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Sustaining the Relevance of Institutional Repository in Academic Libraries in Nigeria: A University of Jos Perspective

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ABSTRACT: Institutional repositories (IRs) are one of the fastest growing mediums of accessing Electronic information resources in Academic Libraries (ALs) today. They have potentially increased the public value, ranking, prestige, and visibility of researchers, and relevant universities. Despite the important and rapid growth of IRs, few efforts have been made to systematically review and integrate the findings of various research studies to ensure the sustenance of IRs in Nigeria. Hence, this paper carried out a review on the IR of University of Jos to provide a better way of sustaining it in the Institution and Nigeria by extension. The study employed a longitudinal research method and systematic literature review (SLR). Findings showed that the viewers from the local host (Nigeria), is not encouraging as expected. The IR challenges include; limited qualified manpower and network issues. On the way forward, the study provided a roadmap for better efforts in sustaining institutional repositories by highlighting the basic guidelines for the successful viability of IRs in the Nigerian higher academic public institutions.

KEYWORDS: Institutional Repository (IR), Academic Libraries (ALs), Information Communication Technology (ICT), information resources, open access.

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INTRODUCTION

Institutional repositories are a key component of academia, universities and institutions included. They play a pertinent role in the enhancement of the reputation of an institution, because one of the primary objectives of any academic institution is its ability to create or develop, disseminate and preserve knowledge. In the recent past, prior to the advent of information and communication technology (ICT)/Internet, academic libraries/institutions grappled with how to manage intellectual output they produce like journal articles, conference papers, reports, theses and dissertation, teaching materials, artwork, research notes, and research data which were all in print. Publishers and academic societies dominated scholarly communication. Researchers channeled their research output solely through authoritative publishers and academic societies. At that time, research works were mainly domesticated in institutions/universities, states and countries of origin more. The probabilities for the visibility of these intellectual discoveries were very low. Even when it happens, it is usually slow as a result of the rigid nature of information dissemination then. Today, in this internet and Information Technology (IT) age, academic libraries (ALs) now manage hybrid resources (print and electronic). Of these hybrid resources, electronic information resources (EIRs) are gradually monopolizing the sole access point to information resources. Advancing the fact that technology has clearly made it easy to create, store and access digital material. One of the means of accessing these electronic resources is through institutional repositories (IR). Asadi, Abdullah, Yah, and Nazir (2019) stated that "Institutional repositories (IRs) have received considerable attention from researchers across disciplines and around the globe. They have potentially increased the public value, ranking, prestige, and visibility of researchers, and relevant universities". Gunasekera (2017) is of the view that it is because of their potential to reform the current system of scholarly communication and their role in advancing the open access movement, many academic libraries, especially those at research universities, have invested human and technical resources to build a robust technical infrastructure that will foster access to the intellectual, cultural and administrative output of their institutions. He goes further to elucidate by saying that they do this in the hope to gain "enhanced access to faculty research and increased visibility of research generated within the university that is relevant to society". An essential characteristics 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, 2002). IRs, intertwined with information and Communications Technology (ICT) continues to transform the scholarly environment and management of higher education because ICTs are core resources required for digital publishing, online teaching and learning and the visibility of IRs. This is because IR is Open Access. By way of operation, Open Access research literature is made up of free, online copies of peer-reviewed journal articles and conference papers, technical reports, theses and working papers. In most cases there are no licensing restrictions on their use by users. They can therefore be used freely for research, teaching and other purposes. Open Access is usually not self-publishing, it is not a kind of second-class publishing route, and it is also not a way to bypass peer-review and publication. It is simply a means to make research results of

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published and certified academic works freely available online to the whole research community. Adding to the many advantages that IRs bring to institutions, it improves increased visibility and impact of research output, interoperability and availability of technical support. IRs have created platforms and opportunities for scholars to work collaboratively through extensive infrastructures, with access to resources and knowledge services in borderless environments (Jain, Bentley and Oladiran, 2009).

According to Prabhakar and Rani (2017), the following are the objectives of IRs:

- To manage, preserve, and maintain the digital assets, intellectual output, and histories of academic institutions.
- Create global visibility for an institution's scholarly research
- Collect content in single location
- Provide Open Access to the intuition's research output
- Provide self- archiving of institutional scholarly research output

This is evident in the views of Asadi et'al (2019) who posited that IRs have potentially increased the public value, ranking, prestige and visibility of researchers and relevant universities.

This brings to bare the high level connections between ICTs and Academic Libraries (ALs). Today, academic libraries are struggling to keep their place as the major source of inquiry in the face of emerging digital technology that has ushered in great revolution in not just the way information is packaged, processed, stored, and disseminated, but also how users seek and access information. ALs have played a key role in the scholarly communication process for the past 150 years. During this period, they have experienced major changes in the creation, dissemination, and preservation of knowledge, through changing social, philosophical and educational paradigms, and the emergence of new technologies. This makes ALs the heartbeat of educational institutions because they help the institutions in carrying out its academic program effectively. According to Anunobi and Okoye (2008), academic libraries no longer restrict themselves to print services such as collection development, cataloguing and classification, circulation and reference services, current awareness, selective dissemination, and other bibliographic services, but have extended their efforts to interdisciplinary concepts and computer software and hardware and telecommunication engineering and technology. Campbell (2006) observed that "numerous creative and useful services have evolved within academic libraries in the digital age: providing quality learning spaces, creating metadata, offering virtual reference services, teaching information literacy, choosing resources and managing resource licenses, collecting and digitizing archival materials, and maintaining digital repositories". Presently, ALs are faced with not only the decision on what books and journals to acquire to satisfy faculty and students but also on how to remain relevant in the digital era, mindful of low budgets and resentment on the part of institutional administrators. There is also the issue of library users opting for alternate, more convenient, and "qualitative" sources of information (the Internet). As Lombardi (2000) stated, users prefer more computer content, more and more computer indices, digitized finding aids, digital repositories of

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articles, online access to newspapers, etc. There is also the struggle with when, how, who, and where to begin digitization efforts, while keeping in mind that hesitation in the digitization of institutional archives will result in relinquishing the function to another institutional repository host. The consequence is repositioning of academic libraries resources, operations, services and skills. Anunobi and Okoye (2008) added that resources today occur in hybridized form: print and electronic, and therefore services provided and skills possessed by professionals in these libraries should reflect that trend.

The development of IRs raised key issues about the role of academic libraries in the scholarly communication cycle globally, and the impact that institutional repositories may have on traditional forms of scholarly communication in the 21st century. On this, Cullen and Chawner (n.d.) categorically asserts that Academic librarians have shown themselves to be adept at adjusting to these changes, and been proactive in advancing research, scholarship and knowledge using the IRs, there have been a steady and progressive adoption of the new technology, one that brings with it the potential for a further paradigm shift in the whole system. Prabhakar and Rani (2017) buttressed this by adding that ALs have benefited from the information communication technologies as the information with their traditional sources in print format is now being added to the electronic resources. The institutions are converting their assets into digital format for creating digital collection for the last few years. While this IR progression is in advanced stages in the developed climes, it is unfortunately not so in Africa, Nigeria to be precise. IRs are found in most universities in Nigeria but the issue is in their viability, visibility, quality, consistency and how current they are. A lot of research work has been done by the academia in Nigeria, but they are mostly in prints. Despite all attempts or enlightenments made on it, majority of the authors have mixed feelings or understanding of IRs. As a result of this, many materials are not usually made accessible for digitization and uploading to be of use to users; they remain marooned in the authors' shelves, personal libraries and computers. About 80-85% of digital intellectual output of universities is never made accessible to the public (The Open Citation Project, 2004). This paper therefore explores the measures of sustaining the institutional repositories in academic libraries in Nigeria, using the University of Jos' perspective in making the needed inference with the core principles of scholarly findings presented by notable scholars in Library and Information Science, with special details to IRs

Research Problem

The development of IRs came as a new strategy that allows universities to apply serious, systematic leverage to accelerate changes taking place in information resource dissemination all over the world. Giving credence to the viability and visibility of information resources domiciled locally in the universities to the global space. For the University of Jos, her research visibility output became very obvious with the inception of the institution's IR. And as a result, the ranking of the university became notable as the 4th best Nigerian University in 2010. What then could be the

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reasons for the almost stagnant nature of the IR? Could it be that there is a decline in uploading of materials, could it also be that there is a problem of man power or lack of materials to upload? Why is the local community (Nigeria) not maximizing the domiciled potentials of the IR based on preliminary observations? These and more questions prompted the need for the research.

Research Objectives

They include but are not limited to the following:

- i. Identify why the academia use IRs in Nigerian universities
- ii. Determine how IRs can contribute in enhancing the learning, teaching and research activities in Nigerian Universities
- iii. Ascertain the major challenges and potential benefits of IRs in Nigeria.

RESEARCH METHODOLOGY

Longitudinal research method was meticulously employed by observing and collecting data on a number of variables without trying to influence those variables. The researchers repeatedly observed the same individuals and events in the university community (university library; systems unit precisely, academic staff and students) to detect any changes that might occur over a period of time with regards to the viability and use of the University of Jos institutional repository (IR). Under this study design also, the researchers carried out a retrospective study (collected data on events that have already happened). Systematic literature review (SLR) was also in hand to aid the research as secondary sources; using related literatures (books, articles, and web searches). These methods proved to be effective as it provided a clear justification to carry out this research.

Conceptual Clarification

Institutional Repository

An Institutional Repository can be defined simply as the digital preservation of the intellectual output of scholars in an institution that is accessible to enquirers and researchers world-wide. It is online, interactive, and has capacity for growth (Akintunde, 2011). An IR sits firmly within the Digital Signal Processing and Control Engineering (DSpace) landscape, which includes "building digital collections, creating tools for collecting, analyzing, and authoring digital information, and using digital collections and analytical tools to generate new intellectual products" (American Council of Learned Society, 2006). Lynch (2010) defines Institutional Repository as:

..."a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these

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digital materials, including long-term preservation where appropriate, as well as organization and access or distribution".

From the perspectives of the above scholars, IR can therefore be defined as a specialized digital library tailored to capture, preserve and disseminate the intellectual output of a University community or research institution by making their information resources available to their user community in particular and the global community at large. Therefore, it is a pertinent infrastructure for modern scholarship.

Academic Library

An academic library is a library in school, college, University and all other institute of higher learning. It is a library which is an integral part of an institution of higher education (Khan, 1998). Academic libraries encompass research libraries, baccalaureate, masters and doctoral degree granting institutions, junior and community colleges, and distance learning programs of higher education. Academic libraries work together with other members of their institutional communities to participate in, support, and achieve the educational mission of their institutions by teaching the core competencies of information literacy—the abilities involved in identifying an information need, accessing needed information, evaluating, managing, and applying information, and understanding the legal, social, and ethical aspects of information use (ala.org).

Relevance of Institutional Repository to Institutions

The relevance of institutional repositories are numerous, made so by the current trend in the digital space that has brought a lot of changes which ALs have taken optimum opportunity of in other to remain relevant in the technological age we find ourselves. They have since become a global phenomenon as they are now established on all continents. Its relevance varies with different aspects of projected benefits. They include its relevance to the researcher, the institution, and the individual disciplines captured in the repositories. Academic institutions such as universities have predicted IRs as an essential part of higher education, because without providing knowledge through these IRs one cannot fill the gaps and challenges of the modern day. Some of the pertinent relevancies are grouped into the following categories in specificity to universities as opined by Prabhakar and Rani (2017):

- Technological change
- Significant increase in the overall volume of research
- Increasing need for archival and access to unpublished information
- Increasing demand to access knowledge objects from anywhere at anytime
- Increasing uncertainty over who will handle the preservation archiving of digital

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THE UNIVERSITY OF JOS INSTITUTIONAL REPOSITORY

The institutional repository of the University of Jos was launched in June, 2009. Akintunde (2011) opined that it is a realization of three years dream; between 2006 and 2009. This according to him was necessitated by the high demand of the library staff and the patrons to promote access to the resources of the University since there was already a global increase in the use of the Internet as a platform to offer library services. Institutional and library resources were increasingly displayed and accessed in real-time on-line over the Internet. It became attractive to librarians and clients alike as the most appropriate medium to offer library services. On the other hand, many academic staff had carried out researches that were never published, or, published in a local journal that were inaccessible by other scholars outside of Jos, this automatically became a welcomed idea to them. Immediately after the installation of IR, the visibility of research output of University of Jos became very obvious, thus, University of Jos moved from nowhere on the map to 4 position in Nigeria, 70th in Africa and 7000th in the world on the Ranking Web of World Universities for January 2010 ranking:

Table 1

	Global position			World position				
	Nigeria		World	Visibility (50%)	Size (10%)	Rich Files (10%)	Scholar (30%)	
January 2010	4 th	70 th	7000 th	NA	NA	NA	NA	
July 2010	3rd	66 th	5882 nd	9184th	7260 th	5743 rd	1588th	
January 2011	2 nd	42 nd	4087 th	11,092 nd	6906 th	4426 th	1770 th	
July 2011	8 th	67th	5376th	11,504th	6052nd	3923rd	2360th	
January 2012	9 th	88 th	5681st	10220th	5022 nd	4760 th	2900 th	

[•] Web Ranking of University of Jos over time (Akpokodje and Akpokodje, 2015)

Their findings showed that there was a steady monthly statistical growth for all items in the institutional repository from the 2009 to 2011; cumulative total for 2009 was 380, for 2010 was 1002 and for 2011, 1370. Since then, the University of Jos IR has been taken as a routine library task (Akintunde 2011), managed by a section of the systems unit in the library. Presently (2023), the IR has a cumulative total of 2,996 information resources in its Dspace (IR). So, a total of 1,626 academic information resources have been added in 12 years.

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Tabulated Growth of University of Jos Institutional Repository Yearly over the years

Table 2

N0	Date	All Item Uploaded			
1	2009	380			
2	2010	1002			
3	2011	1370			
4	2023	2996			

• Source: University of Jos Institutional Repository, 2023

Though there was a major setback the IR encountered in 2016 when the server room of the institution's ICT department got burnt. It affected the IR because its server was part of what got burnt. As a result of this, all the information resources were lost. They uploading started from the scratch again. The network to effectively carry this out has been epileptic; not been very strong and stable since then.

UNIVERSITY OF JOS IR VIEWERS STATISTICS ON SOME FACULTIES AND CENTERS

Table 3

NO	EACH TY/CENTED	SOME TOP COUNTRY VIEWERS						
N0	FACULTY/CENTER	Nigeria	USA	China	Germany	Canada	Ukraine	
1	Library	41	336	177	35	16	26	
2	Law	44	372	180	43	14	25	
3	Agricultural Science	45	316	195	39	25	25	
4	Natural Science	48	385	165	36	23	26	
5	Management Science	44	359	176	36	15	26	
6	Pharmaceutical Science	20	333	171	41	14	26	
7	Social Sciences	45	325	150	41	14	22	
8	Veterinary Medicine	0	317	142	41	15	10	
9	Arts	78	358	193	38	26	28	
10	Engineering	15	315	183	37	27	14	
11	Education	104	406	185	38	18	25	
12	Environmental Sciences	34	367	190	38	25	14	
13	Theses and Dissertations	700	724	163	37	13	0	
14	University lectures	35	341	153	37	14	11	
15	Centers and directorates	17	327	192	37	23	28	
	Total Views from March to September, 2022	1,270	5,581	2,615	574	291	306	

- Source: University of Jos Institutional Repository, 2022
- Duration of visits reviewed is from March to September, 2022.

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From the reports in Table 2, it is glaring that the viewers from the local host (Nigeria), is not engaging as supposed. Though it is the third highest in the table, countries like United States of America and China are toping from all aspects. The reason for the limited or low patronage from the host community is something that is possibly tied to the viability and pedigree of the IR in terms of utilization by the users. Ukwoma and Dike (2017) highlighted that the principal mission of all academic institutions is research dissemination. IRs aid academic institutions to distribute the output of the research to the universal research society, improve community expansion and unlock new situations for cooperation in research nationally and internationally.

This is also possibly tied to the present ranking of the university because the IR plays a significant role in the visibility of academic information resources from the institution to the rest of the world. Where there are relevant and up-to-date resources uploaded for the purpose of satisfying users' needs, it automatically boosts the citations and ratings by extension. Information obtained from the backend of the institutions IR, indicates that the IR has not had any forms of uploads of either old or new academic research publications already in place or in anticipation for quite some time (up to a year) because of reasons beyond the control of the handlers/mangers. Even in the recent past years, the activities of enriching the IR have been largely skeletal. In the 2023 rating, the University of Jos ranked 16th in Nigeria out of 157 universities, 87th out of 1,104 universities in Africa, 3529th out of 14,131 in the global 2023 rating and scored in 35 research topics. The University's ranking is based on 3 factors. The first and most important to this research is the research output. According to EduRank's (n.d), the university of Jos index has 2,386 academic publications and 18,674 citations attributed to the university. Other ranking factors include are the non-academic reputation and the impact of notable alumni. This shows that the university has further dropped in ranking.

CHALLENGES ASSOCIATED WITH THE UNIVERSITY OF JOS INSTITUTIONAL REPOSITORY

According to Akpokodje and Thomas (2015), going by responses gotten from staff of the university, most of them (94%) do not have their publications in IR. Many reasons have been implicated for this low patronage, some which are lack of interest, lack of equipment to scan and upload documents, still planning to do so, just joined the institution from another service, still settling in, inaccessibility of server, do not have the technical know how to do so, frustrating internet service, fear of plagiarism, inadequate time to do so, ignorance of the existence of IR and its functionalities, not interested yet. It is useful to compare the secondary literature findings with some preliminary practical longitudinal studies conducted as part of the challenges of institutional repositories in University of Jos. These challenges are grouped as institutional challenges and

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individual / academic scholar(s) responses and challenges to the growth of the IR in University of Jos and are enumerated below:

A. Institutional Challenges

Inadequate staff in the section

The section of the systems unit that manages the IR of the University are understaffed. As at the time of this research, the section is normally assisted by other staffs in other sections of the system unit for it to function to a reasonable level. There are two members in that section that are saddled with the responsibility officially. Normally, it makes the job of maintaining the viability of the IR very hectic and almost impossible to attain the needed heights if left for just the official persons concerned because the process of getting print materials ready for upload into the IR is a very tasky one, especially considering that most of the academic works of the university are in print forms. Electronic or softcopy resources are usually less cumbersome in the processes it takes to upload them into the IR.

To buttress this, Akintunde (2011) sheared his views on the challenges they had with the staffing in 2008 when it was time to implement the University of Jos IR which are unfortunately still the case today as observed by the researchers. They are:

Inadequate ICT infrastructure

When it comes to ICT, there a lot of infrastructures needed to make it efficient and motivational. Aside the problem of inadequate modeled and fast computers (especially laptops), there is also the part of the internet (for connectivity). As at time of this research, the University of Jos has not had internet connectivity for over 6 months. Even when the network is available, it is mostly epileptic in the library. The library can hardly run in a week without issues of network. In addition, modern scanners with new features and capabilities, up to date softwares that are needed in bring out clean and clear copies of works, especially with the ones are no longer clean or almost getting spoilt. Installing strong up to date antivirus is also a strong case, it is not even considered.

On the aspect of internet connectivity, in 2003, the International Network for the Availability of Scientific Publications (INASP) commissioned a report which compared internet connectivity and cost in selected African Universities with a British university. It was observed that several African universities in the study have an internet connection of between 512 Kbps and 1Mbps (as at May 2003). The British university (Bristol) by contrast has a 2.5 Gbps link. One of the major factors responsible for the high cost of internet bandwidth in Africa is the use of satellite bandwidth as opposed to much cheaper optic fibre infrastructure. So far, there is only one (Christian, 2008). This clearly reveals the reason why the problem of good connectivity has lingered and without

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good/strong connectivity, the viability of excellent uploads into the IR remains a challenge that is left to the hands of luck.

Inadequate funding

Development of institutional repository in developing countries is much a capital intensive project than in developed countries. This is because academic and research institutions in developed country already have in place a well-established state-of-the-art ICT infrastructure to build on. But in developing countries, this infrastructure or foundation is not in place and will require huge financial resources to put them in place (Christian, 2008). This is to say that the high cost of internet bandwidth in developing countries (previously discussed) further worsens the problem.

The state of ICT infrastructure in the University of Jos is low to sustain the steady and efficient development of institutional repositories. As presented by the university management, lack of funds is the present reason why the university could not renew her contract with their internet service provider(s). A viable IR project will first require serious upgrading of the current state of ICT facilities. These factors contribute to inflate the cost of establishing vibrant IR in University of Jos. At this point, it is important to state that all federal Universities in Nigeria receive substantial part of their funding from the government's budgetary allocation. Therefore, the increase in cost of developing digital repositories is made worse by the fact that these institutions are still grappling with the decline in funding from budgetary allocations from the government.

Inadequate advocacy

Knowledge of open access institutional repository is very low among the major stakeholders in the University community which are the lecturers, researchers, librarians as well as students. Part of this problem is also tied to the fact that a lot of the staff in the academia has some form of IT phobia. Some are not interested because they don't know how to do it; therefore, they don't want to involve their works on what they are not comfortable with. Some also have not heard about it, thereby controlling their ignorance and misunderstanding of the idea. Steady and effective advocacy needs to be carried out for these stakeholders to be very familiar with the concept of the IR to be very rich and effective. When some of them hear this for the first time, they become very interested and happy about the idea of being read internationally.

The Problem of Electricity

Institutional problem associated with internet connectivity in not just the University of Jos but all government funded universities in Nigerian is the problem of electricity power supply. A vibrant IR should be accessible 24 hours a day. This means sustained electricity supply to power the ICT facilities. This is not the obtained. It has made the development of IR much more difficult and expensive. Fatunde (2008) observed that poor electricity supply is a major impediment to the operation and growth of information and communication technology in Nigerian universities.

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According to him, only a trickle of daily electricity production dribbles erratically into the country's 93 public institutions, rendering ICT systems dysfunctional. Universities resort to diesel-propelled generators, but they are expensive and environmentally unfriendly.

B. Individual / Academic Scholar(s) Responses and Challenges

Reluctance to contribute

Most times researchers are very excited to do the needful but are usually apprehensive about infringing on publishers copyright. In this too, they lack adequate awareness about their own intellectual property rights. They are also uncertain about making their work available online before it is published by a traditional publisher for fear of plagiarism.

Lack of knowledge of IR

Lack of knowledge or awareness IR is not just peculiar to the stakeholders of the University of Jos but also in other academic communities in Nigeria. A very significant number of them know very little about the concept and a great majority of the stakeholders completely unfamiliar/indifferent or know nothing about the institutions' IR. One of the major reasons of the lack of knowledge is lack or low level of technical know-how when it comes to ICT.

SUSTAINING THE UNIVERSITY OF JOS INSTITUTIONAL REPOSITORY: Way Forward

Installing IR software is just the first step towards a successful IR and Institutions' global visibility. Without content, an IR is just a set of empty shelves. And, in spite of the rapid pace at which institutions are establishing IRs, the quantity and quality of content deposited into them remains key to a successful repository (Akpokodje and Thomas, 2015).

Aside from the obvious challenges discussed above that needs attention from the institutions and individuals, one of the very pertinent way to sustain the IR of the University of Jos is to;

- 1. Revamp the unit saddled with the management of the IR. It should have IT inclined staff and adequate manpower needed with modern ICT gadgets needed to work with less stress and effectiveness. The unit should have direct access to authorities concerned to make their job flow in terms of problem solving since its impact directly reflects the standard and rating of the institution.
- 2. Make it attractive: It is known that the intellectual work of academics is the core business of higher institutions. Much of these intellectual works are documented in research papers, and in materials used for teaching and learning. The IRs should be upgraded to become the hub of all stakeholders in the institutions community, approaching it from diverse

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perspective of the materials collected for improving teaching, learning and research at the institution and their future. This means that the IR should be used as the primary medium of providing access to learning and teaching materials across the institution. All lecturers will by default, make all the course materials freely available on the IR, they could also upload relevant research materials from the University that they refer student to, enabling access to teaching and learning material. Doing this will amount to attaining one of the most important objective of learning and studying for every student which in turn improves the quality of learning and teaching activities and better understanding of the subject in universities since the learning and teaching materials are shared by scholars.

These steps may help to enhance the learning and teaching quality for the higher education institutions, since students and teachers can easily gain plenty of teaching and learning information resources which are obtainable throughout the institutions IR. They could develop themselves appropriately by doing this because it translates to robust awareness and attached importance to the IR. The first degree dissertation category, important research and discoveries of students should be given proper place in it too, this could also help cub the issue of recycling of the same research topics and content by students as a result of its presence in the IR. The aim here is to introduce aspects of the school routine that will be fused to the IR, to make it a pertinent requirement for learning and research processes.

CONCLUSION

The developments of institutional repositories is beneficial not only the researchers who contribute to it but the entire university. For a successful IR, understanding and overcoming the existing issues and challenges is crucial. As IRs continue to evolve and rapidly increase, periodic systematic review is not just apt but equally considered a pertinent basis for scholars to assist in identifying new study opportunities. The proposed method measure of sustaining IR in the University can be extended in the future, even to other Universities in Nigeria. By adding unique touches to this position, university libraries will confidently aid in facilitating digital activities that will be used to facilitate the university's faculty learning, teaching and research activities.

Finally, until the IRs spark or spur motivations in the academic community in Nigeria, the future of IRs looks less assured. Therefore, it is time for serious reconsiderations on the purpose and function of institutional repositories to ensure that they are better aligned with the aspirations of the academic communities they are intended to serve, and that the investment brings the benefits anticipated.

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REFERENCES

- Akintunde S. A. (2011). Institutional Repository: the University of Jos Experience.
- Akpokodje. V.N and Thomas E.T (2015). Availability and Utilization Of Institutional Repositories as Indicators to Institutional Web Ranking. European Journal of Computer Science and Information Technology. Vol.3, No.2, pp.29-40, May
- American Council of Learned Societies. (2006). Our Cultural Commonwealth: The report of the American Council of Learned Societies Commission on Cyber infrastructure for the Humanities and Social Sciences. Retrieved April 4, 2021 from http://www.acls.org/programs/Default.aspx?id=644
- Anunobi, C. V. and Okoye, I. B (2008). The Role of Academic Libraries in Universal Access to Print and Electronic Resources in the Developing Countries. *Library Philosophy and Practice (e-journal)*. Pg 189. http://digitalcommons.unl.edu/libphilprac/189
- Asadi, S., Abdullah, R., Yah, Y. and Nazir, S. (2019). Understanding Institutional Repository in Higher Learning Institutions: A Systematic Literature Review and Directions for Future Research. IEEEAccess. Vol. 7. Digital Object Identifier 10.1109/ACCESS.2019.2897729
- Campbell, J.D. (2006). Changing a cultural icon: The academic library as a virtual destination. Educause. Review 41(1), 16-31.
- Christian G.E (2008). Issues and challenges to the development of open access institutional repositories in academic and research institutions in Nigeria. A Research Paper prepared for the International Development Research Centre (IDRC) Ottawa, Canada.
- Crow, R. (2002). The Case for Institutional Repositories: a SPARC Position Paper, Retrieved April 26, 2021 from http://www.arl.org/sparc/bm~doc/ir_final_release_102.pdf
- Cullen, R. and Chawner, B. (n.d). Institutional Repositories and the Role Of Academic Libraries in Scholarly Communication.
- Definition of library. (n.d). Retrieved March, 2021, from American Library Association website, https://libguides.ala.org/library-definition.
- F. Sarker, H. Davis, and T. Tiropanis, "The role of institutional repositories in addressing higher education challenges," Univ. Southampton, Southampton, U.K., Tech. Rep., 2010, pp. 1_8.
- Fatunde T. (2008) University World News (African Edition) "NIGERIA: Poor electricity supply hits ICT growth" http://www.universityworldnews.com/article.php?story=20080424153055598>.
- Gunasekera, C (2017). Motivational Factors for Faculty Contribution towards Institutional Repositories and their Awareness of Open Access Publishing. Journal of Information Management, Vol 54(3). Pg 67. DOI: 10.17821/srels/2017/v54i3/111684.
- Jain, P., Bentley, G.and Oladiran, M.T (2009). The Role of Institutional Repository in Digital Scholarly Communications.https://www.researchgate.net/publication/23732225
- JISC (2005). Briefing Paper, Open Access. Retrieved from http://www.jisc.ac.uk/uploaded_documents/JISC-BP-OpenAccess-v1-final.pdf.

Print ISSN: 2059-9056 (Print)

Online ISSN: 2059-9064(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development -UK

- Kemparaju, T.D. and Nyainboga, Cnstantine M. (2001). Why IT course in the curriculum of library and information science education? SRELS Journal of Inforantion Management, vol.38, no.3.p.201.
- Khan, K. (1998). Academic libraries. New Delhi: ESS ESS.
- Lombardi, J.V. (2000). Academic libraries in a digital age. D-Lib Magazine 6(10) Available: www.dlib.org/
- Lynch, C. (2003). Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age. ARL, 226, Retrieved April 13, 2021 from http://www.arl.org/bm~doc/br226ir.pdf
- Markey et al. (2007). Census of Institutional Repositories in the United States. Retrieved April 6, 2021 from http://www.google.co.bw/search?hl=en&q=Markey+2007+Council+on+Library+and+Inf ormation+Resour ces+% 2B+institutional+repository&btnG=Search&meta
- Prabhakar, S. V. R. and Rani, M. S.V (2017). Benefits and Perspectives of Institutional Repositories in Academic Libraries. Scholarly Research Journal for Interdisciplinary Studies. Vol- 5/25. Pg. 6904-6909.
- The Open Citation Project. (2004). The effect of open access and downloads (©hits©) on citation impact: a bibliography of studies. Retrieved May 12, 2021 from http://opcit.eprints.org/oacitation-biblio.html
- Ukwoma S. and V. W. Dike (2017). Academics attitudes toward the utilization of institutional repositories in Nigerian Universities. Portal, Libraries Acad., vol. 17, no. 1, pp. 17-32.
- Warren, B. (2003). Current challenges and choices in scientific publication Baylor University Medical Centre Proceedings, v 16 (4), Retrieved May 14, 2021 from http://www.baylorhealth.edu/proceedings/16_4/16_4_warren.pdf
- Asadi, S, Abdullah, R., Yah, Y. and Nazir, S (2019). Understanding Institutional Repository in Higher Learning Institutions: A Systematic Literature Review and Directions for Future Research. IEEE Access, Vol. 7, pp. 35242-35263. doi: 10.1109/ACCESS.2019.2897729.
- EduRank (n.d.). University of Jos: Rankings. https://edurank.org/uni/university-of-jos/rankings/ University of Jos Institutional Repository statistic interface. Retrieved from: http://dspace.unijos.edu.ng/statistics