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Establishment of Institutional Repository (IR) in a Developing Country: Lessons from Landmark University, Nigeria

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Establishment of Institutional Repository (IR) in a Developing Country: Lessons from Landmark University, Nigeria

By

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Abstract

This paper discussed the establishment of institutional repository in a private university, Nigeria. It started with the introduction and stated that repository is a key element in institutional research agenda. It went further to discuss Eprints software used by Landmark University for her repository. The paper further discussed the current state of Landmark University (LMU) repository, how it is being managed, the practical processes and procedures involved in depositing documents into the repository. The paper went further to discussed the factors that contributed to the success of LMU repository such as institutional support, dedicated repository staff, faculty and staff support, quality infrastructures and equipment among others. It also highlighted some of the challenges to include indexing irregularity, mobility of authors, and workload of repository administrator among others. Based on these discussion, it was concluded and recommended that the university library should carry our enlightenment campaign, University management should introduce a policy document that states conditionality for self-archiving. All these will enable landmark university IR to meet up with best practices, thereby taking the university to the leagues of world best universities ranking and rating.

Keywords: Institutional Repository (IR), Eprints Software, University Library, Landmark University, Nigeria

Introduction

Tertiary institutions all over the world are pivotal to the advancement of knowledge which is essential to the development of fundamental economic and social sectors in their host countries. Educational sector in Africa has been enjoying autonomy of some sorts which allows the private players to admit students who intend to pursue higher studies. Landmark University (LMU) is a private tertiary institution established to explore "the hidden treasures in the mother-earth" with emphasis on agriculture. In line with its vision, it becomes crucial to drive quality research that will be visible and assessable to the global space. Management of the institution therefore, has identified key priorities for research and has set them out in the framework for the actualization of World Class Status. Members of faculty and postgraduate students have been identified as the major players in intensifying innovation through research and the management has committed resources to this scholarly activities.

One of the profound research strategy adopted by the University is the drawing of attention to its intellectual and scholarly output through open access (OA). It allows unrestricted access to peer reviewed academic articles and literature, giving researchers across the globe unhindered access the publication. According to Eysenbach (2006) research findings are more likely to be found and distributed through open source. One of the major channels to achieve this is to deposit scholarly materials in an institutional repository (IR), this is a digital platform used to archive, published documents. (Mullen & Ross, 2016, Idiegbeyan-Ose, Ifijeh , Iwu-James & Ilogho 2016). Similarly, in a research conducted by Swan (2010) the findings revealed that institutions with open access repositories enjoy higher usage and ranking of research materials, thereby improving the profile of both the institution and faculty members. The application of Information and communication technology in educational sector has led to the establishment of Institutional Repository. (Idiegbeyan-ose , Idahosa & Adewole-Odeshi, 2014, Idiegbeyan-ose, Nkiko, Idahosa, &Nwokocha,, 2016,). This is also in support of the fact that 21st century learners sort for E-

resources in for their research activities. (Idiegbeyan-ose, Ifijeh, Aregbesola, Owolabi & Eyiolorunshe, 2019)

Literature Review

Web-based technologies such as institutional Repository (IR) has a variety of software packages. One of such is the Eprints, which has existed for close to two decades. Landmark University and other similar institutions such as, the British Library, Australia National University, CalTech, Birmingham University and Harvard College among others used the Eprint for their repository. (Beazley, 2011). Simalrly, Covenant University, Nigeria also use the software for the university repository. (Idiegbeyan-Ose, Ifijeh , Iwu-James & Ilogho 2016). The software is developed by the University of Southampton in England which is a freely distributable archive system available on the Eprint website. It has an enhanced user experience interface that makes navigation simple and easy.

Landmark University Repository is currently running on 3.3.15 version of the Eprints software. The current drive for quality and assessable research has been aided by its repository and the user-friendly Eprints software used for hosting an ever-increasing collection of the institution's intellectual outputs. A collaboration exist between the university's library and the University's information and technology unit. While the repository is being managed by Library, the ICT unit provides technical support for the repository administrators.

 A unique self-archiving feature exist on the software which enables authors to deposit their pre-prints and post-prints publications into the IR. However, control of what is "live-archived" (made available online) lies with an administrator, because as a matter of policy all deposited items must be approved by an editor. This is done in other to maintain metadata homogeneity and to ensure that deposited items maintain the scope of the archive (Beazley, 2011). The University digital repository is available at (https://eprints.lmu.edu.ng).

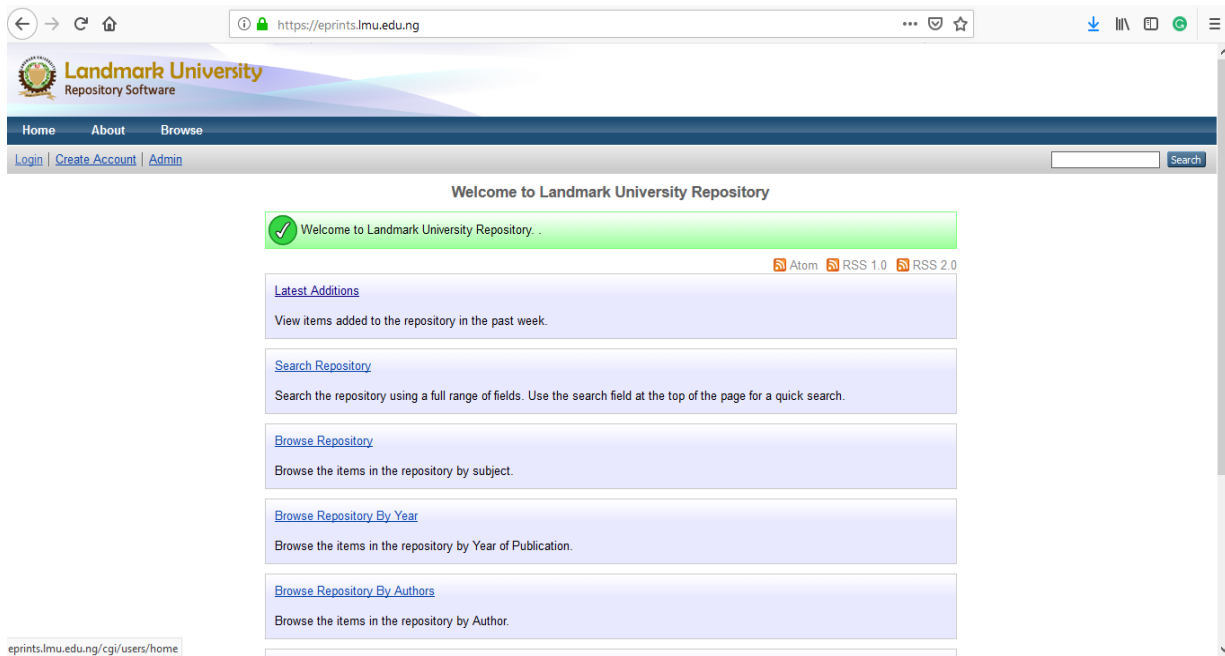Below is the interface of the Landmark University repository software.

Figure 1: Landmark University Repository Software Webpage.

The IR disseminate the intellectual outputs authored by members of faculty and graduate students of the University. Through the repository an author within the University community can self-archive their pre-prints, post prints and other scholarly publications. This increase the visibility and citations of the researcher.
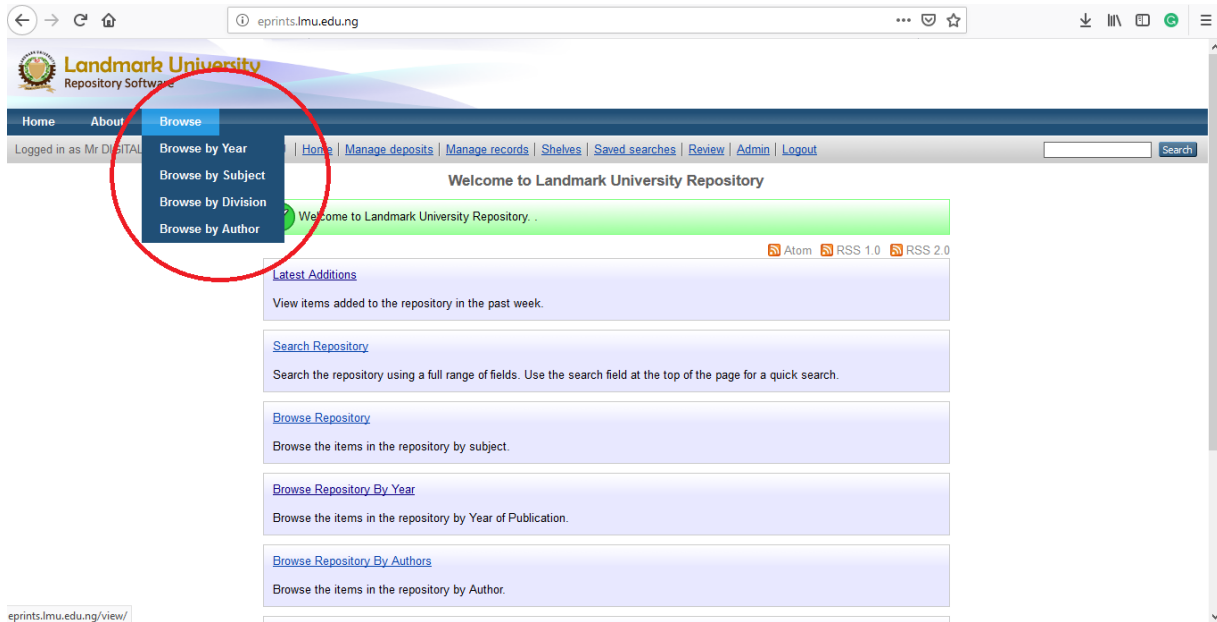
Figure 2: Landmark University Repository Article Retrieval Menu.

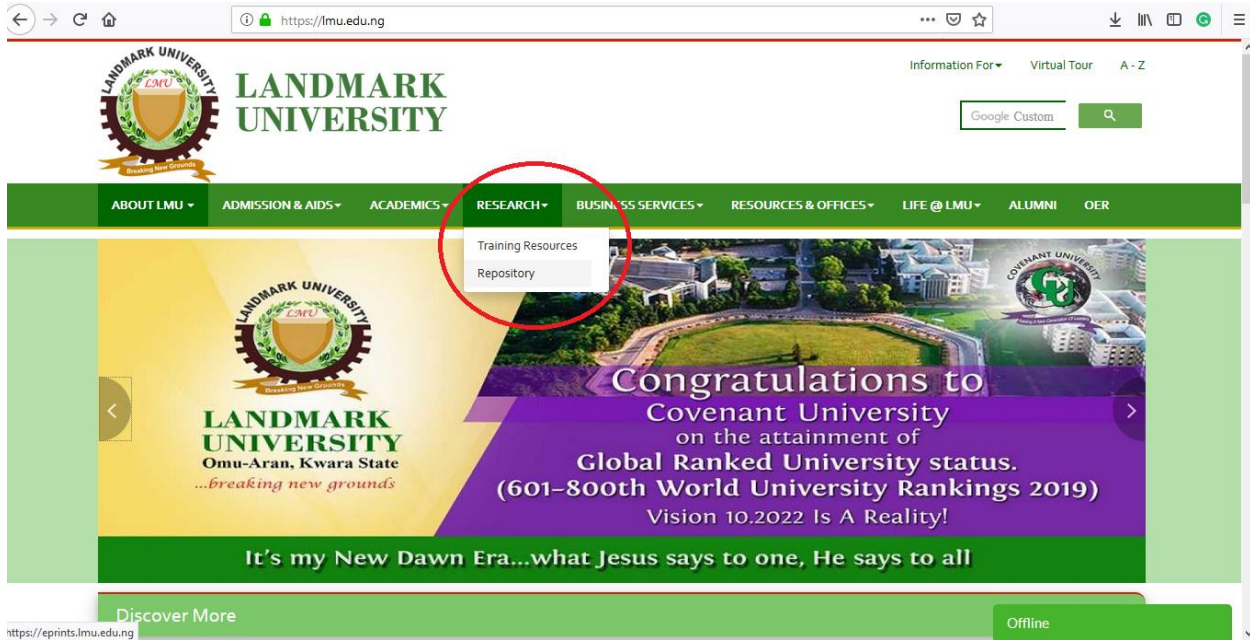The repository has been promoted and can also be accessed through the University's website (https://lmu.edu.ng).

Figure 3: Landmark University website.

Archiving Procedure

Authors have a unique login detail consisting of a username and password, which gives them an access to self-archive. The repository administrator can also make deposits on behalf of authors who so wish. Authors can submit their publications to a dedicated email address, and then these will be uploaded on the repository by the concerned Library staff. In case of publications in hard copies, the documents will be scanned (digitized) and uploaded into the repository.

Below Figure illustrates the six easy steps for depositing in the repository.

Figure 4: Six steps to deposit on the LMU repository.

The document deposited by the author will remain "under review" until an administrator verify and approve the document for a "live archive" status. IR administrators have a login detail that gives them the full rights to deposit, view, edit, publish and retire publications on the repository.
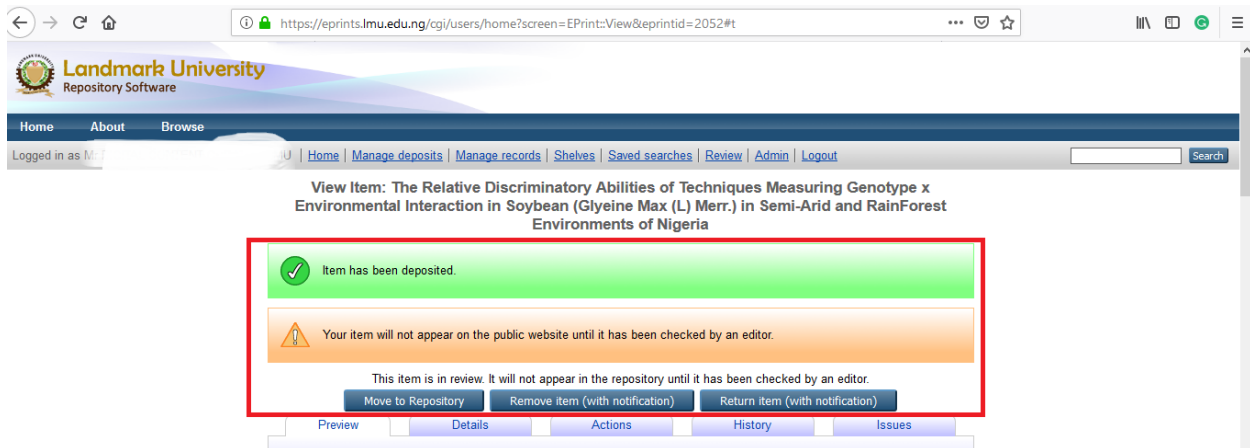

Figure 5: A deposited item awaiting an administrator/editor's approval.

LMU Repository Collection

The University has four (4) colleges – College of Agricultural Sciences , College of Engineering, College of Business and Social Sciences, College of Pure and Applied Sciences and the School of Postgraduate Studies. . The repository currently holds 1,364 scholarly outputs including; Articles, Books, Book Chapters, Conference Papers, and Ph.D. Theses.

College-wise collection in the repository as on March 9, 2019 is represented in the figure bellow.
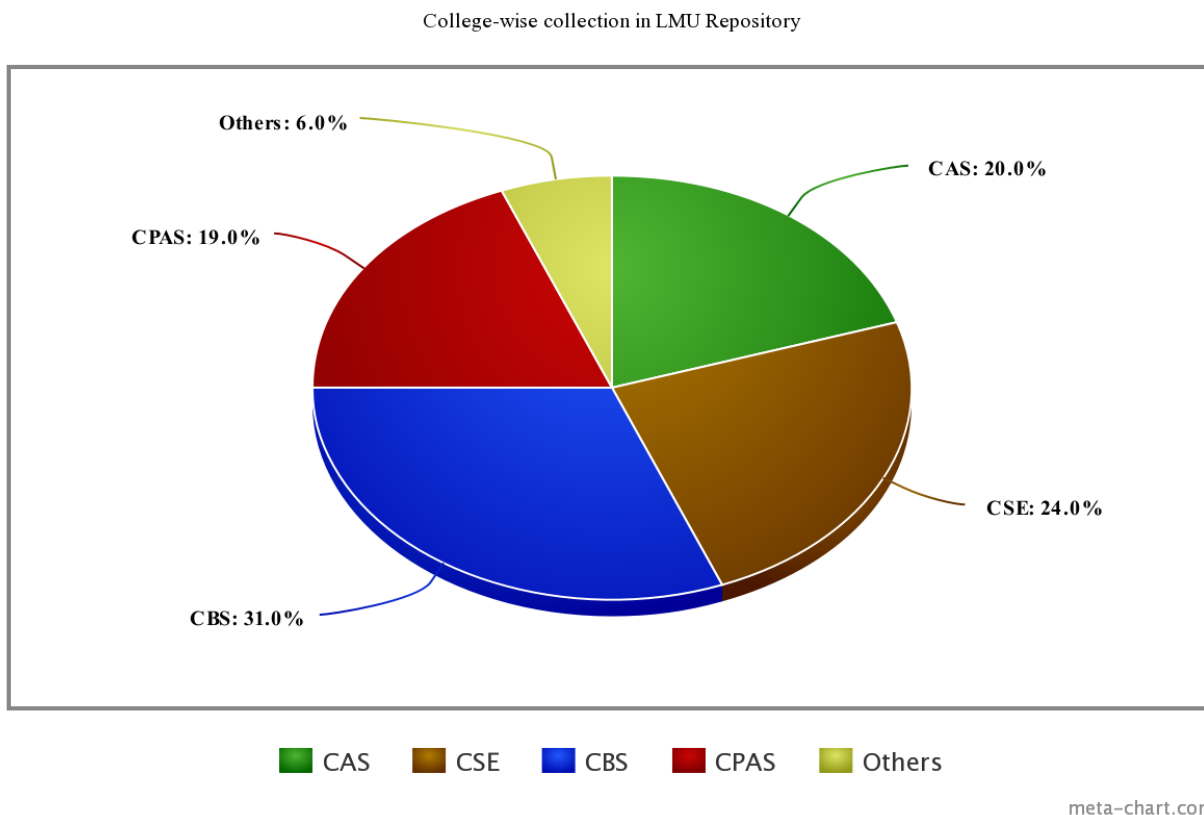
College-wise collection in LMU Repository

Figure 6: College-wise Collection in LMU repository.

Factors Contributing to the Success of LMU Repository

i.   **Institutional Support:** LMU is keen on research and this is evident in management's support for all research oriented activities. Establishing an IR is one of the school's policy on research development. The university paid for publications indexed in SCOPUS and Thomson Router to be opened, (open access) and the documents are uploaded in the Institutional Repository. The management of the institution provides adequate financial and human resources to the Library and the ICT unit. when so needed. LMU's repository

currently ranks 1,780 among other IRs in the world, according to the January, 2019 edition of TRASPARENT RANKING: by Google Scholar.

ii. **Dedicated and Trained Staff:** The University organizes a rigorous induction training program for new employees. The goal of the program is to imbibe them with the core values of the university. They are; "Spirituality, Capacity Building, Possibility Mentality, Responsibility, Integrity, Diligence and Sacrifice." These core values are major driving force for all staff of the university.

iii. **Faculty and Staff support:** Authors are quite responsive to the repository. ICT competency among faculty and staff enables them to self-archive. About 35% of deposited items in the repository were self-archived. Authors have suggested few tips on improving the repository.

iv. **Quality Equipment and Infrastructure:** The University is well furnished with quality equipment and infrastructure that makes repository viable. There is free access to constant power supply, negating the common knowledge of inadequate and scare power supply in Nigeria. There is also access to free internet all the time accessible at any location on the campus including class room, lecture halls, halls of residents, library and staff quarters. Similarly, staff have either a laptop or a desktop computer.

Challenges and Recommendations of IR in LMU

i. **Intermittent Usage of IR:** Some faculty, staff and graduate students of LMU are yet to internalize the IR technology. Deposition of items do not occur year-long. A steady use of the repository usually occur during faculty promotion exercise in LMU. During this period, a large collection of publications are usually queued up for a live achieved status. There is therefore a need for the Library professionals to adopt certain awareness program in making different stakeholders in the University to be aware of the benefits of IR. Librarians can use ways like handouts, brochures or pamphlets, seminars to market and promote the repository among their user community.

ii. **Barriers Caused by High Mobility of Authors:** While the University can boast of a sufficient computer literacy among faculty, staff and graduate students, they do not always sit down with desktop or laptop computer. An ICT competency test must be passed at both admission and appointment entry, the university management can leverage on this ability

of its community by developing a mobile app for its repository. This can reduce the barrier of accessing the repository due to high mobility. A mobile app directly linked to the EPrints software will definitely save the user's time. It can also give proud feelings to the author whose documents are live archived in the repository. However, it is not enough to create a mobile app, it must be user-friendly and easily assessable for download on all mobile application stores such as Google Play, Windows Store and Apple Store. After downloading the app, a click on the repository icon should direct the user straight to the home page where s/he can navigate through various options especially the one shown in Figure 4 above.

iii. **Work Load for Repository Administrators:** For the purpose of information mobility hard copy documents need to be digitized. This is usually done through a scan and capture software like the scanner. The repository office currently make use of the hp Scanjet 5590 to digitize hard copy publications. It is a painstaking activity especially when the documents cannot be detached into single papers. To avoid this painstaking experience, authors who has the ability to self-archive prefers to submit their voluminous hard copy documents to a repository administrator for scanning, uploading and archiving.

Figure 7: Digitizing a hard copy document.

Scanning each pages of such document is monotonous and time consuming. Although the institution has 3 repository administrators, 2 of those 3 performs supervisory roles to the last administrator. This administrator has to dedicate time to this activity at the detriment of other roles required of him. This usually have effect on the numbers of document that are live archived in the repository. The university management should employ more staff in the IR unit to cope with the demand of work in hat unit.

iv. **Indexing Irregularities:** Although authors can self-archive their documents in the IR, only the administrator have the authority to make it visible and assessable online. There are cases where authors deposit their publications using different name formats. By implication, the author will have multiple profiles on the repository making the publication to be scattered across the multiple profiles that have being created.

Conclusion and Recommendations

An open source repository is a resourceful platform for academic and research institutions and Landmark University is exploiting this platform to aid its research goals of visibility and citations. Human beings can make such technology active and rewarding through proper usage. The Eprints software has unique features to successfully manage a digital repository therefore, users must take full advantage of the technology. The university library should enlighten landmark community on the importance of repository in academics and research. An information literacy program that seek to spread the knowledge and importance of the repository should be lunched. A policy document that states conditionality for self-archiving should be created. Furthermore, repository software should be customized and constantly updated to meet the needs of end-users. All these will enable landmark university repository to meet up with best practices, thereby taking the university to the leagues of world best universities ranking and rating.

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