

**READINESS OF UNIVERSITY LIBRARY MANAGEMENT TO SUPPORT SELF-
ARCHIVING PRACTICES IN OPEN ACCESS REPOSITORIES IN THE
NORTHWESTERN STATES OF NIGERIA**

By

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Abstract

The main objective of this study is to investigate the federal university libraries' readiness for development of self-archiving practice with reference to Northwest, Nigeria. The study adopted qualitative approach using cross sectional survey design. The sample of the study was made up of (14) e-library managers in the seven (7) university libraries of federal universities in the North West, Nigeria. A semi-structured interview was used in conducting the research. Finding of the study revealed that the university libraries were found to have a positive perception of open access repositories and they were increasingly ready to support using them. With regards to their readiness towards the development of open access repository, the findings of this study revealed that the status of readiness of university libraries under study in terms of ICT infrastructure, capacity building, funding and policies were low, a lot needs to be done in order to show-case the development of Open Access repository in the university libraries under study. Findings on capacity building skills required for the development of open access to support self-archiving practices, revealed that librarians possessed skills on ability to design web programming, download and retrieve data from database, ability to install computer program and ability to operate library software. lack of awareness about the existence of OA repository; copyright and intellectual property issues; inadequate funding; lack of skills needed for the self-archiving; lack of mandatory self-archiving policy by the university were the major challenges.

Introduction

Open Access entails making research and scholarly output available on the internet without the traditional restrictions of financial and copyright which limit access, circulation and re-using of scholarly work to the detriment of the scholars. The Open Access movement has the potential to improve scholarly and scientific communication. It has also required university libraries to rethink on how they maintain and manage their repositories and make them publicly available online. Libraries must comprehend this shift, as well as the meaning

and mission of the open access movement, which is to provide resources to support the growth of scientific knowledge. This shift calls for the preparation of both librarians and libraries as institutions. In this situation, librarians must adopt a new mindset in addition to new skills in order to successfully transition from closed access repositories to Open Access Repositories. The development of self-archiving practices will be successful if the libraries are ready and supportive to it. However, according to Olumide (2014) many organisations adopt technologies without considering their level of readiness for that technology and this leads to weak implementation and sometimes failure.

An institutional repository according to Lynch (2003) is a set of services offered by a university or group of universities to members of its community for the management and dissemination of scholarly materials in digital format created by the institution and its community members, such as e-prints, technical reports, theses and dissertations, datasets, and teaching materials. The reviewed literature showed that African countries were left behind in the development of institutional repository most especially in Nigeria. This has been linked to the poor state of Information and Communication Technology infrastructure, poor electricity supply and advocacy. Similarly lack of funding was discovered as the major problem confronting the development of institutional repository in Nigeria. Ivwighrehweta (2012) carried out a study in six universities in Nigeria and discovered that funding was the major problem confronting the establishment of institutional repository in most Nigerian universities. This is because the development of institutional repository in developing countries is much capital intensive than that in developed countries. Consequently, it is necessary to conduct this research in order to find out the Readiness of University Management to Support Self-Archiving Practices in Open Access Repositories in the Northwestern Region of Nigeria.

Statement of the Problem

Digital libraries have become a major part of mainstream of university libraries with open source software being a worldwide phenomenon. The emergence of open source software solutions enabled several institutions of higher learning to embark on building institutional repositories. However, despite the emergence of institutional repository that has provided university libraries in Nigeria with an opportunity to make their research output accessible to the outside world, a preliminary observation has shown that self-archiving practices in many of such university via institutional repositories has been observed to be negative. In spite of this tremendous benefit of depositing scholarly works in open access repositories, scholars and researchers in the developing countries especially Nigeria are not well encouraged on the practices. Many academic authors are not ready to deposit their output online, while many others are not even planning to do it.

This hampers the visibility of their universities research outputs which also deter them from contributing to the global pool of information and knowledge. It is for this reason that the researcher embarked on this study to determine the readiness of the university library management to support self-archiving practices in Open Access repositories in Federal University Libraries in Northwest region of Nigeria terms of funding, infrastructure and capacity building. This is because, it is hoped that institutional open access repositories may inevitably become the next target of the universities in the region, and their performance depend largely on the readiness of the library management to self-archiving among such universities.

Research Objectives

1. To determine the perception of e-library managers on open access repositories in universities in Northwestern regions of Nigeria
2. To examine the university library managements readiness to support self-archiving practice in open access repositories in the Northwestern region of Nigeria.
3. To find out the skills required by the libraries to support self-archiving practices in open access repositories in the Northwestern regions of Nigeria.
4. To identify the challenges associated with the university libraries readiness towards self-archiving practices in open access repositories in the Northwestern regions of Nigeria.

Literature Review

Implementing a new program will be successful if the organization is ready. Before any institution can successfully implement large-scale redesign using technology, several readiness criteria must be in place (Mehring, 2000). Self-archiving is an emerging innovation that alters the scholarly communication system to be more responsive with numerous potentials and benefits (Auyo, Abdu and Yahaya, 2023). Readiness is also defined as a condition in which the individuals within the organization are psychologically and behaviorally prepared (Weiner, 2009). This means that readiness is a key element in implementing a new activity, program or policy. To be successful in implementing a program or activity such as institutional repository, individuals within the organization should be ready. The university library management attitudes towards development of self-archiving practices must positively change for its successful implementation.

The content, process, context, and individuals involved in the program or activity within the organization influence the readiness for implementation of a new program or activity (Holt, Armenakis, Feild, and Harris (2007). Thus, psychological and behavioral

preparedness of both librarians and library e-managers is required in every stage of institutional repository implementation (Weiner, Amick, & Lee, 2008). Institutional Readiness implies the state of being fully prepared in terms costs of implementation, stakeholder and risk analysis, availability of skills, finance and infrastructure, policies in place within the organization and whether these will support the innovation, idea or practice to be adapted. According to Akande and Belle (2014) it is important for organizations to attain a high level of readiness before adopting new innovation and lack of readiness before adoption may lead to implementation failure.

The development of self-archiving practices requires readiness of the librarians and the libraries alike. Auyo, Abdu and Yahaya (2023) noted that Self-archiving practice entails making scholarly works freely available on the internet through open access repository. Abdu and Maidabino (2019) stressed that, university libraries in Nigeria should strive to motivate self-archiving practice among academic scholars in order to allow access to research literature for individual and national development.

Most repository services in universities are originated within the library as a means of supporting open access, whereby researchers have been encouraged to deposit copies of their publications, including journal articles, research reports, conference papers and theses. Some repositories have been extended to include other types of format including images and sound files. Institutional repositories can offer a solution to the problem of long term preservation of data, but for this to happen they will need to be recognized by the universities as integral to the university's data management processes and supported accordingly with ongoing funding.

Moreover, scholars like Auyo, Yahaya, Gama, Mohammed, & Abdu, (2022) emphasized that promotion of awareness, knowledge and positive feeling on self-archiving should be developed to help in the formation of a university research policy.

Nevertheless, besides urging the journal articles to be accessible online and free, the open access movement has also brought repositories to follow the path and become open access repositories. Apart from all other stakeholders such as the authors and funding agencies, librarians have led this movement. In the developing or underdeveloped countries, the development of OA initiative has been slow, many libraries still consider their repositories as an important asset of the institutions and therefore the librarians keep them away from public. The librarians still also consider themselves as the guardians of repositories in addition to lack of infrastructure for online access.

Methodology

The objectives of the study were to find out the Readiness of University Library Management to Support Self-Archiving Practices in Open Access Repositories in the Northwestern Region of Nigeria. The study adopted qualitative approach using cross sectional survey design. The sample of the study was made up of (14) e-library managers, two of which were purposively selected from each of the seven (7) university libraries of federal universities in the North West, Nigeria. A semi-structured interview was used in conducting the research. Semi structured interviews allow considerable flexibility in scope and depth gives an opportunity to ask more exploratory questions about the university readiness for the development of Self-Archiving Practices. The data collected were analyzed using thematic qualitative data analysis. The data collected were categorized into five (5) major themes that emerged from the study.

Results and Discussions

Demographic Information about the Participants

Table1:Information about the Participants

S/No	Name of The Institutions	Name of Libraries	Code
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1	ABU Zaria, Kaduna	Kashim Ibrahim Library KIL	P1 P2
2	FUDMA Dutse- Ma Katsina	Federal University Dutsen-Ma Library	P1 P2
3	FUD Dutse, Jigawa state	Jibrilla Dahiru Amin Library	P1 P2
4	Bayero University Kano	University Library	P1 P2
5	Usmanu Danfodiyo University	Abdullahi Fodio Library	P1 P2
6	Federal University Birnin Kebbi	Federal University Birnin Kebbi Library	P1 P2
7	Federal University Gusau	Federal University Library Gusau	P1 P2

Source:Fieldwork(2023)

All the participants of the study had been coded to ensure anonymity of conducting and reporting the interview in line with ethical requirements of qualitative research. The above presentation constitutes the demographic information of all participants in Federal Universities in the North West Nigeria needed for this study.

Theme 1: Perception of e-library managers about Open Access Repository

Participants were asked questions on their opinion about opened access repository; their responses were presented as follows:

P1 “Open Access repository is an electronic store of web based scholarly digital documents used for self-archiving. **P2** “Open Access repository is a resource or a system that facilitates the capture, storage, preservation, and dissemination of intellectual outputs in an electronic form” **P3** “OA repositories are the information resources that are generated by a university or college library which could either be thesis, undergraduate students project etc”

P4 “is an archive for collecting, preserving and disseminating digital resources or copies of digital content of the intellectual output of an institution” **P5** “is an institutional archival records or documents, which are reviewed and consulted from time to time” **P6** “is where a place where institutions or individuals preserve their archival information resources” **P7** “OA repository is an online archive that helps in collecting, preserving and communication of scholarly outputs” **P8** “is a place or store where large number of things i.e institutional

items are kept or stored’’P9 ‘‘Institutional repository is a collection of institution intellectual resources preserve and disseminated accordingly’’P10 ‘‘is a database or a collection of intellectual output from an individual or organisation’’P11‘‘is an electronic store of web based scholarly digital documents used to deposit digital content’’P12 ‘‘is a resource or a system that facilitates capture, storage, preservation, and dissemination of intellectual outputs in an electronic form’’P13‘‘Open access publication are frequently cited due to their high publicity and availability’’ P14 ‘‘Open access repositories bring down barriers to communication and foster international collaboration and understanding’’

The above result shows that majority of the e-resource managers in the universities understudy had positive perception about opened access repository. The findings agreed with the submission of Oguz and Assefa (2014) who found out that over half of the respondents had a favourable or positive perception towards the institutional repository. Also, the results from the study of Dutta and Paul (2014) showed that majority of the faculty reported a positive favourable perception regarding OA repository its uses and services.

The researcher further asked the participants to kindly explain the benefits of Opened Access repository to the academic community; the individual responses were as follows:

P1 ‘‘It offers free access to digital content without restrictions’’P2 ‘‘it serve as a system of standardized institutional records’’P3 ‘‘, like any other library resources support teaching, learning and research in academic community’’P4 ‘‘Open Access repository reserves scholarly work, builds and increases credibility, sets you for leadership, increases your visibility among others, disseminates resources both research based and across departments and units’’P5 ‘‘It serves as a means of keeping and preserving important documents or records that belong to academic institutions’’P6 ‘‘OA repositories are used for research purposes to be referred to at any time the need arises’’P7 ‘‘Open Access repositories increase institutional visibility, staff visibility, greater access to digital resources’’P8 ‘‘such repositories increase visibility of institution, build intellectual leadership and credibility, preservation of scholarly work’’P9 ‘‘make it possible to collect content in one location, capture and provide open access to the intellectual output of a university’’P10 ‘‘those repository bring together different institutions research works across all the disciplines which assist in providing intellectual leadership of the institution’’P11 ‘‘open access repositories round the clock availability; creating visibility for the institution; bringing

together of all the intellectual output of an organization’’P12 ‘‘open access repositories bring together all the institutional publication, creating visibility for the institution and round the clock availability’’P13‘‘it provides avenue to connect with a global society more easily as researchers can publish without printing costs’’P14 ‘‘Open access speeds research progress, productivity and knowledge dissemination’’.

From the above results we found out that majority of the libraries in the universities under study had positive perception about the benefits of Open Access repository. The results from the above presentation conform with the submission of Kakai (2018) who mentioned that institutional repositories have become important in scholarly communication, institutional visibility and institutional knowledge management.

Theme 2: University Libraries Readiness to Support Self-Archiving Practices in Open Access Repositories

The researcher sought from the E-resources managers of the libraries to expatiate on the institutional readiness to Support Self-Archiving Practices in Open Access Repositories. Participants gave varying responses as presented below:

P1 ‘‘Funding in general needs to be increased, to allow for the development and purchase of appropriate equipment, and for the training and employment of staff with the requisite competencies’’P2 ‘‘in addition to Poor state of ICT infrastructure, funding was the main obstacle with regards to institutional repository in our institution’’P3 ‘‘The university management has put all the needed tools to enable the Support of Self-Archiving Practices in Open Access Repositories in my library, these tools include modern computer system, scanning machines and reliable storage devices of large capacities, to mention but a few’’P4 ‘‘The institution is ready in terms of ICT infrastructure, capacity building, policy but funding has been the challenge’’P5 ‘‘Development of institutional repository is on progress but the institution is showing less concern’’P6 ‘‘The institutions management is doing everything possible in-terms of the above listed items’’P7 ‘‘ICT infrastructure- the contract is in the pipeline; capacity building- part of the contract; policy- committee is already working on it and funding- which is Tetfund’’P8 ‘‘ICT- infrastructure is the first major resources for the

development of institutional repository while capacity building and policy should be put in place to strategize for the Support Self-Archiving Practices in Open Access Repositories. In terms of funding, the institution is doing its best in providing adequate funding and all will become easy for the development". P9 "ICT" capacity building is in place but funding is the major issue' P10 "The university is moving assiduously towards boosting the institutional repository to Support Self-Archiving Practices in Open Access Repositories" P11 "we are committed in terms of ICT infrastructure; capacity building and policy guiding the Support Self-Archiving Practices in Open Access Repositories P12 "We have Information and Communication Technology issues, and capacity building as well as funding" P13 "Open access repositories enable cost effective and unrestricted flow of ideas" P14 "Self-archiving practices involves preservation of information resources in an electronic environment, hence require functional and reliable institutional repositories to succeed"

The above result shows that ICT infrastructure and capacity buildings were not sufficient and the university libraries are currently investing to support the development of institutional repositories. The findings of this study confirmed the study of Christian (2008) who revealed that funding was the major problem confronting the establishment of institutional repository in most Nigerian universities.

Participants were asked whether the management is fully supportive or not on the development of Open Access repository for self-archiving practices, their responses were presented below:

P1 "fully supportive" P2 "Supportive" P3 "my university has noticed with concern that providing quality, authoritative information resources to satisfy the information needs in their university irrespective of the sources can save the institution money, hence developing institutional repository was picked as the option" P4 "the management is supportive but the challenge is funding" P5 "the institution is not supportive" P6 "the institution is supportive and is doing everything possible to implement" P7 "Very supportive" P8 "the management of the institution is more supportive" P9 "the management of the university is fully supportive to the development of IR because it will be of great benefit to the institution" P10 "highly supportive" P11 "fully supportive" P12 "100 percent supportive" P13 "partial

*support staff to obtain the requisite training and skills required for the job.***P14***“yes by deployment of information and communication technology infrastructure, but it requires fast and reliable internet connection”*

Result from the above presentation strongly revealed that the managements of the universities under study were fully supportive with regards to OA repository development for self-archiving practices.

Participants were further asked on how do stakeholders intervene in the development of open access repository in their universities for self-archiving practices. Their views were as follows:

P1 *“Through proper funding and offering training with regards to the development of institutional repository”***P2** *“By making available infrastructure”***P3** *“by putting request of the needed institutional repository at the table of the concerned stakeholders chosen by the institution”***P4** *“The university is directly doing its best but the issue of funding has been the challenge: stakeholders can request for our needs and fund the IR deposition”***P5** *“Through awareness campaign and other strategies”***P6** *“Already the Tetfund has come into the situation by making some funds available for IR building in the university”***P7** *“Advocacy, especially to academic staff”***P8** *“Should provide all necessary resources in terms of ICT infrastructure for the development of open access repository”***P9** *“They should provide all necessary equipment or infrastructure for the development of IR in the institution”***P10** *“Through the provision of needed infrastructure by the university and commitment of the faculty/departments in the compilation and prompt subdivision of scholarly work”***P11** *“By providing funds and training”***P12** *“By providing funds”***P13** *“Scholars deposit their research in open access repositories to make it freely available on the internet”***P14** *“authors as stakeholders use open access repositories as an alternative for publishing their research work”*.

The above result showed that proper funding, provision of needed infrastructure, advocacy, training and retraining of staff are needed for successful institutional repository development to support self-archiving practices. The result of this study agreed with the study of Christian (2008) who revealed that, inadequate funding, epileptic power supply, lack of

trained personnel are among the factors that contribute to slow adoption of institutional repository.

Theme 3: Skills required for Capacity building to Support Self-Archiving Practices in Open Access Repositories

Participants were asked to indicate the skills needed for Capacity building to Support Self-Archiving Practices in Open Access Repositories; their responses were presented in the following sub themes:

P1 “To be trained on how to manage the OAR and require staff with IT capabilities” P2 “IT background are more appropriate” P3 “The need for normal traditional knowledge of information handling; such as cataloguing, repackaging, knowledge of computer and modern skills of information organization. P4 “Technical skills and trained librarians” P5 “Basic computer operation skills, database management skills, searching skills, digital archiving skills etc” P6 “ICT skills, preservation and conservation skills” P7 “ICT skills” P8 “Management skills, software skills, storage and preservation etc” P9 “for the development of Open Access Repositories, librarians must have computer skills and can develop softwares” P10 “All librarians must be ICT compliant and committed to the digitization of institutional records” P11 “ICT skills (general); database skills, oracle and web design such as HTML (basic)” P12 “ICT skills, database skills and web design” P13 “good knowledge of scanning skills” P14 “specialized skills of converting prints to digital or web ready formats”.

From the above data, it's evident that librarians from the university libraries under study needed to be abreast of the current trends and trained in their line of work. The finding of this study advocates for compliance with the submission of Mohammed (2013) who emphasized that Self-archiving practices showcase the research value of institutions as well as individual researchers.

Participants were further asked to elaborate on the skills possessed by the librarians in the area of Open Access repository. They responded as:

P1 “Collection management skills and Knowledge sets” P2 “Technical skills, Management skills” P3 “Yes, as some of them have the ICT skills in handling information, Recently, my university sponsored the training of few among them, particularly on Open Access repository

development in terms of ICT management skills. **P4** “Our librarians are trained to acquire knowledge to put in the development of OAR in the university. Training and retraining is important to achieve the said goal” **P5** “Only few possessed an average skills needed” **P6** “Librarians are competent in ICT application as well as preservation and conservation of resources” **P7** “Basic ICT skills ” **P8** “Customise, deploy and manage repository and associate software; manage the reposition budget and respond to user needs in line with the resources” **P9** “How to create a software, they should be fast thinkers in terms of computer skills” **P10** “indeed efforts are on to ensure that all librarians are ICT compliant” **P11** “basic ICT skills” **P12** “ICT skills, database skills, web design skills and internet connection skills” **P13** “Upload and retrieve document from databases” **P14** “ create folder, attach documents and send via emails, and retrieve files”.

The above result clearly showed that e-library managers indicated that their staff possessed basic computer skills and ICT skills for the development of open access repository. This finding confirmed the submission of Diao, & Hernández, (2014) that as well-trained professionals, librarians have the skills of creating authentic and truthful descriptions and providing precise access to materials and information based on standards and principles.

Theme 4: Challenges Associated with the university Readiness on theSupport Self-Archiving Practices in Open Access Repositories

Participants were asked to state the likely challenges they believe will militate against these practices. Their responses were presented as follows:

P1 “Poor ICT infrastructure, poor institutional funding of institutional repositories, absence of institutional repositories policies, lack of awareness of publishing in institutional repositories, irregular power supply, lack of man power training, and low internet bandwidth” **P2** “Challenges of technical support, content provision, qualified personnel, and institutional backing” **P3** “Plagiarism, this is because most institutional repository are generated from the published or unpublished projects of others, and users nowadays copied work directly, and lack of staff” **P4** “Bureaucracy, lack of funding, lack of in-house training, and many others are responsible for the challenge” **P5** “Willingness on the side of university library management and the lack of fund provision on the side of university management”

P6 ‘‘Lack of adequate fund for the acquisition of the modern items or electronic resources, lack of space and staff’’P7 ‘‘Internet connectivity, power supply, poor attitude of academic staff towards uploading their publications’’P8 ‘‘Lack of commitment and continued support from the university management; inadequate planning for the development of open access repository’’P9 ‘‘Inadequate funding for necessary resources, delays in provision of necessary resources’’P10 ‘‘The major challenges are epileptic power supply, technological development of the librarians and users’’P11 ‘‘Inadequate funds, technophobia, inadequate ICT skill, epileptic power supply, inadequate internet connectivity’’P12 ‘‘Inadequate funds, inadequate ICT skills, inadequate power supply and inadequate internet’’P13 ‘‘Some university researchers only publish to gain financial reward, personal prestige, and to advance in their promotion’’P14 ‘‘some of our members lack information that will help them increase the visibility of their research output to communicate with the whole world’’.

From the above results, it could be seen that the participants indicated that the university libraries were faced with series of challenges such as lack of policy framework for the development of institutional repository as well as clearing the hurdle of university managements in accepting to adopt the technology since it will involve an additional capital outlay; bureaucratic processes dragging or derailing implementation after a decision to adopt the technology; skills gap; requirement for training and retraining; financial constraints; poor /inadequate internet bandwidth among others. The finding of this study corroborate with the finding of Christian (2008) where he found out that lack of funding, poor state of ICT infrastructure, trained personnel, low internet, poor electricity were the major problems with regards to institutional repository development in Nigeria.

Theme 5: Possible Solutions to the Challenges Associated with the university Readiness on the Support Self-Archiving Practices in Open Access Repositories

On the solutions to the above challenges, the participants were asked to suggest possible solutions to the challenges identified. Their responses were as follows:

P1 ‘Electricity supply, Internet connections, as well as provision of adequate computer equipment, appropriate software’ P2 ‘Provision of adequate funding’ P3 ‘Provision of alternative power supply among others’ P4 ‘Provide adequate funding to increase in the allocation, training of staff towards the goal, staff welfare ’ P5 ‘Both the university management and the library management should do their parts. Similarly, the library staff should try to acquire necessary skills’ P6 ‘Provision of adequate funds, provision of space and employment of staff to take charge’ P7 ‘Improved funding, alternative source of power, sensitization’ P8 ‘The management of the institution should be committed and supportive; proper planning should be put in place for the development of open access repository’ P9 ‘Provision of adequate funds to provide all necessary resources to develop IR and the resources for the development of open access repository should not be delayed because it will affect the development’ P10 ‘To ensure that the librarians are trained in the area of ICT and un-interrupted internal power sources’ P11 ‘provision of adequate funds’ P12 ‘Funding from government and university management, training and workshops, standby generator, solar power should be provided and full subscription of internet access’ P13 ‘Knowledge of Open Access Repository should be enriched among university lecturers, as they are in a better position to advocate for change in policies within their institution’. P14 ‘Authors in federal universities in Nigeria should develop self-archiving behavior that will foster their wellbeing in academic arena’.

From the above, the study found out that library management must make a very convincing case to university management for the development of Open Access repository. Consultation with stakeholders while hatching the plan of the development of institutional repository; using internally generated funds to support the running of the technology platform to ensure sustainability; have stakeholder involvement in the design and implementation of the development of Open Access repository to ensure a smooth deployment and reduce bureaucracy; provision of regular training for staff among others as the suggested solutions to solve the challenges are extremely imperative Nigeria. Thus, Ridwan (2015) attributed that Institutional Repositories are valuable for research and

development which can offer instant access to information and knowledge resources being generated on the continent.

Recommendations

Based on the research findings and major conclusions reached in this study, the following recommendations are offered:

1. The university management should enhance academic authors' awareness and understanding of Open Access repository benefits through a comprehensive information literacy program.
2. Effective information literacy can enhance self-archiving practices, boost author visibility, and foster collaboration, thus fostering a positive perception of the Open Access (OA) repository.
3. University Libraries management should consider the capacity building of their staff as one of their major priorities in order to ensure well developed institutional and open access repositories.
4. Universities management in Nigeria, should formulate comprehensive policies to govern development of their institutional repositories.
5. University libraries should also put effort in providing sufficient ICT infrastructure like computers, reliable network, internet services, and availability of servers for the library were very crucial.
6. The university libraries should collaborate with their respective managements to hire and regularly train staff for the development and management of institutional repositories
7. There must be a culture of training for the entire library staff to ensure that they keep abreast with trends and changes in technology in relation to library service provision.

8. The University libraries should gain top management support and encourage researchers to make their research outputs available in Open Access repositories and improve information literacy for high-quality results.

Conclusion

The study explores the readiness of university library management in Nigeria to support self-archiving practices in open access repositories. These digital libraries, which store scholarly digital documents like thesis, journals, articles, books, and conference papers, have significant potential for bridging the digital divide, enabling development, and making research outputs globally visible. However, Nigerian universities face challenges such as lack of ICT infrastructure, insufficient technological skills, and lack of funding. To overcome these obstacles, adequate funding, librarian training, stakeholder awareness, and increased bandwidth and power are needed for proper implementation in northwest universities and Nigerian universities.

References

- Abdu, A. H., & Maidabino, A. (2019). Self-Archiving Practice Among Authors in Nigerian Federal Universities: A Review of Related Literature. *Dala Journal of Library and Information Practice*, 1,(1). Bi-annual journal of the Nigerian Library Association, Kano State Chapter, Maiden edition.
- Akande, A.D and Belle, J. W. V., (2014). A proposed framework to assess and increase the cloud computing readiness of financial institutions in South Africa. Presented at *2014 5th International Conference- Confluence The Next Generation Information Technology Summit (Confluence)*. DOI: 10.1109/CONFLUENCE.2014.6949250
- Auyo, M.A, Abdu, A.K and Yahaya, A.D. (2023). Awareness and Adoption of Self-Archiving Practice among Academic Authors in Nigerian Federal Universities: A Review of Related Literature. *International Journal of Applied Technologies in Library and Information Management* 9 (1) 05 - 45 – 51

- Auyo, M.A, Yahaya, A.D, Gama, U.G., Mohammed, A. & Abdu, A.K. (2022). Awareness and Perception of Academic Authors on the Adoption of Open Access Repository in Federal Universities in Northwestern Region of Nigeria. *Nigerian Library Link* vol. 21 no. 2 October, 2022
- Christian, GM. 2008. Issues and challenges to the development of open access institutional repositories in academic and research institutions in Nigeria. A paper prepared for the International Development Research Centre (IDRC). Available: <http://idl.bnc.idrc.ca/dspace/handle/123456789/36986/1/127792.pdf> (Accessed 31 March 2010).
- Diao, J. & Hernández, M.A (2014). Transferring Cataloging Legacies into Descriptive Metadata Creation in Digital Projects: Catalogers' Perspective. *Journal of Library Metadata*, 14:130–145, 2014. DOI: 10.1080/19386389.2014.909670
- Dutta, G. & Paul, D. (2014) Awareness on institutional repositories related issues by faculty of University of Calcutta. *Journal of Library and Information Technology*, 34:293-297. Retrieved April 10, 2015, from <http://dx.doi.org/10.14429/djlit.34.5138>
- Holt, D., Armenakis, A., Field, H., & Harris, S. (2007). Readiness for organizational change: The systematic development of a scale. *The Journal of Applied Behavioral Science*, 43(2), 232-255.
- Ivwhighrehweta, O. (2012) An investigation to the challenges of institutional repositories development in six academic institutions in Nigeria. *International Journal of Digital Library Services* 2.4:1-23. Retrieved April 14, 2015, from <http://www.ijodis.in>
- Kakai, M. (2018). Open access institutional repositories in selected East African Universities: achievements, challenges and the way forward; Kampala; Makerere University. Retrieved from https://www.scecsal.org/publications/papers2018/012%20_kakai_2018.pdf
- Lynch, C.A. 2003. Institutional repositories: essential infrastructure for scholarship in the digital age. *Portal: libraries and the academy* 3(2):327-336. <http://muse.jhu.edu/journals/pla/summary.v003/3.2lynch.html>. 23 July 2015
- Mohammed, A. (2013), Institutional digital repository: an option for scholarly communication in Nigeria, *International Journal of Environmental Research*, 5(6), 21-30.
- Oguz, F. & Assefa, S. (2014) Faculty members' perceptions towards institutional repository at a medium-sized university. *Library Review*, 63 (3), 189-202.
- Olumide, A.A. (2014) Assessment of Cloud Computing Readiness of Financial Institutions in South Africa. A mini dissertation presented to the Department of Information Systems University of Cape Town In partial fulfillment of the requirements for the Master of Commerce in Information Systems.

Weiner, B. (2009). A theory of organizational readiness for change. *Implementation Science*, 4(67), 1-9.