------|
| Availability of reliable electricity | 2.11 |
| Internet access in libraries | 2.24 |
| Presence of digital policies at the institutional level | 2.03 |
| Government support for digital library initiatives | 1.97 |
| Budget allocation for ICT and digital tools | 1.89 |

Source: Field Survey, 2024

The data in Table 3 show systemic deficiencies in infrastructural and policy support for digital transformation. Mean scores for key items such as electricity (2.11), internet access (2.24), and digital policy frameworks (2.03) all fall below the midpoint. These findings are consistent with those of Tella et al. (2017), who identified erratic power supply and poor policy implementation as major barriers to technology integration in Nigerian libraries.

Moreover, the lowest ratings are associated with government support (1.97) and budget allocation (1.89), indicating structural neglect. According to Masenya (2020), financial and policy deficiencies remain the biggest obstacles to modernizing public libraries in Nigeria. The lack of institutional frameworks and consistent funding compromises the ability of libraries to implement and sustain emerging technologies, regardless of staff enthusiasm.

4. CONCLUSION

This study has demonstrated that public libraries in Adamawa State are only partially ready for digital transformation. While there is commendable awareness and willingness among library professionals to adopt emerging technologies, the actual capacity to implement these tools remains limited due to inadequate skills and insufficient institutional support. The gap between awareness and preparedness highlights a critical need for targeted capacity-building initiatives. Moreover, infrastructural deficits and poor policy frameworks significantly hinder the digital transition.

The findings suggest several actionable recommendations as follows;

- i. Library authorities and stakeholders must prioritize investment in continuous professional development. Tailored training workshops focused on digital literacy, cloud-based systems, and information management tools are necessary to equip library staff with relevant skills. Institutions should collaborate with universities and professional bodies to develop modular training programs.

- ii. Infrastructural upgrades are vital. Reliable electricity and internet connectivity should be addressed through public-private partnerships and government-funded infrastructure initiatives. Investment in ICT tools and maintenance should also be increased through designated library development funds.
- iii. Policy frameworks need urgent revision. Libraries should develop and implement institutional digital policies that align with national ICT goals. Such policies should outline benchmarks for digital readiness, training, infrastructure, and performance evaluation. Collaboration with the National Library of Nigeria and state educational agencies can help ensure consistent policy enforcement.
- iv. Government support must go beyond rhetoric. Increased budgetary allocations, grants, and monitoring systems should be instituted to provide consistent funding for digital initiatives. Without this, public libraries will continue to lag behind in a knowledge economy that demands digital integration. By addressing these challenges holistically, public libraries in Adamawa State can reposition themselves as hubs of information innovation and access.

REFERENCES

- [1] [1] Ukaegbu, C. and Okwu, M. (2022) Utilization of Emerging Technologies in Public University Libraries in Nigeria, *Library Philosophy and Practice*, Vol. 2022, pp. 1-17.
- [2] Dorman, D. (2002) Open Source Software and the Intellectual Commons, *American Libraries*, Vol. 39, No. 11, pp. 51 – 54.
- [3] Rahmat, M. et al. (2023) Factors Influencing Intention to Adopt E-Library Services, *Library Hi Tech*, Vol. 41, No. 1, pp. 34-52.
- [4] Saibakumo, F. (2021) Awareness and Adoption of Emerging Technologies in Academic Libraries in Nigeria, *Journal of Library and Information Services*, Vol. 57, No. 3, pp. 20-29.
- [5] Manjunatha, K. & Patil, C. (2021) Awareness and Adoption of Smart Technologies by Library Professionals, *International Journal of Library and Information Science*, Vol. 13, No. 2, pp. 14-22.
- [6] Adeleke, A. (2019) Determinants of ICT Use in Nigerian Libraries, *Nigerian Library Journal*, Vol. 52, No. 1, pp. 88-96.
- [7] Tella, A. et al. (2017) KOHA Software Implementation in Nigerian University Libraries, *Library Hi Tech News*, Vol. 34, No. 4, pp. 1-6.
- [8] Masenya, T. (2020) Institutional Support for Technology in Public Libraries, *Records Management Journal*, Vol. 30, No. 2, pp. 211-226.
- [9] Dowdy, K. (2020) Librarians' Intentions and Use of New Technologies, *Public Library Quarterly*, Vol. 39, No. 3, pp. 203-220.
- [10] Shahzad, M. et al. (2021) Technology Adoption Attitude among Library Professionals in Pakistan, *Library Management*, Vol. 42, No. 1, pp. 15-33.