

AVAILABILITY AND UTILIZATION OF INSTITUTIONAL REPOSITORIES AMONG STUDENTS IN TERTIARY INSTITUTIONS IN SOUTH-SOUTH NIGERIA

Nsemeke Etukudo Ukpanah

Library Department
Akwa Ibom State Polytechnic, Ikot Osurua

and

Israel Nse Umanah

Library Department
Akwa Ibom State Polytechnic, Ikot Osurua

Abstract

This study aimed to investigate the availability and utilization of institutional repositories (IRs) among students in selected public tertiary institutions in South-South Nigeria. The purpose of the study was to examine the influence of availability on utilization, determine the extent of utilization, identify challenges affecting availability and utilization, and ascertain differences between availability and utilization of IRs. The study adopted a descriptive survey design and was conducted in five public tertiary institutions that benefited from the 2025 TETFund digitization equipment across Bayelsa, Akwa Ibom, Rivers, Edo, and Cross River States. The population comprised 385 final-year Computer Science students in the 2024/2025 academic session, and a census sampling technique was employed. Data were collected using a structured questionnaire. The instrument was validated through trial testing on 20 students outside the study area, and reliability was established using Cronbach's Alpha, yielding a coefficient of 0.84. Data were collected directly from respondents and analyzed using mean and standard deviation to answer research questions. In contrast, independent and dependent t-tests were used to test hypotheses at the 0.05 level of significance. Findings revealed that availability significantly influenced utilization, utilization was moderate, and infrastructural and awareness challenges hindered effective use of IRs. It was recommended, among others, that tertiary institution administrators strengthen the development and maintenance of institutional repositories by providing adequate funding, reliable internet connectivity, and a stable power supply. Functional infrastructure is necessary to ensure consistent access and sustainability.

Keywords: Availability, Utilization, Repositories, Awareness

Introduction

The system of scholarly communication and knowledge dissemination in tertiary institutions through libraries has been continually changing with the adoption of emerging technologies. One of the current changes in the series is the emergence of an Institutional Repository (IR), which describes an institution's digital collections of its intellectual output. An IR is a digital collection of an institution's scholarly output. It is a new paradigm for storing and managing an institution's research output. IR is a web-based accessible database that captures, stores, indexes, preserves, and disseminates an institution's intellectual output in a digital environment. "An essential characteristic of an IR is that it is within a university because it is institutionally defined, scholarly in scope, cumulative and perpetual, open and interoperable Crow's study (as cited in Igboechesi *et al*, 2023). Interestingly, the availability of this information environment offers developing opportunities for global visibility of information resources in tertiary institutions and for the ease of use of current topical scholarly research. This technology, therefore, has opened new and broader potential and frontiers for academic libraries in Nigeria to provide information services that were not possible in traditional academic libraries (Ogochi & Uche, 2020). The availability of IR in Nigerian tertiary institutions' libraries supports the availability of web resources such as Open Educational Resources (OER) and the uploading of local institutional content, which has promoted the institutions' rankings.

Utilization of IR in libraries is the extent to which an information resource has been accessed satisfactorily for a specific academic purpose. This, however, is linked to the timely availability of the resources to the users.' However, Users' untimely access to the needed information resource in the required format may mar their interest or lead to user

frustration. (Onuoha, Ifeanyi, & Yunisa (2020). This study aims to investigate the availability and utilization of IR in tertiary institutions in South-South Nigeria, despite TETFund's support in supplying digitization equipment to the institutions.

Problem statement

Institutional repositories (IRs) have become an essential tool for preserving and sharing the intellectual output of academic institutions. IRs platforms support open access to theses, dissertations, journal articles, and much more, thereby enhancing scholarly visibility, research accessibility, and educational collaboration. In Nigeria, and particularly within the South-South region, efforts have been made by government agencies such as the Tertiary Education Trust Fund (TETFUND) in delivering equipment for digitization of theses to support the establishment of Institutional Repositories in tertiary institutions and uploading of digitized theses to TETFund Tertiary Education Research, Application and Services (TERAS) platform. The second batch of the equipment was delivered to tertiary institutions in early 2025. Despite TETFund efforts, the establishment of Institutional Repositories in tertiary institutions in Nigeria remains a growing concern. This study, therefore, seeks to examine the availability and utilization of Institutional Repositories among students in South-South Nigeria as a contribution to the educational sustainable development goal in Nigeria.

Research questions

The following research questions guided the study:

1. How does availability influence utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?
2. What is the extent of utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?
3. What challenges affect the availability and utilization of institutional repositories among students in tertiary institutions in South-South Nigeria?
4. What is the difference in availability and utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?

Research hypotheses

The following hypotheses were tested in the study:

1. There is no significant influence of availability on utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria
2. There is no significant difference in the availability and utilization of institutional Repositories among students in tertiary Institutions in South-South Nigeria.

Review of literature

Theoretical framework

This study is grounded in an interconnected theoretical framework that provides a comprehensive understanding of technology adoption and information-seeking behaviors. It is based on the Technological Acceptance Model and Wilson's Information Behavior Model (Davis, 1989). This model illuminates and envisages the use of a new technology because of specific determinants. The theory states that two primary features guide the

acceptance of the Institutional Repository technology. These are Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived usefulness denotes the extent to which students believe that using a specific skill will enhance their performance and efficiency. It regulates their assertiveness, which controls their aim in using the IR.

It also adopted the Information Behaviour Model as developed by Wilson (1996). This model is widely recognized for providing a comprehensive framework for understanding how individuals acknowledge a need for information and seek it. It emphasizes that information seeking arises from a need, which leads to demands on formal or informal information sources. It further adds that the process of seeking information may determine whether the required information is found. Students must first identify their information needs before seeking resources through institutional repositories. Wilson's model helps students to understand the complex factors that influence whether students with information needs will actually utilize institutional repositories. Also, to know if they will succeed or fail in the information-seeking process.

Institutional Repositories (IRs) were conceived to address the problems of presentation, organization, and dissemination confronting libraries in managing digital content (Adebayo, 2021). Mohammed (2013), cited in Sambo, Okonoko & Lawal (2022), noted that "IR is a system of connecting the digital divide and supporting scholars in their academic investigations". The contents vary by institution, though they generally include each institution's local content. However, Ezema and Okafor, (as cited in Onyeneke (2023) "observed that repositories house both scholarly and cultural resources of an institution and are preserved for researches by the scholars to enhance effective dissemination and

significant visibility of the institution for the global and academic ranking”. Zibani, Rajkoomar and Naccker’s study (as cited in Ogonu and West (2024) stated “that digital repositories are of diverse forms, such as: institutional, disciplinary, national, or regional, depending on their scope and purpose”. IRs are, however, described as innovative technology for assembling, managing, sharing, and archiving intellectual content. This is open for use by the academic community, including students (Ani & Ahiauzu, 2020). The availability of IR varies significantly across tertiary institutions in Nigeria. Panyil and Shidi (2024) observed that the availability of IR in tertiary institutions plays a vital role in promoting academic activities, particularly when effectively utilized. Ukpanah and Afolabi (2011) noted that only available resources are used in libraries”. Ani and Ahiauzu (2020) further observed that several federal and state institutions have functional repositories, but infrastructure gaps, including poor internet connectivity, inadequate ICT resources, and insufficient funding, hinder their full-scale utilization. Omoniwa and Kamba (2021) stated that although over 60% of universities in Nigeria claim to have an IR, only about 40% have repositories that are regularly updated or accessible to students. However, students’ use of IR depends on the availability, awareness, and relevance of the contents (Onyeneke, *et al* 2023). The distinctiveness of an institutional repository lies in its use, content organization, and restricted boundaries. Librarians and libraries around the world are advocating for the establishment and proper funding of institutional repositories to sustain their role as information specialists, as Hinmikaiye (2015) and Ukpanah (2012) observed. They noted that users' acquisition of information skills enhances the utilization of digital information resources in libraries. The utilization of digital repositories by

researchers is a complex phenomenon, shaped by multiple factors, including area of specialization, institution, locality, enthusiasm, approach, and performance, each of which contributes to the success of information delivery in the library. While IRs are designed to support academic engagement, many students are either unaware of their existence or lack the digital literacy required to use them effectively (Okoye & Ejikeme, 2019). In a study by Eze and Uzoigwe (2022), "it was revealed that only 34% of final-year students in tertiary institutions had ever accessed their institution's repository, and of those, fewer than half used it regularly". There are many factors that hinder the development and sustenance of IR in tertiary institutions. Inadequate advocacy and ICT connectivity challenges followed by copyright issues and a lack of knowledge or awareness of the repositories coming behind Iheanacho-Kelechi and Uche, (2020) identified these as inadequate funding, low advocacy, and no awareness of the availability of IR among the academic community. This study seeks to fill the information gap on the availability of IR.

Methodology

The study adopted a descriptive survey design. It was carried out in public tertiary institutions in South-South Nigeria that have benefited from the 2025 second batch TETFund Theses Digitization Equipment delivery. Five tertiary institutions, each from a state, were selected for the study, namely: Federal University Otuoke (Bayelsa State), Akwa Ibom State Polytechnic Ikot Osurua (Akwa Ibom State), Captain Elechi Amadi Polytechnic Port Harcourt (Rivers State), Federal College of Education, Ekiadolor (Edo State), and Federal Polytechnic Ugep (Cross River State).

The study population consisted of 385 students from the selected institutions in the 2024/2025 academic session. This consisted of final-year students from the Department of Computer Science at the selected institutions. The choice of computer science was that this course is available at all the selected institutions, and final-year students are involved in project writing, which may require information from the IR for their research. Census sampling techniques were used to sample the study population. A trial test was conducted on 20 students from the Computer Science department at the Federal Polytechnic Ukana, which is not part of the study. The data were analysed using Cronbach's alpha, with a reliability of .84. The data collection instrument was a questionnaire. Data collected for the study were analyzed using mean and standard deviation to answer the research questions, while the t-test was used to test the hypotheses at a 0.05 level of significance.

Results and discussion

Research question 1

How does availability influence utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?

Table 1: Mean and Standard Deviation of the Influence of Availability on Utilization of Institutional Repositories among Students in Tertiary Institutions

Availability of Institutional Repositories	n	Mean	SD
High	233	58.42	6.93
Low	145	53.88	9.44

The result in Table 1 indicate that the mean utilization of the Institutional repository was the same among students in tertiary institutions with high and low availability of the

institutional repository. As shown in the table, the mean utilization of the institutional repository among students with high availability was 58.42, whereas among students from institutions with low availability, it was 53.88. The mean difference between the two groups is 4.54 in favour of students in institutions with high institutional repository availability. The findings of this study showed that the availability of institutional repositories significantly influences their utilization among students in tertiary institutions in South-South Nigeria. This means that students in institutions with well-established, functional, and accessible repositories tend to use them more than those in institutions where repositories are either absent or poorly developed. This result is logical because students can only use what is available and accessible to them. One possible reason for this finding is that when institutional repositories are correctly set up, regularly updated, and easy to access, students are more likely to see their usefulness for assignments, research projects, and seminar work. Availability also improves visibility and awareness. When repositories are integrated into library services and academic activities, students become more familiar with them and gradually adopt them as part of their research routine. This finding aligns with the study by Panyil and Shidi (2024), which found that the availability of institutional repositories in tertiary institutions plays a vital role in promoting academic activities, mainly when effectively utilized. It also supports the position of Ukpanah and Afolabi (2011), who noted that only available resources are utilized in libraries.

Research question 2

What is the extent of utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?

Table 2: Mean and Standard Deviation of the Utilization of Institutional Repositories among Students in Tertiary Institutions

S/N	Items	N	Mean	SD
1	I frequently use the IR for assignments and class work.	378	2.10	1.07
2	I seldom use the IR for my academic activities.	378	3.01	.96
3	I do not know how to use IR	378	2.22	1.11
4	I prefer using the IR over other online academic resources	378	2.28	1.07
5	I have never used IR for my academic activities.	378	3.10	1.07
6	We are not taught how to use IR	378	2.31	.96
7	IR is only used by lecturers.	378	2.17	.97
8	There is no internet to support the use of IR.	378	2.22	1.11
9	The IR unit is always closed.	378	2.68	1.07
	Grand Mean		2.43	1.04

The result in Table 2 indicated the mean utilization of institutional repositories among students in tertiary institutions in South-South Nigeria. As shown in the table, the grand mean of 2.43 indicates that the extent of utilization of the institutional repository among students in tertiary institutions in South-South Nigeria is moderate. The findings of this study revealed that institutional repositories are scarce in tertiary institutions in South-South Nigeria. This suggests that many institutions either lack functional repositories or have repositories that are not fully developed, accessible, or regularly updated. This situation limits students' access to locally generated research outputs such as theses, dissertations, conference papers, and other scholarly works. One possible reason

for this low availability is inadequate funding and weak institutional commitment to digital library development. Setting up and maintaining an institutional repository requires reliable internet connectivity, ICT infrastructure, skilled personnel, and continuous technical support. Where these are lacking, repositories may not be adequately established or sustained. Another reason may be poor advocacy and limited awareness among university management and academic staff about the importance of repositories in improving research visibility and institutional ranking. This finding is consistent with Ani and Ahiauzu (2020), who observed that although several federal and state institutions claim to have repositories, their full-scale development and functionality are hindered by infrastructural gaps such as poor internet connectivity and inadequate ICT resources. It also aligns with Iheanacho-Kelechi and Uche (2020), who identified inadequate funding, low advocacy, and lack of awareness as significant factors affecting the development and sustainability of institutional repositories in tertiary institutions.

Research question 3

What challenges affect the availability and utilization of institutional repositories among students in tertiary institutions in South-South Nigeria?

**Table 3: Mean Challenges of Availability and Utilization of Institutional Repositories
Among Students in Tertiary Institutions**

S/N	Items	N	Mean	SD
1	Poor internet connectivity limits the utilization of the IR	378	3.11	1.07
2	Lack of awareness affects students' use of the IR	378	3.23	1.02

3	Inadequate ICT facilities hinder the utilization of IR	378	3.23	.96
4	Students are not trained in the utilization of the IR	378	2.82	1.10
5	Irregular updates to IR content limit its usefulness.	378	2.69	1.08
6	Irregular power supply hinders the utilization of IR	378	2.89	1.10
7	Inadequate skills hinder the utilization of the IR	378	3.23	1.02
8	I do not know how to use IR	378	3.23	.96
9	There are no current resources in the IR	378	2.82	1.10
10	There is no policy to guide the use of IR	378	2.68	1.07
	Grand Mean		2.99	1.05

The results in Table 3 show the challenges affecting the availability and utilization of institutional repositories among students in tertiary institutions in South-South Nigeria. As shown in the table, the results indicated that poor connectivity, lack of awareness, inadequate ICT facilities, untrained students, and irregular updates of the institutional repository are challenges that affect the utilization of the institutional repository in tertiary institutions in South-South Nigeria. The result also indicated that irregular power supply, inadequate skills, and the absence of policy guidance contribute to the challenges in the utilization of institutional repositories in tertiary institutions in South-South Nigeria. The findings of this study showed that students face several challenges in utilizing institutional repositories in tertiary institutions in South-South Nigeria. These challenges include poor internet connection, irregular power supply, limited awareness, poor training, and inadequate ICT facilities. This suggests that even where repositories exist, students may not be able to use them effectively due to environmental and technical barriers. One

primary reason for this situation is the unstable digital infrastructure in many institutions. Institutional repositories are web-based platforms that depend heavily on steady internet access and electricity. When internet connectivity is slow or unreliable, students become frustrated and may abandon the system. Similarly, irregular power supply affects both access to computer systems and the proper functioning of repository servers. Another possible reason is limited user education. Many students may not be properly introduced to the repository during library orientation or ICT training. Without adequate guidance, they may not understand how to search, retrieve, or download materials from the platform. This finding agrees with Ani and Ahiauzu (2020), who observed that the full utilization of repositories in many institutions is hindered by infrastructural gaps such as poor internet connectivity and inadequate ICT resources. It also supports Iheanacho-Kelechi and Uche (2020), who identified inadequate funding, low advocacy, and lack of awareness as key barriers to the development and use of institutional repositories.

Research question 4

What is the difference in availability and utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria?

**Table 4: Mean Difference on Availability and Utilization of Institutional Repositories
Among Students in Tertiary Institutions**

Variables	Mean	SD	Mean Difference
Availability of Institutional Repository	28.83	3.84	1.09
Utilization of Institutional Repository	27.74	4.62	

The results in Table 4 indicated differences in the availability and utilization of institutional repositories among students in tertiary institutions in South-South Nigeria. As shown in the table, the mean availability of the institutional repository was 28.83, while the mean utilization was 27.74. The difference between the mean availability and utilization is 1.09 in favour of availability of institutional repositories. The findings of this study revealed that the availability of institutional repositories in tertiary institutions in South-South Nigeria exceeds their utilization. This means that although many institutions have repositories in place, students are not using them to the same degree. In other words, existence does not automatically translate into active use. One possible reason for this gap is limited awareness. Students may not know that the repository exists or may not fully understand its relevance to their academic work. Even where awareness exists, poor orientation and lack of training on how to search and retrieve materials can discourage effective use. Another reason may be infrastructural challenges such as unstable internet connectivity and inadequate ICT facilities, which make access difficult and reduce students' motivation to use the platform regularly. This finding supports Eze and Uzoigwe (2022), who reported that only a small proportion of final-year students had ever accessed their institution's repository, and fewer used it regularly. It also agrees with Omoniwa and Kamba (2021), who noted that although many universities claim to have repositories, only a fraction are regularly updated or fully accessible to students.

Research hypotheses

Hypothesis 1

There is no significant influence of availability on utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria.

Table 5: Independent t-test of the Influence of Availability on Utilization of Institutional Repositories Among Students in Tertiary Institutions

Availability of Institutional Repositories	N	Mean	SD	t-cal.	df	p-value
High	233	58.42	6.93	5.38	376	.000
Low	145	53.88	9.44			

The result in Table 5 shows that the calculated t-value of 5.38 for the influence of availability on utilization of institutional repositories among students in tertiary institutions in South-South Nigeria is significant. This is because the p-value of .000 is less than .05 at 376 degrees of freedom. Therefore, the null hypothesis, which stated that availability has a significant influence on the utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria, is rejected. Hence, availability significantly influences the utilization of Institutional Repositories among students in tertiary institutions in South-South Nigeria.

Hypothesis 2: There is no significant difference in the availability and utilization of institutional Repositories among students in tertiary Institutions in South-South Nigeria.

Table 6: Dependent t-test of the difference in availability and utilization of institutional Repositories among students in tertiary Institutions

Variables	Mean	SD	t-cal.	Df	p-value
Availability of Institutional Repository	28.83	3.84	3.31	377	.001
Utilization of Institutional Repository	27.74	4.62			

The result in Table 6 indicated that the calculated dependent t-test value of 3.31 for the difference in availability and utilization of institutional repositories among students in tertiary institutions in South-South Nigeria is significant. This is because the p-value of .001 is less than .05 at 377 degrees of freedom. Therefore, the null hypothesis, which stated that there is no significant difference in the availability and utilization of institutional Repositories among students in tertiary Institutions in South-South Nigeria, is rejected. Hence, there is a significant difference in the availability and utilization of institutional Repositories among students in tertiary Institutions in South-South Nigeria.

Findings

- i. The availability of institutional repositories significantly influences their utilization in tertiary institutions in South-South Nigeria, with higher utilization in institutions with greater availability.
- ii. There is a low availability of institutional repositories in tertiary institutions in South-South Nigeria.
- iii. There are various challenges to the use of institutional repositories in South-South Nigeria, including poor internet connectivity, irregular power supply, limited awareness, inadequate student training, and inadequate ICT facilities, among others.
- iv. The availability of institutional repositories in tertiary institutions in South-South Nigeria exceeds their utilization.

Conclusion

Based on the study's findings, it was concluded that institutional repositories in tertiary institutions in South-South Nigeria have not yet realized their full potential in supporting students' academic work. Although some level of availability exists, infrastructural limitations, low awareness, and limited user capacity continue to weaken effective engagement. This shows that the mere presence of institutional repositories is not enough; meaningful academic impact depends on functional systems, supportive infrastructure, and informed users.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. Tertiary institution administrators should strengthen the development and maintenance of institutional repositories by providing adequate funding, reliable internet connectivity, and a stable power supply. Functional infrastructure is necessary to ensure consistent access and sustainability.
2. University libraries should intensify awareness campaigns on the existence and benefits of institutional repositories. Regular user education programmes, orientation for new students, and practical training sessions should be organized to improve students' skills in accessing and utilizing repository resources.
3. ICT departments should ensure that repositories are user-friendly, regularly updated, and properly integrated with other academic platforms. Technical support should be readily available to promptly address access challenges.

4. Lecturers should encourage students to use institutional repositories by integrating repository materials into coursework, assignments, and research activities. This will help normalize its use within academic practice.
5. Education authorities and funding agencies should develop clear policies that support the establishment, standardization, and monitoring of institutional repositories across tertiary institutions in the region.

References

- Adeyemo, O. O., & Jamogha, E. (2021). Institutional repository as a catalyst for enhanced university visibility: The case of Obafemi Awolowo University. *Covenant Journal of Library & Information Science (CJLIS)*, 4(1).
- Davis, F. D. (1989). Perceived use-fulness, perceived ease of use, and user acceptance. *MIS Quarterly*, 13(3): 319 – 340
- Hinmikaye, B. V. (2015). *Awareness and use of institutional repositories among academic staff in the federal universities of North Central Nigeria* [Master's dissertation, Bayero University, Kano]. <https://teras.ng/api/asset/document/fb296bbd-9a86-4cd7-8d1a-ff00cb19c135>
- Iheanacho-Kelechi, O., & Uche, A. C. (2020). Status of institutional repositories in federal and state tertiary institutions in Imo State, Nigeria. *Journal of Applied Information Science and Technology*, 13(2), 323–333. <https://www.jaistonline.org/13vol2/34.pdf>
- Igboechesi, G. P., Adigun, T. A., Pobish, P. S., & Angulu, R. K. (2023). Sustaining the relevance of institutional repository in academic libraries in Nigeria: A University of Jos perspective. *International Journal of Library and Information Science Studies*, 9(6), 46–60. <https://doi.org/10.37745/ijliss>
- Ogonu, J. G., & West, A. T.-I. (2024). Awareness and utilization of digital repositories as a correlate of lecturers' research output in library and information science schools in Rivers State. *Journal of Applied Information Science and Technology*, 17(1). <https://www.jaistonline.org/17vol1/7.pdf>
- Onuoha, J. C., Ifeanyi, L. U., & Yunisa, A. Y. (2020). Availability and utilization of e-resources in university libraries for effective research output by undergraduates of social

studies in South East Nigeria. *Library Philosophy and Practice (e-journal)*.
<https://digitalcommons.unl.edu/libphilprac>

Onyeneke, C. O. (2023). Developing the content of the institutional repository for academic libraries in Nigeria. *Jewel Journal of Librarianship*, 18(1).
<https://www.jeweljournals.com/admin/published/1000016562.pdf>

Panyil, J. D., & Shidi, H. (2024). Availability and utilization of electronic information resources for undergraduate students' satisfaction in the University of Jos. *European Journal of Research and Reflection in Educational Sciences*.
<https://www.eajournals.org>

Ukpanah, M. E. (2012). Innovations in Nigerian libraries in the 21st century. *Journal of Resourcefulness and Distinction*, 2(1), 187–193.

Ukpanah, M. E., & Afolabi, M. (2011). Availability of cited law resources by law students in the Universities of Uyo and Calabar law libraries, Nigeria. *Nigerian Libraries*, 44(2), 40–57.