Challenges and Strategies to the Use of Institutional Repository among Academics Staff in Universities Libraries in South-West, Nigeria

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Abstract
The purpose of this study is to identify the major challenges and strategies to using institutional repositories (IRs) among academic staff in university libraries in South-West Nigeria. A descriptive survey was employed in the study. The research population consist of 420 academic staff from six federal universities. A questionnaire was used as an instrument for data collection. The questionnaire was designed based on the objectives of the study. The results indicate that the major challenges to using IRs include poor ICT skills, unwillingness to deposit research materials, epileptic power supply, absence of IRs policy hindering the submission of content to the IRs, fear of copyrights infringement, financial constraints, lack of awareness of publishers policy as regards depositing published works in IR, fear of plagiarism, and low bandwidth. The results further revealed strategies to surmount the factors facing the IRs in universities are alternative power supply should be provided, management should endeavour to increase Internet bandwidth to enhance the effective utilization of the IRs, having an IRs policy will encourage the acquisition of content, availability of plagiarism software, specifying copyright and intellectual property right in respect of IRs content, creating more awareness of the importance and content of the IRs among others.

Keywords: Institutional Repositories, Promotion Strategies Inhibiting factors, Academics, Staff, University Library, Nigeria.

Introduction
An institutional repository (IR) is a database for conserving the indigenous content of an academic institution. Indigenous content comprises materials such as examination question papers, research publications, working papers and inaugural lectures generated in institutions of higher learning. These materials contain information that is pertinent for teaching, learning and research in universities. They are often hard to come by since many of them are not in published form. In some cases, the materials are leaflets that can easily become stiff. IRs provide a safe option for the preservation and accessibility of indigenous content in digital format. IRs preserve and secure records that would have been obliterated by age (Musa, Musa, & Aliyu, 2014). The consumption of IRs for the safeguarding of information resources has gone a long way to reducing the calamity of management and protection since materials are now digitized and archived according to collections and communities in repository databases.

Mohammed (2013) states that an IR is a way of bridging the digital divide and enabling researchers to attain visibility and communicate their research findings to the world effectively. According to Fasae, Esew, Alanyo and Holmner (2017), a repository provides services for faculty and researchers who want to archive research and historic materials. According to Safdar (2021), one of the reasons libraries worldwide are focusing on the development of IRs is to assist their teachers and researchers in achieving their instructional as well as research needs. The creation of IRs is a fresh approach that enables universities to take significant, systematic action to hasten improvements in academic communication and scholarship. One of the more recent academic communication platforms made feasible by the Internet in the twenty-first century is the institutional repository (IR), a platform for disseminating scholarly works in tertiary institutions (Bamigbola, 2014). Due to the academic communication tasks they carry out, such as student and staff registration, certification, and institutional digital content archiving, universities all over the world create and heavily utilize IRs (Crow, 2002; Prosser, 2003). Due to advancements in information and communications technology, (ICT), institutional repositories (IRs) have seen an increase in acceptance and deployment in recent years. Institutional Repositories (IRs) are commonly used in academic institutions to preserve the community's collective scholarly production and enhance the effect of research (Andrew, 2018). Another innovative idea for gathering, administering, disseminating, and archiving academic works made in digital form by faculty and students in specific academic institutions is the institutional repository (Prabhakar and Manjula, 2017). The creation of IRs is a fresh approach that enables universities to take significant, systematic action to hasten improvements in academic communication and scholarship. The traditional academic library practice has been revolutionized by institutional repository (IR) technologies, which has disrupted librarians' work cultures (Tapfuma and Hoskins, 2019). Although it has been noted that these services are frequently accessible, several barriers prevent the usage or development of IRs in

institutions in Nigeria. Ivwighreghweta (2012) noted that "academics have not yet fully embraced open access IRs in this area"p.17. Based on these facts, this study examined challenges and strategies to use institutional repositories among academic staff in university libraries in South-West Nigeria, which have IRs to effectively operate IRs.

Objectives of the Study
The research work examines challenges and strategies to use institutional repositories among academics staff in universities libraries in South- West, Nigeria

1. to identify the challenges of the use of IRs among academics staff in universities libraries in South-West, Nigeria
2. to suggest strategies that would enhance the use of IRs among academic staff in university libraries South-West, Nigeria.

Research Questions
1. What are the challenges of the use of IRs among academics staff in universities libraries, in South-West, Nigeria
2. What are the strategies that would enhance the use of IRs among academic staff in university libraries in South-West, Nigeria?

Review of Related Literature
To preserve the collective scholarly output of the university community and consequently enhance the effect of research, institutional repositories (IRs) are widely used throughout academic institutions. Scientific knowledge has also been widely disseminated and communicated through institutional repositories (Okumu, 2015). However, the availability and wide distribution of scholarly work, authors' professional visibility, restrictions on self-archiving, the perception that repository materials are of poor quality, copyright concerns, a lack of quality control, and a lack of prestige all affect the adoption and use of institutional repositories in developed countries (Tmava & Miksa 2017; Casey 2012). Despite the increased adoption and use of institutional repositories in industrialized nations, American universities submit intellectual publications at a relatively low rate (Casey, 2012). African nations have had a low rate of institutional repository adoption compared to developed and Asian nations (Ezema, 2013; Kathewera, 2016; Lwoga & Questier 2014; Dulle 2010; Fasae, et al. 2017). The adoption and use of institutional repositories in Africa have not been encouraging, and among the factors hindering adoption are inadequate information, communication, and technology (ICT) skills, a lack of institutional repository awareness, and a negative attitude toward the adoption and usage of IRs (Christian, 2008; Nwakaego, 2017; Saulus, Mutula & Dlamin, 2017). Similarly, Sankar and Kavitha (2017) in their survey on the challenges of contributing to institutional repository system, found that "the challenges to the institutional repository include: funding, plagiarism, maintenance, copyright issue, lack of incentive, lack of will to deposit, lack of understanding of institutional repository goals, lack of administrative attention/support and lack of will to deposit" p 7. In the same vein, Bamigbola (2014) in her survey on the attitude and use of institutional repositories (IRs) by Faculty in Agriculture disciplines, reposted that the respondents strongly agreed that the major challenges to the use of institutional repositories are: lack of awareness to institutional repositories, epileptic power supply, fear of not being able to publish work submitted in an institutional repository, fear of plagiarism and ignorance of publisher policy.

Likewise, Omeluzor's (2014) study of institutional repositories (IRs) awareness and willingness of faculty staff to deposit research work: a study of faculty staff in a selected public and private university in Nigeria, found that the majority 64% and 72% of the respondents in private and public universities respectively agreed that plagiarism is a challenge. Another majority, 73.5% and 68% of the respondents noted that copyright was a problem while 64% and 68% of the respondents from private and public universities respectively also agreed that lack of understanding of the goals of IR was a challenge. Okhakhu (2015) also identified some of the issues that negatively impact the development of institutional repositories in Africa, including insufficient information and communication technology infrastructure, a lack of awareness of open access institutional repositories, insufficient funding, the high cost of internet bandwidth in the region, and a low level of awareness of these issues. Chan, Kwok, and Yip (2005) listed other challenges such as low levels of awareness of IRs, low levels of awareness of self-archiving rights among faculty members, insufficient institutional support and authors' inability to retain the correct version of their papers as required by publishers. Additionally, copyright has become a difficult issue to resolve (Wu, 2015). Similarly, Li and Banach (2011) cited a lack of sustainable funding and inadequate staffing as obstacles to

implementing a successful IR. Since many institutions are still developing their IRs, these issues need to be attended to as part of the planning process. Another challenge is a lack of collection policies, that is, policies that specify what resources should be included in an IR and in what format and who should include them. Adebayo (2009) identified several problems concerning the creation and maintenance of IRs. These problems include the tracking of publications, staffing and getting staff to agree to share their work. These challenges should be addressed by an administration that wants its IR to succeed. Rahman and Mezbah-Ul-Islam (2014) commented that though the challenges associated with implementing IRs may differ from country to country, a lack of awareness, copyright issues and inadequate funding are among the most common ones. Meanwhile, Fasae et al. (2017) attributed the challenges to insufficient funds, an unstable power supply and software problems. In the same vein, Fear of copyright infringement, plagiarism and lack of awareness were major challenges to the use of IRs (Alice and Alice 2017). The use of IRs by lecturers presents several general and context-specific obstacles, according to previous studies.

Globally, some of the issues included inadequate knowledge of intellectual property rights, a lack of awareness of publishers' policies supporting open-access IR, and a lack of awareness of IR in general (Creaser, Fry, Greenwood, Oppenheim, Probets, Spezi, & White 2010). However, other difficulties were unique to Nigeria, such as a lack of the technological expertise needed to use IR, an unstable power supply, a low internet bandwidth, and poor infrastructure (Nwokedi, 2011; Bamigbola, 2014). Similarly, Saini (2018) observed that the slow adoption and development of repositories in most developing countries is attributed to higher learning institutions still being in the process of establishing guiding principles and best practices. Slow adoption and use of institutional repositories in African countries are also being attributed to institutional challenges such as user awareness, poor user attitude, a reliable electricity supply, policies, Internet access and cost (Ampong, 2016; Tapfuma, 2016). Similarly, Akparobore and Omosekejimi (2020) studied faculty members' awareness and attitude towards the use of IRs in federal universities in South-South, Nigeria, the study revealed that 73(13%) agreed that lack of awareness is a challenge to the use of IR, 454(87%) disagreed. 176(31%) agreed that difficulty in using IR, whereas the majority 396(69%) of them disagreed and 322(56%) agreed that fear of not being able to publish works deposited in IR in a peer-reviewed journal is a challenge to use of IR whereas 250(44%) disagreed among others. Likewise, Ukachi (2018) highlighted inhibiting factors encountered in using IRs include; issues with the legal framework/ intellectual property rights and difficulty in content recruitment. Equally, Kumah and Filson (2021) highlighted major challenges of libraries in operating IRs in Ghana with includes, including inadequate ICT connectivity and infrastructure, unreliable power supply, copyrights and intellectual rights, financial constrain, inadequate advocacy and training on the importance of IRs to faculty and users were the major challenges of academic libraries in operating IRs in Ghana.

Though, certain strategies need to be adopted for institutional repositories to function effectively towards enhancing scholarly communication. This is needed because the design and obtainability of institutional repositories do not automatically translate to their optimal use. The place of awareness creation among the academics by the library as well as public promotion of the repository site should not be ignored. To minimize the abovementioned problems, strategies must be devised for the utilization of IRs. Though, Schmidt and Shearer (2012) indicated that the Confederation of Open Access Repositories is promoting new strategies for addressing some of the barriers to populating repositories. Vishal and Bhandi (2007) remarked that libraries can be involved in the development of IRs and can serve as collaborators in research and teaching. Further, libraries can educate faculties of academic institutions on the importance of open access for the global sharing of scholarship to enhance the visibility of authors and institutions.

> According to Ukwoma and Ngulube (2019) stated that "the major strategies for improving the use of IRs are that the universities should ensure adequate bandwidth for easy downloading and archiving of articles (3.71), there should be a constant power supply to enable access to the repositories (3.65), they agreed that it is necessary to create more awareness of the importance and content of IRs (3.62), university management to sensitize academics on the use and benefits of IRs (3.55), IRs should have search features like searching on multiple criteria such as author, title and subject for their effective access and use (3.51) and having an IR policy(3.42) among others" P. 7.

Meanwhile, Akparobore and Omosekejimi (2020) recommended that contributing scholarly works to the university's IRs by faculty members should be made mandatory by Federal university management in Nigeria; the University library should be organizing orientation programmes, seminars and workshops regularly to create awareness in faculty members the of the usefulness and benefits of institutional

repositories among others. This study, therefore, is engrossed in the challenges and strategies of academic staff towards creating IRs to effectively promote scholarly communication in universities in Nigeria.

Methodology

The study adopted the descriptive survey research design. The study covered six federal universities in South-West, Nigeria. The population figure is obtained from the establishment unit of university studies (2020/2021 academic session). The instrument for data collection for this research was a self-constructed questionnaire titled: Challenges and Strategies to Use Institutional Repository among Academics Staff in Universities Libraries in South-West, Nigeria. (CSUIRASULSWN). The researchers distributed the questionnaire with the help of co-librarians as research assistants. Three research assistants from the institutions helped to distribute and collect the instruments since they are familiar with the respondents. A period of 2 weeks was used for the administration and collection of the instruments. Out of the 420 questionnaires that were distributed to the respondents, 300 were duly completed and found usable, which gives (a 71.4%) response rate. Results were analysed using Statistic Package for the Social Science (SPSS) and are presented in percentage, mean and standard deviation. For the responses, it was based on (4) - point rating scale of Strongly Agree (SA), Agreed (A), Disagree (D), and Strongly Disagree (SD).

Presentation of Results

Table 1: Questionnaires and Response Rate

Name of University	No Questionnaire Administered	No of Questionnaire Returned	Response Rate%
The Federal University of Technology Akure, (FUTA), Ondo	70	51	72.8
Federal University of Agriculture Abeokuta, Ogun, (FUNNAB	70	49	70
Obafemi Awolowo University. Ile-Ife (OAU)	70	54	77.1
University of Ibadan, Ibadan (UI)	70	57	81.4
University of Lagos (UNILAG)	70	47	67.1
Federal University, Oye-Ekiti, Ekiti State (FUOYE)	70	42	60
Total	**420**	**300**	**71.4**

Table 1 revealed that out of the 420 copies of the questionnaire administered for the study, 300 were retrieved and found useable, representing (a 71.4%) response rate.

Research Question 1: What are the challenges of usage of IRs among academic staff in university libraries, in South-West, Nigeria?

Table 2: Challenges to the usage of IRs in Federal Universities in South-West, Nigeria

Challenges (IRs)	A	D
Poor ICT Skill	225(74.9%)	75(25%)
Financial constraints	192(64%)	108(36%)
Low bandwidth	175(58.3%)	125(41.6%)
Epileptic power supply	200(66.6%)	100(33.3%)
Fear of copyrights infringement	197(65.6%)	103(34.3%)
IRs lack global accessibility	116(38.3%)	184(61.3%)
The absence of IRs policy hinders the submission of content to the IRs	198(66%)	102(34%)
Unwilling to deposit	209(69.6%)	91(30.3%)
Lack of awareness of publishers' policy as regards depositing published works in IR	182(60.6%)	118(39.3%)
Fear of plagiarism	180(60%)	120(40%)
Depositing scholarly works in IRs consumes time	128(42.6%)	172(57.3%)

The result in Table 2 reveals the challenges of the usage of IRs in university libraries. The respondents agreed that poor ICT skills 225(74.9%), unwillingness to deposit 209(69.6%), epileptic power supply 200(66.6%), and absence of IRs policy hinder the submission of content to the IRs 198(66%), fear of copyrights infringement 197(65.6%), financial constrain 192(64%), lack of awareness of publishers policy as regards depositing published works in IR 182(60.6%), fear of plagiarism 180(60%) and low bandwidth 175(58.3%). Whereas 184(61.3%) and 172(57.3%) of the respondents disagreed that IRs lack global accessibility and depositing scholarly works in IRs consumes time respectively.

Research Question 2: What are the strategies that would enhance the use of IRs among academic staff in universities in South-West, Nigeria?

Table 3: Strategies that would enhance the use IRs

Strategies (IRs)	A	D
Having an IRs policy will encourage the acquisition of content	216(72%)	84(28%)
Specifying copyright and intellectual property rights in respect of IRs content	199(66.3)	101(33.6%)
Management should endeavour to increase Internet bandwidth to enhance the effective utilization of the IRs	241(80.3%)	59(19.6%)
An alternative power supply should be provided	251(83.6%)	49(16.3%)
Availability of plagiarism software	213(71%)	87(29%)
There should be sensitization of academics by the university management on the use and benefits of the IRs	178(59.3%)	122(40.6%)
Creating more awareness of the importance and content of the IRs	189(63%)	111(37%)
Motivate staff/researchers to create and contribute local content to the IRs	195(65%)	105(35%)
More training for staff and students in the creation access and use of the IRs	186(62%)	114(38%)
Creating and displaying documentaries (video recordings) on resources in the IR	161(53.6%)	139(46.3%)
Helping users in searching and retrieving information	198(65.9%)	102(34%)

Table 3 shows that respondents agreed that the sustainable strategies to surmount the factors facing the IRs in universities are alternative power supply should be provided 251(83.6%), management should endeavour to increase Internet bandwidth to enhance effective utilization of the IRs 241(80.3%), having an IRs policy will encourage the acquisition of content 216(72%), availability of plagiarism software 213(71%), specifying copyright and intellectual property right in respect of IRs content 199(66.3%), helping users in searching and retrieving information (198(65.9%), motivate staff/researchers to create and contribute local content to the IRs 189(65%), creating more awareness of the importance and content of the IRs 189(63%), more training for staff and students in creation access and use to the IRs 186(62%) and there should be sensitization of academics by the university management on the use and benefits of the IRs 178(59.3%), creating and displaying documentaries (video recording) on resources in the IR 161(53.6%).

Discussions of Findings

The findings of the study showed that academic staff faced diverse challenges in the process of usage of IRs in university libraries. The inhibiting factors are poor ICT skills, unwillingness to deposit, epileptic power supply, absence of IRs policy hinders the submission of content to the IRs, fear of copyrights infringement, financial constraints, lack of awareness of publishers policy as regards depositing published works in IR 182, fear of plagiarism and low bandwidth. The outcome of this study conform with that of Christian, 2009; Nwakaego, 2017; Saulus, Mutula, and Dlamin, 2017; Sankar and Kavitha 2017) who in their study identified funding, plagiarism, maintenance, copyright issue, lack of incentive, lack of will to deposit, lack of understanding of institutional repository goals, lack of administrative attention/support and lack of will to deposit. Supported by Kumah, and Filson (2021) inadequate ICT connectivity and infrastructure, unreliable power supply, copyrights and intellectual rights, financial constrain, inadequate advocacy and training on the importance of IRs to faculty and users were the major challenges of academic libraries in operating IRs in Ghana.

The study also indicated that respondents suggested strategies to surmount the factors facing IRs in universities. Such as alternative power supply should be provided, and management should endeavour to increase Internet bandwidth to enhance the effective utilization of the, having an IRs policy will encourage the acquisition of content, availability of plagiarism software, specifying copyright and intellectual property right in respect of IRs content, helping users in searching and retrieving information, motivate staff/researchers to create and contribute local content to the IRs, creating more awareness of the importance and content of the IRs, more training for staff and students in creation access and use to the IRs and there should be sensitization of academics by the university management on the use and benefits of the IRs, creating and displaying documentaries (video recording) on resources in the IR.

This finding is in support by Ukwoma and Ngulube (2019) who found out that universities should ensure adequate bandwidth for easy downloading and archiving of articles, there should be a constant power supply to enable access to the repositories, create more awareness of the importance and content of IRs, university management to sensitize academics on the use and benefits of IRs, IRs should have search features like searching on multiple criteria such as author, title and subject for their effective access and use and having an IR policy among others. This is supported by Akparobore and Omosekejimi (2020) suggested that contributing scholarly works to the university's IRs by faculty members should be made mandatory by Federal university management in Nigeria; University library should be organizing orientation programmes, seminars and workshops regularly to deepen faculty members' awareness of the usefulness and benefits of institutional repositories among others.

Conclusion
The outcome of this study established the fact that institutional libraries in Nigeria are faced with numerous challenges which have worked against the optimal delivery of scholarly output. The study apart from adding to existing literature provides an understanding of the challenges and strategies to use IRs. The main challenges acknowledged include poor ICT skills, epileptic power supply, financial constrain, lack of awareness of publishers' policy as regards depositing published works in IR, fear of plagiarism, low bandwidth, fear of copyright infringement, absence of IRs policy hinders the submission of content to the IRs and unwilling to deposit. Management of institutions of higher learning must address these challenges, through increased Internet bandwidth, provision of IRs policy, purchasing of plagiarism software, specify copyright and intellectual property right among others. Given the foregoing, the following recommendations were made:

Recommendations
1. To protect the institution from copyright infringement issues, the library management should expose staff members responsible for content upload to pieces of training in the area of copyright law. This will give them knowledge of the type and aspects of the materials that need to be uploaded. Additionally, plagiarism software should be implemented.
2. The institutions ought to implement a submission policy that will require staff members to send their research products to the repository. Such a policy can require academic members of the institution to submit their work to the institutional repository as part of the evaluation process for promotions.
3. The university needs to set up a method for rewarding academic staff members who submit their work to the IR. This could be done by recognizing and giving research grants to staff employees whose list of publications during the appraisal period matches the materials accessible to such staff on the IR.
4. The institutions should request more money for the library from the university administration. Additionally, the library needs to raise money from corporate organizations and set aside enough money in its budget to run the IR efficiently. These will aid in resolving other issues, including connectivity and infrastructure issues, power generation options, finances for raising awareness, and bandwidth issues.

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