

Enhancing Institutional Repositories (IR) in Ghana

R. B. Lamptey and A. Corletey

*Institutional Repository, Kwame Nkrumah University of Science
and Technology-Kumasi-Ghana*

Abstract

Academic and Research libraries in Ghana have difficulty accessing research work done in their institutions and in Ghana as a whole. This is a challenge in supporting teaching, learning, research and knowledge dissemination. Therefore, an alternative solution can be to enhance the Open Access Institutional repositories (OA- IR). The technology is currently new in Ghana with only one university hosting it. This article provides an overview of the establishment of OA- IRs in Ghana, the challenges and making a case for key decision makers to consider ways in setting up and enhancing their institutional repositories.

Keywords

Intellectual output, digital archiving, open access, publishing, information professionals, Ghana, institutional repository

1.0 Introduction

Preserving knowledge and looking forward to its wider availability has never been more important than it is today for the information society. Librarians and information professionals should be reminding themselves that we live in a world that is saturated in information, Asamoah-Hassan (2009) says a world which good, well understood, well managed information is easily accessible, can mean the difference between prosperity and destitution. Tise (2010) argues that reading which is the tool for growth and development, information and knowledge, was alien to Africans, and was clearly absent. This has contributed to the growing unemployment, widespread poverty and limited availability of social services. The information famine is a significant contributor to the growth of a country. There is information famine in most developing countries even in Ghana. It is crucial that researchers, academics and scholars in Ghana,

seek solutions for alleviating the information famine and thereby integrating their respective universities or countries into the global economy as a supplier and user of information.

Open access institutional repositories for global information from a remote place are present day's requirement for academic and research libraries. The Implementation of institutional repositories has emerged as a new strategy that has allowed universities and research institutions in the developed world to apply serious, control to accelerate changes taking place in scholarship and scholarly communication.

1.1 Access to Information in Academic Environment

Seibert et.al (2001) argue that "a person seeks information to enhance his competency and skills and greater access to information and information resources would lead to his higher level of motivation" The nature of information seeking may range from trivial information to a sensitive research area. For example, the information access could be to monitor development of a well-known topic or subject over the period of time; or to carryout stereotyped series of searches to achieve a particular goal; or to explore and understand the new subject of interest.

Manjunatha and Shivalingaiah (2003) defines information access as the modes or means through which information is made available, or to an entire range of possibilities for making information and information services available to the users. Libraries are repositories of information sources and play an important role in the academic world by furthering research among academics and researchers. The current information landscape has offered a plethora of options for accessing the various format and types of information. With this glut of options, Academic and Research libraries in Ghana still have difficulty accessing research work carried out in their institutions and in Ghana as a whole. The traditional way has been to publish research work in their institutions printed journal or journals outside the institution and displaying bound postgraduate theses on the library shelves for limited or no access. However this can cause serious plagiarism in the country's universities and research institutions. An alternative could be to deposit them into an online database of the institution which can be accessed by all members of the institution and outsiders as well. Johnson (2002) is of the view that the open access movement and institutional repositories could contribute significantly to economic growth by broadening the market for scholarly publications and research results.

1.2 Open Access (OA)

Open access (OA) scholarly literature is composed of free online copies of peer-reviewed journal articles and conference papers as well as technical reports, theses and working papers with no licensing restriction on their use by

readers. They can therefore be used for research, teaching and other purposes thereby enhancing knowledge dissemination. According to Asamoah-Hassan (2007) it enables developing countries to have access to research output from the north. However this will aid academic and research libraries to satisfy the information needs of their users as cost of acquiring journals are going outside their budget. This is an urgently needed opportunity for the improvement of academic research quality assurance, a major asset for the developing world like Ghana.

1.3 Importance of Institutional Repositories to Academic and Research Libraries in Ghana

According to Lynch (2003) a university-based institutional repository is 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 members.

The developments of institutional repositories have largely taken place in universities in Europe, America, Asia and South Africa and have been of great benefits. Gradually it is becoming clear that academic and research institutions may in the near future no longer pay the subscription prices charged by publishers of scholarly publications. It therefore means that universities in Ghana can adopt the strategy used by the South African universities to promote free and easy access to scholarly information. Below are some benefits of IR for academic and research libraries in Ghana. IRs:

- Can provide users with online access to various research articles produced within and outside Ghana.
- Ease and speed of use to a great amount of information sources just at the touch of a few keys which the current system of information retrieval in libraries does not.
- Can be accessed by multiple users at the same time, any time, and any day once the host server is always on or uninterrupted power supply.
- Saves shelf space and labour cost in libraries

2.0 Overview of IR Implementation in Ghana

According to Lynch (2003), the development of institutional repositories emerged as a new strategy that allows universities to apply serious, systematic leverage to accelerate changes taking place in scholarship and scholarly communication. He further states that many technology trends and development efforts came together to make this strategy possible. Online storage costs have dropped significantly; repositories are now affordable, hence universities and research libraries should take advantage. Developing or establishing institutional repositories in Ghana does not require that each institution act entirely

on its own. Consortia like the Consortium of Academic and Research Libraries in Ghana (CARLIGH) could provide a logical infrastructure for implementing institutional repositories via collective development. Such cooperation could deliver economies of scale and help institutions avoid the needless replication of technical systems and information sources. Indeed, consortia might well prove the fastest path to proliferating institutional repositories and attaining a critical mass of open access content.

2.1 The Current State of IR in Ghana

Setting up the first Institutional repository (IR) in Ghana was initiated by Mrs Helena Asamoah-Hassan, the University Librarian of Kwame Nkrumah University of Science and Technology-Kumasi. She setup the IR in her University and populated it with research papers from faculty and postgraduate theses of the university. These theses were in print, so the abstract had to be scanned and converted to digital format to enable upload onto the IR. This strategy was used till the university approved the IR policy for postgraduates to mandatorily submit their theses in both soft and hard copies.

This technology is new in Ghana with only Kwame Nkrumah University of Science and Technology (KNUST) hosting one online, filled with theses of postgraduate students and research work of few faculty and researchers. The KNUST IR called KNUSTSpace was set up in February 2009 and had a test run for 5 months and was opened to public use in July 2009. The software used (Dspace) is an open source software developed by the Massachusetts Institute of Technology (MIT) and Hewlett-Packard (HP) and was customised to meet the needs of the university.

The IR currently has 101 full text documents in portable document file (pdf) all articles from the Journal of Science and Technology publications (JUST) which is the university's quarterly print journal , 1,110 abstracts of postgraduate theses and some individuals research and conference articles. Since it is an open access IR any person anywhere can have access to these documents archived in the IR. It can be accessed through the major search engines like the Google, Yahoo or Exalead and others the URL <http://dspace.knust.edu.gh>

The IR is governed by a policy which has been approved by the University, and is managed by the IR team consisting of the University Librarian, the Systems Librarian and the Institutional Repository Librarian. It has a policy approved by the University for students, researchers and faculty members to deposit their research work, including conference papers, lecture notes and anything of academic and research use into the institutional repository. It is mandatory for all postgraduate students to submit their theses in soft copies for uploading online. This will help populate the repository with the full texts of their research work. Even with the policy in place, the IR team is finding it

difficult in getting access to these soft copies. So far the university has not created the awareness about the implementation of the IR and its policy to enable staff members to mandatorily deposit their papers. This hinders the progress of the repository. There is therefore the need for the university authorities to provide the necessary confidence in the IR policy to enable faculty members contribute their research works to the repository and also ensure long-term administrative attention span and commitment to the preservation and maintenance of the repository.

Recently the International Network for the Availability of Scientific Publications (INASP) and the Consortium of Academic and Research Libraries in Ghana (CARLIGH) initiated setting up IR platforms for some CARLIGH member institutions. So far (5) five of them have the IR platforms, with the onus on the institutions to populate the IR. Although this initiative was successfully implemented, the awareness about its importance is extremely low in Ghana.

2.2 Challenges of IR Establishment in Ghana

Establishing IRs in Ghana presumably could be the pad that will launch the Academic and research Libraries into the publishing of scholarly communication and the free flow of scholarly work. There are therefore some challenges in pushing for its establishment. For instance, Asamoah-Hassan (2009) argues that it is difficult convincing university management, researchers and academics that it is necessary to have IR and get them to agree to plan and support it on long term basis. Funding to start and to sustain the IR and reliably electricity supply, and reliable and good internet connectivity are major issue and also permissions for licensing and copyright issues and resistance from computer phobia of some faculty and researchers.

3.0 The Way Forward

Academic and Research libraries in Ghana have a substantial role to play in growing the information and knowledge pool and to ensure quick access. Johnson (2002) confirms that providing no- or low-barrier access to the intellectual product generated by an institution increases awareness of research contributions. This should be the motivating factor for academic and research institutions in Ghana to create and maintain a digital repository. Librarians and Information professionals in Ghana should demonstrate leadership in the IR field, creating IRs and encouraging open access mandate, and preparing key decision makers to understand the importance of digital archiving.

Regardless of the above listed challenges information professionals and Librarians should see the benefits more than the challenges and seriously advocate for its establishment in their respective institutions. Moreover, knowl-

edge of the information professionals immensely helps in advocating for the establishment so therefore one need to be knowledgeable about IRs first. The libraries need to have standby generators as well as increase their internet bandwidth. Information professionals will have to make presentations at gatherings of academics and researchers, featuring the benefits of an IR to them.

Lynch (2003) states that most individual faculty lack the time, resources, or expertise to ensure preservation of their own scholarly work even in the short term, and clearly cannot do it in the long term which extends beyond their careers; the long term can only be addressed by an organizationally based strategy. Institutional repositories can address both the near-term questions about continuity of access by providing an environment in which such new works of scholarship can be managed and disseminated.

4.0 Conclusions

Academic and research libraries, perform functions of identification, acquisition, processing, storing, dissemination and validation of information, therefore they must play a key role in the online production of scholarly information.

Setting up and enhancing open access repositories, digitising and putting academic works online must be their major priority in this current information overflow. Enhancing institutional repositories in Ghana will offer a strategic response both to the opportunities of the digital networked environment and the systemic problems in today's access to research and scholarly work. This response can be applied immediately, reaping both short-term and on-going benefits for research institutions, the universities and their faculty and advancing the transformation of scholarly communication over the long term. Academic and research libraries in Ghana will have to optimally ensure the survival of values that the library has represented in the academic sphere for its future existence.

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