AI-DRIVEN INFORMATION SERVICES: ARE KENYAN UNIVERSITY LIBRARIES READY?

Ubaga E.M.[1] Gichohi P.M.,[2] Karani J.M.[3]

[1]Daystar University, KENYA

[2]Kenya Methodist University, KENYA

[3]Kirinyaga University, KENYA

***Correspondence** : eubaga@daystar.ac.ke

Abstract

Artificial Intelligence (AI) presents substantial opportunities to advance library services and user experiences in university libraries. However, despite the growing global adoption of AI in university libraries, Kenyan university libraries face challenges that hinder AI-driven innovation, affecting service delivery and user satisfaction. This study assessed the readiness of Kenyan university libraries for AI adoption by examining key enablers and challenges of AI adoption. A systematic review of journal articles and research papers from Google Scholar, EBSCOhost and Emerald databases from 2020-2025 was conducted, focusing on AI adoption in university libraries in Kenya. Themes were identified through thematic analysis, ensuring a comprehensive understanding of AI readiness. Results showed that Kenyan University libraries have poor ICT infrastructure; library staff lack AI specific skills, and users have mixed perceptions about AI use in libraries. These challenges are common across many university libraries in Kenya, and inhibit seamless integration of AI into library operations. Although there are challenges, the interest in AI adoption creates an opportunity for policymakers and universities to promote digital transformation in library services. If these challenges are resolved, Kenyan university libraries can effectively provide AI-driven information services. There is need for government, university administration, and library associations to collaborate, increase funding for AI adoption, formulate appropriate policy and initiate capacity building programs. This paper provides a basis for development of a framework to guide policy and practice in AI-enhanced library service delivery.

Keywords: AI Readiness in Libraries, Artificial Intelligence (AI), University Libraries, AI Integration in Libraries, Digital Transformation.

Introduction

The evolving needs of library users and digital transformation have forced university libraries to change their modes of service delivery [1]. As a result, university libraries have explored and integrated Artificial Intelligence (AI) into their daily operations to meet the ever-evolving user needs while simultaneously remaining relevant in the rapidly evolving technology society [2]. AI is a field of computer science whose aim is to build intelligent systems that can perform tasks that typically need the intelligence of human beings [3]. AI tools have the potential to completely transform university libraries through improvement of efficiency, effectiveness, and usability of their services. According to [4], using AI in university libraries has resulted in the improvement of efficiency and effectiveness of library services such as acquisition, indexing, cataloguing, reference services circulation, and information storage and retrieval. However, while university libraries in the developed world have integrated AI into a range of library services, such as reference and circulation services, those in developing countries like Kenya are still lagging behind [2]. Sang [5] observed that despite the numerous benefits of AI, university libraries in Kenya have exhibited a slow pace of adoption, with most university libraries still relying on traditional library management systems with minimal AI integration.

Given the importance of AI in enhancing information services in university libraries, this study, a systematic review, evaluated the readiness of Kenyan university libraries for AI-driven information services guided by the following objectives.

i. Examining the status of ICT infrastructure readiness to provision of AI-driven information services in university libraries in Kenya
ii. Assessing the library staff level of ICT competence and readiness to provision of AI-driven information services
iii. Users' perception and readiness towards AI-driven information services in university libraries in Kenya

By analyzing global AI adoption trends, identifying enablers and barriers to AI adoption, and evaluating the readiness of Kenyan university libraries to provision of AI-driven information

services, this study offers guidance on how Kenyan university libraries can successfully integrate AI into their operations.

Problem Statement

Artificial Intelligence has a great potential of transforming the services offered by university libraries. A Semi et al 2020 [6] observed that libraries around the world have embraced AI in provision of information services including acquisition, information retrieval, indexing, reference services, and cataloguing and classification of information materials. Tella [7] however noted that, whereas university libraries in the developed world have embraced AI for provision of information services, those in developing nations like Kenya have been slow in adoption of this technology. This assertion is collaborated by observations of Sang (2020) [5] that University libraries in Kenya are still lagging in the use of AI despite the potential of AI in enhancing services. A study by Masinde et al 2024 [2] established that adoption of AI in Kenyan university libraries was still at the initial stages based on the maturity model. Sang 2025 [5] attributed the slow uptake of AI in Kenyan university libraries to inadequate ICT infrastructure, inadequate ICT skills and competencies among library staff, and lack of a policy framework for successful adoption. Thus, if these challenges are not resolved, university libraries in Kenya risk becoming obsolete due to inability to improve their efficiency, effectiveness and user experience. Knowledge of the enablers and challenges of implementing AI in Kenyan university libraries would support development of strategies to accelerate AI adoption for provision of information services.

Literature Review

Literature was reviewed in line with the objectives of the study.

ICT Infrastructure Readiness for AI-driven Information Services

A significant investment in a robust ICT infrastructure is necessary to support deployment of AI in University libraries. Oyile et al 2024 [8] observed that infrastructure comprises computer hardware, software, and the required network infrastructure and connection. The readiness of ICT infrastructure for adoption of AI can be determined by examining the availability, quality and capacity of technical resources required to support AI services such as high-performance computing resources, AI development tools and platforms, network infrastructure and cyber

security procedures(9–11). A study conducted in Saudi Arabian academic libraries by [12] in 2021 established that all the respondents, 29(100%), indicated that AI adoption was hindered by inadequate ICT infrastructure and insufficient technical skills and competencies among the staff. Additionally, the study indicated that the most crucial technical prerequisites for implementing AI technologies in libraries were setting up the right ICT infrastructure, including a robust communication network and contemporary equipment. Amoah and Minishi-Majanja 2023, [13] studied Ghanaian university libraries ICT infrastructure readiness for 4IR and established that 85 (39%) of the respondents indicated that they were somehow ready, 77 (35.3%) were not sure, 36 (16.5%) were sure, and 20 (9.2%) had no idea. Elsewhere, [14] it was observed that poor infrastructure, such as low Internet bandwidth in most of the Tanzanian academic libraries, hindered the deployment of AI in Tanzanian University libraries.

Library Staff ICT Skills and Competencies Readiness for AI-driven Information Services

Integration of ICT in operations of university libraries has resulted in modifications to many activities within the libraries, including automation of previously manual processes for information gathering, processing, and dissemination[7]. To stay relevant in the face of competition in the contemporary online environment, librarians must upgrade their ICT skills and competencies [15]. Effective integration of AI in information services is highly dependent on the librarians' degree of AI literacy [16]. A multidisciplinary approach is required for University libraries to provide AI driven including data literacy, technological competence, critical thinking, and flexibility [17]. Thus, there is need for libraries to have the skills necessary to comprehend how AI works in addition to creatively applying it to information services in order to improve user experiences and their contribution to the spread of knowledge [18]. The AI skills readiness of library staff and competencies for AI-driven information services can be assessed by examining staff competence with basic, intermediate and advanced ICT skills and their confidence in their capacity to successfully utilize AI technologies [19,20]. A study in Pakistani university libraries established that readiness to adopt AI was impacted by factors such as staff's ICT skills and competencies [21]. Another study on AI skills of academic library staff in Nigeria [22] established that academic libraries in Nigeria had significant challenges in effectively using AI technology due to a lack of technical expertise and a skill gap among library personnel.

Users Perception on Readiness for AI-driven Information Services

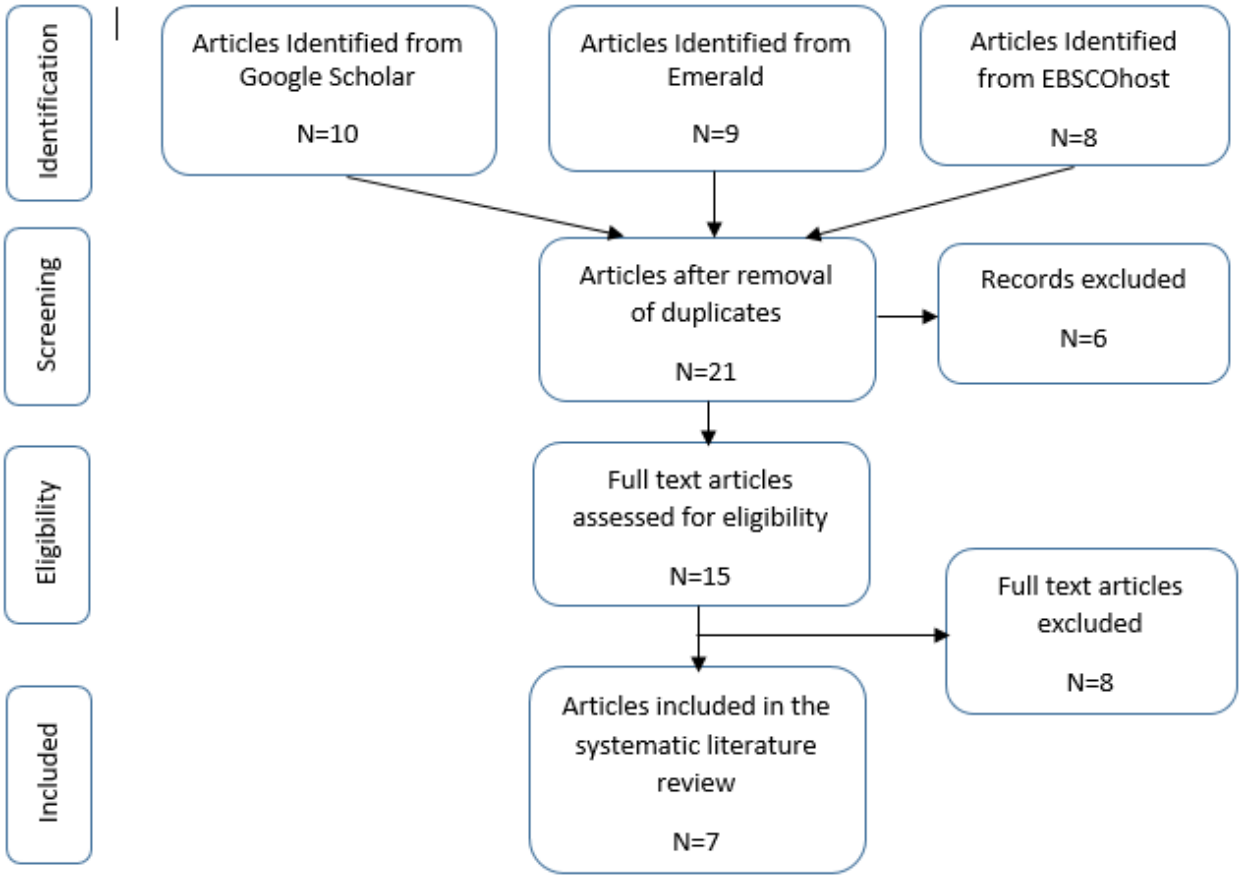
Anyone who comes to the library with the intention of using its resources to meet their information needs is considered a library user. University libraries user communities include students, faculty, and researchers who visit the library with the intention of satisfying their information needs. User readiness for AI adoption is hinged on possession of positive attitudes toward AI-driven information services and possession of the necessary ICT skills and competencies for operating AI systems [23]. The way users perceive AI-driven information services can determine whether the adoption of AI is successful or not [24]. Thus, if users have doubts about AI-driven information services, chances are high that utilization of these services would be poor. User readiness for AI-driven information services can be assessed by the users' perceived usefulness of AI, perceived ease of using of AI, and their perception of the challenges of AI. A study of library users in Pakistani university libraries established that users were generally positive about using AI in libraries, though they had concerns about privacy and the ethical use of information collected by AI systems [25]. Elsewhere, a study on the perception of Korean university libraries students towards AI-related educational content recommendation systems established that all the respondents, regardless of their age, gender, year, or major, intended to use the AI-related educational content recommendation system, with task suitability, perceived benefits and perceived ease of use as the influencing factors [26].

Methodology

A Systematic Literature Review (SLR) was applied to obtain a comprehensive overview of relevant research on the readiness of Kenyan university libraries to providing AI-driven information services [27]. The study was conducted by reviewing journal articles and research papers from Google Scholar and EBSCOhost and Emerald databases. Google Scholar was chosen because of its broad and comprehensive coverage of the research topic, in addition to the open access advantage it offers, Emerald was chosen because of its high quality and peer reviewed content that is focused on library and information science, while EBSCOhost was selected because of its subject specific database with a robust coverage of library and information science. Inclusion criteria included English research articles and papers on the adoption of Artificial Intelligence in Kenyan universities that were published between 2020-2025. Studies focusing on AI applications outside the Kenyan university libraries' context, and

studies in languages other than English were excluded from the study. Book chapters, editorials, and guest editorials were also excluded. To retrieve articles for the study, "Artificial Intelligence" AND "university library" OR "university libraries" AND Kenya was used as the search key phrase. PRISMA model was used to select the final sample of articles that were considered for the study (28) as shown in figure 1 below.

Figure 1: PRISMA model for the systematic review



Ten (N= 10) articles were retrieved from Google Scholar, (N-9) articles from Emerald, and (N=8) articles from EBSCOhost resulting in (N=27) articles from the three databases. Upon merging the results from three databases, (N=6) duplicated records were removed, obtaining a sample of (N=21) articles. Thereafter, all abstracts were used and in case of doubts, complete papers. This resulted in exclusion of (N=6) articles. Reasons for excluding papers varied, such as only covering the librarian's role or minor aspects on the use of AI in university libraries in Kenya. In the end, a total of fifteen (N=15) articles were obtained for closer analysis. These papers were read thoroughly, and (N=8) articles were removed, leaving a final sample of (N=7) articles.

Data extracted from the articles identified for the SLR was categorized into themes based on the study's research questions for more straightforward analysis, enabling key observations to be identified and conclusions to be drawn. Results were presented on tables to enhance clarity and comprehension. Ethical considerations such as clear description of the search strategy, inclusion and exclusion criteria, proper citation and use of genuine and verifiable articles were observed.

Findings and Discussion

ICT infrastructure Readiness for AI-driven information services in university libraries in Kenya

Results of ICT infrastructure readiness for AI-driven information services in university libraries in Kenya are summarized on Table 1 below.

Table 1: Findings on ICT infrastructure readiness for AI-driven information services in university libraries in Kenya

Authors	Year	Main topics covered
Sang, L. J.	2025	Inadequate ICT infrastructure hinder adoption of AI
Masinde, J. M. , Mugambi, F. & Wambiri, D. M.	2024	Inadequate ICT Infrastructure due to the high cost of AI tools
Nzioki, R.	2021	Deployment of basic ICT infrastructure to support AI Financial resources required to upgrade the ICT infrastructure, internet connectivity and other ICT related facilities in order to support adoption new disruptive technologies

These findings revealed that Kenyan university libraries lack the necessary ICT infrastructure to support AI-driven information services [2,5,29]. This is because AI tools and systems rely on good ICT infrastructure that includes high speed Internet, scalable storage, high performance computers and proper cybersecurity measures. Poor ICT infrastructure in Kenyan university libraries is attributed to high cost of AI tools such as RFID technologies [2,29]. These findings agree with previous reports of several other studies in Saudi Arabia, [13] in Ghana, and [14] in Tanzania that established one of the reasons why AI had not been adopted in the university libraries in their studies was poor ICT infrastructure. According to [30], if the challenges with the

ICT infrastructure are not resolved, they will prevent university libraries in Kenya from reaping the numerous benefits that AI may provide. University libraries in Kenya therefore need to make substantial investments in the ICT infrastructure in order to provide AI-driven information services.

Staff ICT Skills and Competencies Readiness for AI-driven information services in University libraries in Kenya

Results on the staff ICT skills and competencies in readiness for AI-driven information services in university libraries in Kenya are summarized on Table 2 below.

Table 2: Results on staffs' ICT skills and competencies readiness for AI-driven information services in university libraries in Kenya

Authors	**Year**	**Main topics covered**
Masinde, J. M. , Mugambi, F. & Wambiri, D. M.	2024	Scarcity of skilled personnel
Jebet, T. & Gichugu, M.	2025	Staff are moderately well informed on AI's use in libraries Need for training and awareness programs on AI tools
Chepchirchir, S. & Kagoiya, R.	2025	Training and skill gaps in staff to manage AI tools
Sang, L. J.	2025	Significant gap in training on using AI tools
Nzioki, R.	2021	Staff to upgrade and update their skills
Abok, V, & Masako, D. R.	2024	Staff training and support for seamless integration
Sang, L. J.	2024	Policymakers need to make investment in staff training a priority to enhance their readiness to adopt AI

These findings reveal a skills gap among the library staff in university libraries in Kenya, with some librarians being moderately informed on the use of AI in libraries [2,31,32]. It has also been reported elsewhere that librarians in Kenyan university libraries lack proficiency in advanced ICT skills such as deep learning, big data and analytics that are necessary for effective use of AI systems [2,5,30,33,34]. Thus, for seamless integration of AI in information services, there is need for librarians to be trained on use of AI tools in libraries [5,29,31,32,35,36]. These findings corroborate

previous reports [18] showing that there was need for university libraries to invest in the training of their staff to accelerate uptake of AI.

User perception or readiness for AI-driven information services in university libraries in Kenya

Results on the user perception on readiness for AI-driven information services in university libraries in Kenya are summarized on Table 3 below.

Table 3: Results on user' perception readiness for AI-driven information services in university libraries in Kenya

Authors	**Year**	**Main topics covered**
Chepchirchir and Kagoiya	2024	Lack of trust in AI-driven tools and services.
Sang L. J.	2025	Ethical concerns Users comfortable in utilizing AI-powered resources AI-powered tools are user friendly and effective.
Masinde, J. M. , Mugambi, F. & Wambiri, D. M.	2024	AI can streamline various library processes Users confident in their own skills to utilize AI tools Positive experiences with AI tools
Nzioki, R.	2021	AI tools significant to the library users

These results indicate that users in Kenyan university libraries were comfortable using AI-powered resources, they found AI tools to be friendly and effective, they believed AI could streamline various library processes, they were confident in their own skills to use AI, and had had positive experiences with AI tools [2,5,29]. These findings reflect a positive perception among library users toward AI-driven information services, positioning it as a valuable asset in the future of Kenyan university libraries. These findings are corroborated by reports of other studies on university library users in Pakistani [25] and on Korean university libraries' users [26] which established that users were overwhelmingly positive about the use of AI-driven information services. However, concerns such as the ethical use of AI tools and lack of trust in AI systems [5,31] could contribute to resistance to change [5]. These concerns align with global discussions about responsible AI and reflect anxieties about the use and potential misuse of sensitive data in academic environments [37,38]. To address the issues of privacy concerns, there

is need for university libraries to put in place ethical frameworks that would ensure safe and responsible use of AI-driven information services [39].

Conclusion

This study assessed the readiness of Kenyan university libraries for AI-driven information services. Based on the findings, it was concluded that the ICT infrastructure in Kenyan university libraries was not ready for AI driven information services. That in as much as the libraries had foundational ICT infrastructure, they lacked advanced computing systems and reliable network connectivity. Consequently, there is need for university libraries to invest in strengthening their ICT infrastructure to enable them provide AI-driven information services. Library staff were not ready, with majority lacking in advanced ICT skills required to handle AI tools and systems in the library. This calls for structured training programs to equip library staff with the requisite ICT skills and competencies. Library users had a positive attitude and perception towards AI-driven information services. However, they also recognized the privacy, ethical concerns in the use of AI that must be addressed for successful provision of AI-driven information services.

6.0 Recommendations

University libraries should partner with other stakeholders such as the developers of AI tools and library users to ensure customization of the AI tools to the specific needs of the library users. There is also need for university libraries in Kenya to create AI adoption policies that address the privacy and ethical concerns that surround the use of AI for provision of information services.

References

1. Hussain A. Use of Artificial Intelligence in the library services: Prospects and challenges. Library Hi Tech News 2023. 40(2):15–7. A https://doi.org/10.1108/LHTN-11-2022-0125

2. Masinde JM, Mugambi F, Wambiri DM. Exploring the current landscape of Artificial Intelligence adoption in Kenyan academic libraries. In: Proceedings of the 17th International Conference on Theory and Practice of Electronic Governance [Internet]. New York, NY, USA: Association for Computing Machinery; 2024. 403–8. (ICEGOV '24). https://dl.acm.org/doi/10.1145/3680127.3680156

3.Kamble AM. Transforming academic libraries: Tapping into the power of Artificial Intelligence tools (2023). Aarhat Multidisciplinary International Education Research Journal XII(V):13–9. https://www.aarhat.com/journals/amierj

4.Abba T. Use of Artificial Intelligence technologies in rendering library services: Empirical evidence from university libraries in Africa. Informology 2023;2(2):23–40. https://informology.org/2023/v2n2/a21.pdf

5.Sang LJ. Artificial Intelligence (AI) for smart library systems: A focus on awareness and level of adoption in the kenyan university libraries. CUEA Journal of Science. 2025;2(1).

6.Asemi A, Ko A, Nowkarizi M. Intelligent libraries: A review on Expert Systems, Artificial Intelligence, and robot. Library Hi Tech 2020 ;39(2):412–34. https://doi.org/10.1108/LHT-02-2020-0038

7.Tella A. Robots are coming to the libraries: Are librarians ready to accommodate them? Library Hi Tech News 2020. 37(8):13–7. https://www.emerald.com/insight/content/doi/10.1108/LHTN-05-2020-0047/full/html

8.Oyile PO, Ongare RM, Ikoha AP. Assessing ICT infrastructure requirements for AI-powered virtual assistants in delivering ICT technical support to Kenyan public universities. International Journal of Advanced Research in Computer and Communication Engineering 2023. 12(8):27–36. https://www.researchgate.net/publication/373328412

9.Masawi A, Matthee M. Guidelines for the adoption of Artificial Intelligence in identity and access management within the financial services sector. In: Nagar AK, Jat DS, Mishra D, Joshi A, editors. Intelligent Sustainable Systems. Singapore: Springer Nature Singapore; 2024. 111–27. (Lecture Notes in Networks and Systems; vol. 812). https://link.springer.com/10.1007/978-981-99-8031-4_11

10.Sangwan RS, Badr Y, Srinivasan SM. Cybersecurity for AI systems: A survey. Journal of Cybersecurity and Privacy 2023.3(2):166–90. https://www.mdpi.com/2624-800X/3/2/10

11.Tursunbayeva A, Chalutz-Ben Gal H. Adoption of Artificial Intelligence: A top framework-based checklist for digital leaders. Business Horizons 2024. 67(4):357–68. https://www.sciencedirect.com/science/article/pii/S000768132400051X

12.Farag HA, Mahfouz SN, Alhajri S. Artificial Intelligence investing in academic libraries: Reality and challenges. Library Philosophy and Practice 2021. (150;1–34. https://www.proquest.com/openview/6066025cec97947027134fcb198f8d41

13.Amoah GB, Minishi-Majanja MK. Ghanaian university libraries' preparedness for the fourth industrial revolution. African Journal of Library, Archives & Information Science 2023 22];33(1):51–64.
https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=163503626&site=ehost-live

14. Mwilongo K, Mwageni R. Assumptions of the future application of Artificial Intelligence in Tanzanian academic libraries: A review of literature. In: Proceedings of the 4th COTUL Scientific Conference, Arusha: Dar es Salaam University Press (DUP); 2022. 201–23. https://cotul.or.tz/phocadownloadpap/2022-Proceeding_New/13 ASSSUMPTIONS%20OF%20THE%20FUTURE.pdf

15. Narasappa KC, Kumar PD. ICT skills for LIS professional in the digital environment. International Journal of Research in Library Science 2016.2(2):55–8. https://www.ijrls.in/wp-content/uploads/2016/08/ICT-Skills-for-LIS-Professional-in-the-Digital-Environment.pdf

16. Alam AF, Subaveerapandiyan A, Mvula D, Tiwary N. AI literacy and Zambian librarians: A study of perceptions and applications. Open Information Science 2024. 17];8(1). https://www.degruyter.com/document/doi/10.1515/opis-2022-0166/html?lang=en

17. David-West BT, Ig-worlu MO. AI-driven future: Strategies and skills development for Nigerian librarians. Gateway Information Journal 2023. 24(1 & 2):20–32. https://www.gatewayinfojournal.org/index.php/gij/article/view/33

18. Ayinde L, Kirkwood H. Rethinking the roles and skills of information professionals in the 4th Industrial Revolution. Business Information Review 2020. 37(4):142–53. ttp://journals.sagepub.com/doi/10.1177/0266382120968057

19. Bhargava A, Bester M, Bolton L. Employees' perceptions of the implementation of Robotics, Artificial Intelligence, and Automation (RAIA) on job satisfaction, job security, and employability. J technol behav sci 2021.6(1):106–13. https://link.springer.com/10.1007/s41347-020-00153-8

20. Edelmann N, Mergel I, Lampoltshammer T. Competences that foster digital transformation of public administrations: An Austrian case study. Administrative Sciences 2023.13(2):44. https://www.mdpi.com/2076-3387/13/2/44

21. Jan SU, Khan MSA, Khan AS. Organizational readiness to adopt Artificial Intelligence in the library and information sector of Pakistan. EBLIP 2024. 19(1):58–76. https://journals.library.ualberta.ca/eblip/index.php/EBLIP/article/view/30408

22. Ogwo U, Ibegbulem F, Nwachukwu VN. Applications and perceived impact of Artificial Intelligence in academic libraries in Nigeria. Library Philosophy and Practice (e-journal) L 2023;(7907). https://digitalcommons.unl.edu/libphilprac/7907

23. Owolabi KA, Okorie NC, Yemi-Peters OE, Oyetola SO, Bello TO, Oladokun BD. Readiness of academic librarians towards the use of robotic technologies in Nigerian university libraries. Library Management 2022. 43(3/4):296–305. Ahttps://doi.org/10.1108/LM-11-2021-0104

24.Modiba M. User perception on the utilisation of Artificial Intelligence for the management of records at the council for scientific and industrial research. CC 2023. 22];42(3):81–7. https://www.emerald.com/insight/content/doi/10.1108/CC-11-2021-0033/full/html

25.Shaheen MA, Khurshid A. Perceptions and experiences of Artificial Intelligence (AI) use in libraries: A study of library users in Pakistan. Library Philosophy & Practice. 2023 [cited 2024 Jun 30];1–13. Available from: https://digitalcommons.unl.edu/libphilprac/7905/

26.Seonghun K, Park J, Oh Y, Park S. A study on the intention to use of the AI-related educational content recommendation system in the university library: Focusing on the perceptions of university students and librarians. Journal of Korean Library and Information Science Society 2022.;53(1):231–63. https://doi.org/10.16981/KLISS.53.1.202203.231

27.Williams M, Wiggins R, Vogt PR. Beginning quantitative research [Internet]. SAGE Publications Ltd; 2021. https://methods.sagepub.com/book/beginning-quantitative-research

28.Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. bmj 2021. 8];372. https://www.bmj.com/content/372/bmj.n71.short

29.Nzioki R. An assessment of the level of adoption of disruptive technologies in academic libraries in Kenya: A case study of the Mahatma Gandhi graduate research library, University of Nairobi, kenya [Internet] [PhD Thesis]. University of Nairobi; 2021 http://erepository.uonbi.ac.ke/handle/11295/161040

30.Akello J. Artificial Intelligence in Kenya Nabenyo E, editor. Paradigm Initiative; 2022. https://paradigmhq.org/wp-content/uploads/2022/02/Artificial-Inteligence-in-Kenya-1.pdf

31.Chepchirchir S, Kagoiya R. Integrating Artificial Intelligence literacy in Library and Information Science training in Kenyan academic institutions. In: Standing Conference of Eastern, Central and Southern African Library and Information Associations (SCECSAL XXVI) Mombasa: SCECSCAL; 2024. https://karuspace.karu.ac.ke/handle/20.500.12092/3201

32.Jebet T, Gichugu M. Adoption and use of artificial intelligence tools in service delivery in selected academic libraries in Kenya. International Academic Journal of Information Sciences and Project Management 2025. 3(7):287–301. https://ir-library.ku.ac.ke/bitstreams/8208d9e1-e177-44c7-bafc-5dc81486f2d6/download

33.Agava SL, Underwood PG. ICT proficiency: Perspectives of Tangaza University College librarians in Kenya. LM 2020. 41(6/7):487–501. https://www.emerald.com/insight/content/doi/10.1108/LM-03-2020-0057/full/html

34.Maina PK, Muthee DW. Preparedness towards adoption of cloud computing technologies by academic libraries in Kenya. ijrls 2020.6(1):200. http://www.ijrls.in/wp-content/uploads/2020/07/Preparedness-towards-adoption-of-cloud-computing-technologies-by-academic-libraries-in-Kenya.pdf

35.Abok VA, Mosako DR. Futuristic view of robotics in enhancing library accessibility for differently-abled users in Kenya and south africa. Re-Imagining Library and Information Services in the Digital Era/editors, Tom Kwanya, Irene 2024. 128. https://www.researchgate.net/profile/Kizito-Ongaya/publication/384254095_Policy_Challenges_in_Establishing_Institutional_Repository_Business_Process_Modelling_of_Universities_in_Uganda/links/66f153d997a75a4b48414ff7/Policy-Challenges-in-Establishing-Institutional-Repository-Business-Process-Modelling-of-Universities-in-Uganda.pdf#page=138

36. Sang LJ. Adopting artificial intelligence in Kenyan academic libraries: analyzing through the technology-organization-environment framework. Library Management 2024. https://www.emerald.com/insight/content/doi/10.1108/lm-03-2024-0029/full/html

37. Gajbhiye CK. Impact of Artificial Intelligence (AI) in library services. IJFMR - International Journal for Multidisciplinary Research 2024.6(3). https://www.ijfmr.com/research-paper.php?id=22452

38. Mallikarjuna C. An analysis of integrating Artificial Intelligence in academic libraries. SSRN Journal 2024. https://www.ssrn.com/abstract=4898532

39. Shahzad K, Khan SA, Iqbal A, Javeed AMD. Identifying university librarians' readiness to adopt Artificial Intelligence (AI) for innovative learning experiences and smart library services: An empirical investigation. Global Knowledge, Memory and Communication 2024. https://doi.org/10.1108/GKMC-12-2023-0496