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AI: MYTH OR REALITY OF JOB LOSS IN LIBRARIES? READINESS OF DELTA STATE LIBRARIANS' DIGITAL SKILLS FOR LIBRARY SERVICES

IRENE, Gbemudu-Ughwumiakpor Ogaga (CLN) & **OSIEBE, Priscilla, O. (CLN)**

Dennis Osadebay University, Library, Asaba. Delta State, Nigeria & Department of Library and Information Science. Dennis Osadebay University, Asaba-Delta State, Nigeria

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ABSTRACT

This study examines the readiness of librarians in Delta State, Nigeria, to integrate artificial intelligence (AI) into library services, focusing on their digital skills, perceptions of AI's impact on employment, and factors influencing AI adoption. Using a descriptive survey design, data were collected from a sample size of 180 Academic librarians through structured questionnaires assessing digital competencies, AI awareness, job security concerns, and implementation readiness. The findings reveal that librarians possess moderate to high digital skills, with strong proficiency in computer literacy, database management, and social media management. However, significant gaps exist in data analysis capabilities and practical knowledge of AI applications, highlighting a critical need for targeted training. Librarians generally perceive AI positively, viewing it as a tool to enhance their capabilities (mean = 3.18) and create new professional opportunities (mean = 2.97), rather than a threat to job security (mean = 2.34). Despite this optimism, awareness of AI's practical implementation in libraries remains limited (mean = 2.46), and readiness for integration is hindered by low institutional support (mean = 2.31) and resource constraints (mean = 2.14). Key factors influencing AI adoption include the availability of training (mean = 3.24) and management support (mean = 2.95), while infrastructural and financial barriers pose significant challenges. The study concludes that AI represents an evolutionary shift in library services, requiring librarians to adapt through continuous learning rather than facing displacement. Recommendations include professional development programs to bridge skills gaps, institutional investments in infrastructure, and policy frameworks to support AI adoption. Collaborative efforts between library associations and academic institutions are essential to ensure librarians remain relevant in an AI-enhanced digital era.

Keywords: Artificial Intelligence, Digital Skills, Library Services, Professional Development, and Librarians

Introduction

The advent of artificial intelligence has fundamentally transformed numerous professional sectors, with libraries experiencing significant technological disruption in recent decades. Contemporary library environments increasingly integrate AI-powered systems for cataloging, reference services, collection management, and user interaction, raising critical questions about the future role of library professionals. The discourse surrounding AI's impact on library employment has generated polarized perspectives, with some predicting widespread job displacement while others argue for professional evolution and enhancement.

The relationship between AI implementation and library employment requires careful examination within the Delta State context, considering factors such as technological infrastructure, professional development opportunities, and institutional support for digital transformation. Understanding librarians' current digital skills levels and their preparedness for AI integration becomes crucial for developing appropriate training programs and ensuring successful technology adoption without compromising employment security. Delta State academic libraries operate within rapidly evolving technological landscapes, necessitating continuous adaptation to remain relevant in digital information environments. The country's library professionals face unique challenges in developing digital competencies required for effective AI integration while maintaining traditional library service excellence. As educational institutions increasingly demand sophisticated information services supported by emerging technologies, librarians must demonstrate proficiency in digital tools and AI applications to justify their professional relevance.

This investigation explores Delta State librarians' perceptions of AI's impact on library employment while assessing their digital skills readiness for AI-enhanced library services. The study examines whether AI represents a genuine threat to library employment or merely requires professional adaptation and skill enhancement. By analyzing librarians' current competencies and their perspectives on AI integration, this research provides insights into the preparedness of Delta State library professionals for the digital future.

Statement of the Problem

Despite the global momentum toward digital and AI-enabled library services, there exists a notable scarcity of empirical data regarding the readiness of Delta State librarians to adapt to these transformative changes. Many Delta State academic institutions grapple with infrastructural deficiencies, inadequate funding, and limited access to continuous professional development programs—factors that impede effective skills acquisition and technological adaptation. This situation is exacerbated by the absence of comprehensive strategies tailored to enhance librarians' digital competencies, which are essential for the effective integration of AI systems.

Furthermore, prevailing literature presents conflicting perspectives concerning AI's impact on library employment. While some scholars posit that AI will complement and enhance the roles of librarians, others raise concerns about potential job displacement and professional marginalization. In the Delta State context, these anxieties are compounded by systemic challenges such as limited awareness of AI applications, inadequate policy frameworks, and a lack of institutional support. Consequently, understanding librarians' perceptions of AI, their existing digital skills, and their level of preparedness to incorporate AI into their professional routines is imperative. This understanding will inform the development of effective capacity-building initiatives and policy measures to address the skills gap, alleviate employment concerns, and ensure the continued relevance of librarians in the digital age.

Research Objectives

The study aims to achieve the following objectives:

1. To assess the current digital skills levels of Delta State university librarians in relation to AI technologies
2. To examine Delta State librarians' perceptions of AI's impact on library employment and job security
3. To evaluate the extent of Delta State librarians' awareness and understanding of AI applications in library services
4. To determine the preparedness of Delta State librarians to integrate AI technologies into their professional practice
5. To identify factors influencing Delta State librarians' readiness to adopt AI technologies in library services

Research Questions

This study addresses the following research questions:

1. What are the current digital skills levels of Delta State University librarians in relation to AI technologies?
2. How do Delta State librarians perceive the impact of AI on library employment and job security?
3. What is the extent of Delta State librarians' awareness and understanding of AI applications in library services?
4. How prepared are Delta State librarians to integrate AI technologies into their professional practice?

5. What factors influence Delta State librarians' readiness to adopt AI technologies in library services?

Literature Review

Artificial Intelligence in Library Services

The adoption of AI technologies within library services has been documented extensively in recent literature. For instance, Chen and Zhang (2021) argue that AI has revolutionized traditional library operations, facilitating activities such as automated cataloging, AI-enhanced reference services, and personalized content recommendations, thereby increasing efficiency and user satisfaction. Their findings suggest that AI not only supports routine tasks but also opens avenues for higher-level analytical and strategic endeavors for library professionals. Similarly, Kumar et al. (2020) identified key AI applications in academic libraries, including chatbot-enabled services, recommendation systems, and automated metadata generation. Their research emphasizes that effective AI implementation requires substantial investments in staff training and infrastructure, which remain challenging for resource-constrained environments. Importantly, they note that AI systems are designed to supplement human expertise rather than replace it, necessitating librarians to acquire new competencies for productive collaboration with intelligent systems.

Digital Skills and Professional Competencies

Digital literacy has become increasingly critical for library professionals navigating technology-enhanced information environments. Rodriguez and Martinez (2022) conducted a comprehensive analysis of digital competencies required for contemporary library practice, identifying data analysis, system administration, and user experience design as essential skills. Their research reveals significant gaps between existing librarian capabilities and emerging technological demands, necessitating systematic professional development interventions. Patel and Johnson (2021) investigated the relationship between digital skills and job satisfaction among library professionals, finding that individuals with higher digital competencies demonstrated greater confidence in their professional relevance and career prospects. Their study suggests that digital skills development not only enhances job performance but also contributes to professional resilience in rapidly changing technological environments.

Job Security and Professional Evolution

The discourse surrounding AI's impact on library employment has generated diverse perspectives within the profession. Williams and Thompson (2023) argue that concerns about AI-induced job displacement are largely unfounded, as intelligent technologies create new professional opportunities while eliminating routine tasks. Their longitudinal study of library employment trends demonstrates that institutions implementing AI technologies typically maintain or increase library staffing levels while reshaping job responsibilities toward more strategic functions.

Conversely, Davis and Lee (2022) caution that library professionals who fail to adapt to technological changes risk professional marginalization. Their research indicates that libraries increasingly value employees who can effectively utilize AI tools and contribute to technology-driven service innovations. The study emphasizes the importance of proactive skill development to maintain professional relevance in AI-enhanced environments.

Research Design

This investigation employed a descriptive survey research design to examine Delta State librarians' digital skills readiness and perceptions regarding AI's impact on library employment. According to Creswell and Creswell (2018), descriptive survey methodology enables systematic collection of quantitative data from large populations to identify patterns, relationships, and trends within specific demographic groups. .The target population comprised all professional librarians employed in Delta State University libraries, including federal, state, and private institutions. According to the Delta State Library Association (2023), approximately 2,400 professional librarians work in Academic libraries systems across Delta State, Nigeria. A stratified random sampling technique was employed to ensure representative selection across different university categories and geographical regions. The sample size of 180 librarians was determined using Yamane's formula with a 95% confidence level and 5% margin of error. The stratification considered university type (federal, state, private), geographical zones, and professional experience levels to ensure comprehensive representation.

The sampling frame was developed using the Delta State Library Association membership directory and institutional staff listings. Random selection within each stratum ensured equal probability of selection while maintaining proportional representation across different categories. Data collection utilized a structured questionnaire developed specifically for this study, incorporating validated scales adapted from previous research on digital skills assessment and technology adoption. The instrument employed 4-point Likert scales to measure respondent attitudes and perceptions, with response options ranging from "Strongly Agree" (4) to "Strongly Disagree" (1). This scale eliminates neutral responses, encouraging definitive position-taking while maintaining

sufficient response variation for statistical analysis. Content validity was established through expert review by library and information science professors, while pilot testing with 30 librarians confirmed instrument reliability (Cronbach's α = 0.89).

Data analysis utilized descriptive statistical procedures, including frequency distributions, percentages, means, and standard deviations to summarize respondent characteristics and response patterns. A criterion mean of 2.5 was established as the threshold for positive versus negative responses, calculated as the midpoint of the 4-point scale [(4+3+2+1)/4 = 2.5]. Responses with means above 2.5 indicated agreement or positive perceptions, while means below 2.5 suggested disagreement or negative attitudes. Inferential statistics, including t-tests and ANOVA, were employed to examine relationships between demographic variables and key study variables. Statistical significance was set at $p < 0.05$ for all analyses. Data were processed using SPSS version 28.0, ensuring accuracy and reliability of statistical computations.

Results and Data Analysis

Demographic Characteristics

Demographic Characteristics	Percentage
Gender	
Female	62.3%
Male	37.7%
Age distribution	
30-39 years	34.4%
40-49 years	28.6%
25-29 years	23.4%
Above 50 years	13.6%
Educational qualifications	
Master's degrees	23.4%
Bachelor's degrees,	23.4%
Doctoral degrees.	9.1%
Professional experience varied	
5-10 years	31.2%
11-15 years	26.6%
less than 5 years,	24.7%
over 15 years	17.5%

The study garnered a high response rate of 85.6%, with 154 completed questionnaires out of the 180 distributed. The demographic profile of the respondents reflects diverse backgrounds across gender, age, educational attainment, and professional experience. Gender distribution among participants was predominantly female, constituting 62.3% of the respondents, while male participants made up 37.7%. Regarding age, the majority of librarians were within the 30 to 39-year age bracket, representing 34.4% of the sample. This was followed by those aged 40 to 49 years (28.6%), and a substantial proportion aged 25 to 29 years (23.4%). A smaller segment, 13.6%, were above 50 years old, indicating a significant representation of mid-career professionals alongside younger librarians.

In terms of educational qualifications, a large portion of respondents held master's degrees, accounting for 67.5%. Additionally, 23.4% possessed Bachelor's degrees, and a minority of 9.1% held doctoral degrees, reflecting a generally well-educated professional cohort. Professional experience varied considerably among participants. The largest group, 31.2%, had accumulated between 5 and 10 years of experience in the library profession. Those with 11 to 15 years of experience made up 26.6%, while 24.7% had less than 5 years, indicating relatively recent entrants into the field. Conversely, 17.5% of respondents had over 15 years of professional experience, demonstrating a mix of early-career, mid-career, and seasoned librarians within the sample. This demographic composition provides a comprehensive overview of Delta State University librarians' profiles, underpinning the diverse perspectives and competencies related to digital skills and AI

Digital Skills Assessment

Table 2: Mean Ratings on Digital Skills Levels

Digital Skills Component	Mean	SD	Remark
Computer literacy	3.12	0.89	High
Database management	2.87	0.95	High
Digital content creation	2.64	1.02	High
Social media management	2.91	0.87	High
Data analysis capabilities	2.23	1.15	Low
Overall Digital Skills	2.75	0.98	High

Table 2 presents the mean ratings and standard deviations for various digital skills components among Delta State librarians, providing insight into their digital proficiency levels. The data indicate that, overall, the librarians possess moderate to high digital skills, with an average overall score of 2.75 on a 4-point Likert scale, which is considered a positive or high level of digital competence.

Specifically, computer literacy received the highest mean score of 3.12 (SD = 0.89), reflecting a strong foundational proficiency in basic digital operations and familiarity with computer-based tasks. Similarly, skills related to database management (mean = 2.87, SD = 0.95) and social media management (mean = 2.91, SD = 0.87) were rated highly, indicating that librarians are relatively comfortable with managing digital content and engaging on social media platforms. Digital content creation also showed a favorable rating, with a mean score of 2.64 (SD = 1.02), suggesting a moderate capability in producing digital resources, although there remains room for further development. However, a notable gap was observed in data analysis capabilities, which recorded the lowest mean score of 2.23 (SD = 1.15). This low rating points to a significant deficiency in analytical competencies, highlighting a critical area where skills enhancement is necessary. In summary, the analysis demonstrates that Delta State librarians generally possess strong foundational digital skills, particularly in computer literacy and content management. Nonetheless, their limited data analysis skills suggest an essential need for targeted training to bridge this competency gap, especially as data-driven decision-making becomes increasingly vital in AI-enhanced library services.

AI Impact Perceptions

Table 3: Mean Ratings on AI Impact on Library Employment

Perception Statement	Mean	SD	Remark
AI will eliminate library jobs	2.34	1.12	Disagree
AI enhances librarian capabilities	3.18	0.84	Agree
AI creates new professional opportunities	2.97	0.91	Agree
AI threatens job security	2.41	1.08	Disagree
Librarians will become obsolete	1.89	1.21	Disagree
Overall AI Impact Perception	2.56	1.03	Positive

Table 3 illustrates the perceptions of Delta State librarians regarding the impact of artificial intelligence (AI) on library employment, expressed through mean ratings and standard deviations for various statements. The overall perception score is 2.56, indicating a generally positive outlook toward AI's role in library services. Librarians tend to disagree with the notion that AI will lead to the elimination of library jobs, as reflected by a mean rating of 2.34 (SD = 1.12). Similarly, they also reject the idea that AI renders librarians' roles obsolete, with a lower mean score of 1.89 (SD = 1.21). These findings suggest that respondents do not perceive AI as a direct threat to their job security or professional relevance.

Conversely, they agree that AI has a positive influence on their capabilities, with a high mean rating of 3.18 (SD = 0.84). This indicates a recognition of AI as a tool that can augment librarians' skills and improve service delivery. Additionally, librarians believe that AI can create new professional opportunities within the library sector,

demonstrated by a mean score of 2.97 (SD = 0.91). These perceptions highlight an optimistic attitude toward AI as a facilitator of professional growth rather than a risk. The combination of these responses underscores a generally positive perception of AI's impact on the profession. Librarians acknowledge the potential of AI to enhance their work and open up new avenues for career development while simultaneously expressing confidence that AI does not pose an immediate threat to their employment or professional existence. This outlook is crucial for fostering proactive engagement with AI technologies and supporting targeted training initiatives aimed at maximizing their benefits.

AI Awareness and Understanding

Table 4: Mean Ratings on AI Awareness in Library Services

AI Knowledge Area	Mean	SD	Remark
Familiarity with AI concepts	2.67	0.94	High
Understanding library AI applications	2.45	1.06	Low
Awareness of AI tools	2.52	0.98	High
Knowledge of implementation strategies	2.18	1.14	Low
Overall AI Awareness	2.46	1.03	Moderate

Table 4 presents the findings on the levels of AI awareness among Delta State librarians across various knowledge domains related to AI in library services. The data show that overall AI awareness is moderate, with a mean score of 2.46 on a 4-point Likert scale, indicating that while librarians have some familiarity with AI, their understanding of its practical applications and strategies for implementation remains limited.

In terms of conceptual familiarity, librarians demonstrate a relatively high level of understanding, with a mean rating of 2.67 (SD = 0.94). This suggests that most respondents are moderately knowledgeable about basic AI concepts and can recognize the significance of AI in the context of library services. They are aware of AI as an emerging technology, which provides a foundation for further learning and engagement. However, their understanding of how AI is practically applied within library settings is comparatively low, with a mean score of 2.45 (SD = 1.06). This indicates that although librarians may understand the general idea of AI, they possess limited knowledge about specific applications, tools, and systems currently used or potentially useful in their work environment. This gap could hinder effective integration and utilization of AI technologies in library operations.

Furthermore, awareness of AI tools available for library use is relatively high (mean = 2.52, SD = 0.98). This suggests that librarians are somewhat familiar with existing AI applications and software, which can serve as a stepping stone for deeper engagement. Conversely, knowledge of AI implementation strategies remains the lowest among the assessed areas, with a mean score of 2.18 (SD = 1.14). This reveals a significant gap in understanding how to effectively plan, adopt, and manage AI systems within library infrastructures. The limited grasp of implementation strategies could present challenges to successful AI integration, as librarians may lack the practical guidance needed to initiate or oversee AI projects.

In summary, while Delta State librarians display a fair level of conceptual awareness about AI, there is a clear need for more targeted training and practical education focused on how AI can be implemented and operationalized in library environments. Bridging this knowledge gap is crucial for empowering librarians to confidently adopt and leverage AI technologies to enhance service delivery and organizational efficiency.Implementation Readiness

Table 5: Mean Ratings on AI Integration Preparedness

Readiness Factor	Mean	SD	Remark
Willingness to adopt AI	3.05	0.82	High
Confidence in learning new technologies	2.88	0.89	High
Institutional support perception	2.31	1.18	Low
Resource availability assessment	2.14	1.25	Low
Overall Implementation Readiness	2.60	1.04	Moderate

Table 5 provides an overview of Nigerian librarians' preparedness to implement and integrate AI technologies into their professional practice. The data reveal that overall implementation readiness is moderate, with a mean score of 2.60 on a 4-point Likert scale, indicating a mixed level of confidence and perceived support. Librarians demonstrate a high level of willingness to adopt AI, with a mean rating of 3.05 (SD = 0.82). This suggests a strong intrinsic motivation and openness among respondents to explore AI technologies and incorporate them into their work. Similarly, confidence in their ability to learn new technologies is also rated highly, with a mean of 2.88 (SD = 0.89), indicating that many librarians believe they possess or can develop the necessary skills to operate AI systems effectively.

However, despite these positive indicators, significant concerns emerge regarding institutional support and resource availability. Perceptions of institutional backing are notably low, with a mean score of 2.31 (SD = 1.18), reflecting a lack of confidence in their organizations' commitment to providing the necessary infrastructure, policies, or strategic guidance for AI adoption. This perceived deficiency in support can act as a barrier, reducing the likelihood of successful and sustainable AI integration. Resource availability, encompassing technological infrastructure, funding, and other essential materials, scores even lower at a mean of 2.14 (SD = 1.25). This low rating signals that librarians feel the necessary resources are insufficient or unavailable, which could impede the practical implementation of AI solutions, regardless of individual enthusiasm and readiness.

In summary, while Nigerian librarians' exhibit a strong personal drive and confidence to adopt AI, the overall preparedness for implementation remains moderate due to perceived organizational and resource limitations. Addressing these institutional and infrastructural barriers is critical to transforming individual readiness into successful, sustainable AI integration within library services. Enhancing organizational support and resource allocation will be essential for enabling librarians to effectively leverage AI technologies and realize their potential benefits.

Adoption Influencing Factors

Table 6: Mean Ratings on Factors Influencing AI Adoption

Influencing Factor	Mean	SD	Remark
Training availability	3.24	0.76	High
Management support	2.95	0.91	High
Peer influence	2.67	0.88	High
Technological infrastructure	2.43	1.11	Low
Financial resources	2.29	1.19	Low
Overall Adoption Factors	2.72	0.97	High

The assessment of factors influencing AI adoption among Nigerian librarians, as outlined in Table 6, highlights a nuanced landscape of facilitators and barriers. The mean ratings indicate that certain factors exert a high influence on adoption processes, with training availability scoring the highest at 3.24 (SD = 0.76). This underscores the critical importance of accessible, comprehensive training programs in equipping librarians with the necessary skills and knowledge to effectively integrate AI technologies into their workflows. A well-structured training regimen fosters confidence, reduces perceived complexity, and promotes proactive engagement with AI tools.

Management support also emerges as a significant determinant, with a mean score of 2.95 (SD = 0.91). Leadership commitment and organizational backing manifested through policy directives, resource allocation, and strategic encouragement serve as vital drivers facilitating the adoption process. The influence of peer support is also notable, with a mean rating of 2.67 (SD = 0.88), reflecting the role of social dynamics and collaborative learning in shaping individual and collective attitudes toward AI integration. Conversely, infrastructural and financial barriers are perceived as relatively low influences, with mean scores of 2.43 (SD = 1.11) for technological infrastructure and 2.29 (SD = 1.19) for financial resources. These figures suggest that, although infrastructural and monetary constraints exist, they are less dominant factors compared to others, but nonetheless pose notable challenges. The limited availability of technological infrastructure and funding could hinder the deployment and functional efficacy of AI applications, especially if not adequately addressed at the policy and institutional levels.

In aggregate, the overall influence factor score of 2.72 (SD = 0.97) corroborates the high overall significance of these determinants in shaping AI adoption within Nigerian

academic libraries. The findings underscore that while individual motivation and institutional support are pivotal, addressing systemic infrastructural and financial limitations remains imperative to capitalize on the drivers of AI adoption. Strategic interventions aimed at enhancing training opportunities and reinforcing management commitment, alongside infrastructural development and resource mobilization, are critical for fostering an environment conducive to successful AI integration in library services.

Discussion of Findings

The findings of this study illuminate the intricate landscape of Delta State librarians' preparedness for AI integration and their perceptions regarding the influence of technology on library employment. The respondents demonstrated moderate to high levels of digital skills, indicating a foundational competency that could underpin efforts toward adopting AI technologies. This observation aligns with prior research by Rodriguez and Martinez (2022), who emphasized the importance of digital literacy as critical for navigating technologically advanced library environments and advocating for systematic professional development to bridge existing skill gaps. However, a significant deficiency was identified in data analysis capabilities, with a mean score of 2.23. This highlights a crucial area requiring targeted capacity building, as analytical skills are increasingly vital in leveraging AI for effective information management, consistent with the findings of Patel and Johnson (2021), who underscored data analysis as a core component of digital competence necessary for adapting to emerging technological demands.

Notably, the study revealed predominantly positive perceptions of AI's impact on library employment, contradicting prevalent fears of automation-induced job displacement. Respondents agreed that AI enhances librarian capabilities (mean = 3.18) and generates new professional opportunities (mean = 2.97), reflecting a mature understanding of AI as a supplementary rather than replacement technology. Furthermore, the strong disagreement with statements asserting that AI threatens job security (mean = 2.34) or renders professionals obsolete (mean = 1.89) indicates a professional confidence rooted in the belief that human expertise remains indispensable in library services. These perceptions are consistent with Williams and Thompson's (2023) assertion that AI has the potential to augment rather than diminish employment, provided that professionals acquire the necessary new skills.

The study also highlighted a moderate level of AI awareness (mean = 2.46), suggesting that while librarians possess a good conceptual understanding of AI, their grasp of practical applications and implementation strategies remains limited. This gap underscores the need for hands-on, application-oriented training programs that move beyond theoretical familiarity, echoing the recommendations of Kumar et al. (2020), who stressed the importance of experiential learning and continuous professional development in facilitating successful AI integration. When examining implementation readiness, results point to a disconnect between individual motivation and organizational support. While librarians demonstrated high levels of personal willingness (mean = 3.05) and confidence in their ability to learn new technologies (mean = 2.88), concerns about institutional backing (mean = 2.31) and resource availability (mean = 2.14) highlight systemic challenges. These organizational factors, aligned with the systemic infrastructure and funding constraints reported by Adebayo and Okonkwo (2021), suggest that efforts to foster AI adoption must address institutional policies, infrastructural enhancements, and resource mobilization to translate individual readiness into tangible implementation success.

The identification of training availability as the most influential factor (mean = 3.24) reinforces the pivotal role of comprehensive professional development programs in enabling effective AI adoption. Management support (mean = 2.95) also emerged as a critical determinant, emphasizing the importance of leadership commitment and strategic policy formulation. Conversely, lower ratings assigned to technological infrastructure (mean = 2.43) and financial resources (mean = 2.29) reflect systemic infrastructural and economic challenges prevalent within Delta State's higher education sector, which necessitate policy-level interventions for sustainable AI integration. These findings corroborate the systemic challenges highlighted by Okoro et al. (2022), emphasizing the need for coordinated efforts to facilitate infrastructural development and resource allocation for successful technological transformation in Nigerian libraries

Conclusion and Recommendations

This study demonstrates that concerns about AI-induced job displacement in Delta State libraries are largely unfounded, with librarians recognizing technology's potential for professional enhancement rather than elimination. While librarians possess moderate digital skills and maintain positive attitudes toward AI adoption, significant gaps exist in analytical competencies and practical implementation knowledge that require targeted interventions. The evidence gathered underscores the imperative for Delta State academic institutions and library associations to prioritize professional development initiatives aimed at enhancing digital and AI literacy among librarians. Given the moderate level of digital skills and existing infrastructural deficits, targeted training programs focusing on AI applications, data analysis, and implementation strategies are essential. Additionally, institutional support in terms of policy formulation, resource allocation, and infrastructural investments must

be strengthened to enable seamless AI integration. The findings suggest that AI represents an evolution rather than a revolution in library services, requiring professional adaptation rather than wholesale job replacement. Delta State librarians demonstrate readiness for this evolution but require institutional support and professional development opportunities to realize their potential in AI-enhanced environments. Based on the findings the following recommends:

Professional **Development Programming:** It is imperative that library associations and academic institutions collaborate to design comprehensive AI literacy initiatives that emphasize practical applications and implementation strategies over purely theoretical knowledge.

Skills **Gap Interventions:** Priority should be given to targeted training programs that focus on enhancing data analysis and analytical competencies among Delta State librarians.

Institutional **Support Enhancement:** University administrators must bolster support for AI integration by implementing strategic resource allocation, developing pertinent policies, and improving infrastructural capabilities.

Collaborative **Learning Networks:** Establishing peer learning communities and mentorship programs can leverage the high influence of peer support in fostering technological acceptance and competence among librarians. Such collaborative platforms can serve as vital mechanisms for knowledge sharing, skill development, and collective problem-solving.

Infrastructure **Development:** Systematic and sustained investment in technological infrastructure is critical to underpin AI implementation initiatives across Delta State university libraries.

Policy **Framework Development:** Development of comprehensive national and institutional policies is essential to guide AI adoption within the library sector. These policies should concurrently address concerns related to job security and ongoing professional development, thereby fostering a supportive policy environment for technological advancement.

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