TOWARDS NATIONAL ETD DATABASE: RESPONSIBILITIES FOR LIBRARIES IN KENYA

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ABSTRACT

This paper outlines the status of theses and dissertations publications emanating from Kenyan universities and efforts towards enhancing their visibility. It gives a background on the factors contributing to the growth of theses and dissertations which include the rise in number of universities, increase of approved graduate courses and the higher number of students graduating.

It further outlines the responsibilities for libraries in management of theses and dissertations, and emphasizes the need for adapting new technologies to fulfill their roles. Librarian, as experts in collection development, information storage, cataloguing and dissemination, should take leadership role in management of information in any format as well as in planning and developing institutional repositories. Also collaboration with various stakeholder who are concern with local content such as Kenya Education Network (KENET) is emphasized.

It advocates for establishment of national repository that takes a central role in management of the scholarly research publication. It describes an institutional, national and African-based repository (INAR) model for management and dissemination of ETDs. INAR is a 3-tier hierarchal setup that has the institutional repositories (IR) are at the bottom, then the National ETDs in the middle and the regional DATAD database at the top level.

It concludes with outlining the role of national repository center.

Keywords (Required)

Theses, dissertations, ETD, institutional repositories, national repositories, information systems, metadata, universities, Kenya.

INTRODUCTION

In the recent past there has been a marked increase in the number of postgraduate theses and dissertations in the country. University libraries usually receive these publications which they index into their respective online catalogues. To trace these documents therefore it will require visiting numerous catalogues of the various universities. This practice wastes a lot of time and often never exhaustive, it limits access and visibility of Kenyan scholarly output. In order to increase visibility these publications need to be indexed into a form that is harvestable into a major search engines or repositories.

Some universities are now establishing institutional repositories (IRs) for their publications which will include theses and dissertations. However without a unified system of indexing it will always be a challenge to comprehensively search for scholarly output form Kenyan universities. It is for this reason that a national electronic theses and dissertation (ETD) repository is highly advocated.

The rate of scholarly publications is steadily rising as compared to a few years ago. Prior to 2009 a list of theses and dissertations produced by Kenya Information Preservation Society (KIPS) had just over 12,000 publications that had cumulated over the years in the libraries from 12 universities and 8 research institutions. Significant growth can be marked by the statistics from two major universities – University of Nairobi and Kenyatta University – that have a combined average of over 2000 theses per year. The increase can be attributed to three main factors as outlined below. First is the gradual rise in number of universities. Second is the increase of approved graduate courses and finally the higher number of students graduating.

Number of Universities in Kenya

In the last ten years, the number of universities in Kenya has more than doubled. According to the Economic Survey reports of 2005 and 2010, the universities increased from 15 in 2000 to 31 in 2009 (see Table 1 below). The current status of recognized universities stands at 50 (http://www.che.or.ke/status.html).

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Public	6	6	6	6	6	6	7	7	7	7
Private	9	11	13	17	17	17	17	21	21	24
Total	**15**	**17**	**19**	**23**	**23**	**23**	**24**	**28**	**28**	**31**

Table 1. Number of Universities in Kenya

Post Graduate Programmes

Almost all the universities in Kenya offer post graduate courses. The directory of approved programmes offered in Kenyan Universities, CHE (2008) lists 17 masters and 8 PhD programmes. Some of the programmes were being offered in 5 or more institutions, thus the Doctor of Philosophy (5); Master of Education (7); Master of Business Administration (8); Master of Science (11) and Master of Arts (14). This scenario justifies the need for a national theses and dissertation repository for consultation before any new research is undertaken. It will minimize possible duplications.

Number of Graduating Students

Graduating students directly impact the number of theses and dissertations since they are responsible for their publication. University of Nairobi leads in student enrollment at graduate studies followed by Kenyatta University. Recent statistics show a steady rise of graduating students as shown in Table 2 below.

Graduation Year & Number	2009		2010	
	41st	42nd	43rd	44th
PHD Degrees	13	28	26	18
Mater Degrees	381	998	679	1299
Total	**1420**		**2022**	

Table 2. Graduating Students from University of Nairobi

Graduation Year & Number	2009		2010	
	26th	27th	28th	29th
PHD Degrees	19	32	22	23
Mater Degrees	150	309	189	311
Total	**510**		**545**	

Table 3. Graduating Students from Kenyatta University

RESPONSIBILITIES FOR LIBRARIES

University libraries are required to organize and make accessible not only books and other materials acquired but also theses, dissertations and other publications from the institution. Apart from the traditional indexing practices it is expected that libraries should innovatively adapt new technologies in meeting their role of facilitating access and custodians of information. Therefore librarians, as experts in collection development, information storage, cataloguing and dissemination, should take leadership role in management of information in any format – print, digital or otherwise.

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Genoni, P (2004) observes that technology is changing how researchers create, communicate, preserved and communicate new knowledge. Many avenues exist and may present difficulty in controlling new knowledge. However libraries should provide stewardship in planning and building institutional repositories that encourage researchers deposit new information. Librarian should thereafter facilitate access through established indexing services and repositories that enhance visibility.

For a long time, librarians have been aware that no library can be self sufficient and have always established or joined consortiums to enhance access and delivery of information. In recognizing that theses and dissertations are unique scholarly research and intellectual output, libraries within the country should work closely in harnessing these precious national information by establishing a national repository that will not only register all publication but also facilitate visibility. Further, collaboration with national establishments such as Kenya Education Network (KENET) that is responsible for interconnection among tertiary institutions and management of local content should be encouraged.

INAR MODEL FOR ETD MANAGEMENT

INAR is institutional, national and African-based repository which is a 3-tier hierarchal model for the management of theses and dissertations emanating from universities and research institutions in Africa. In this model the institutional repositories (IR) are at the bottom, then the National ETDs in the middle and finally the regional DATAD database at the top level. Repository unit established at any level has defined processes and conforms to international standards particularly for maintaining the ETDs metadata. All units are interrelated and can share data and information across and within each level. The overall aim is to comprehensively acquire, organize, store, conserve, disseminate and monitor use of scholarly publications of theses and dissertations emanating from Africa. Illustration of this concept is shown in figure I below.
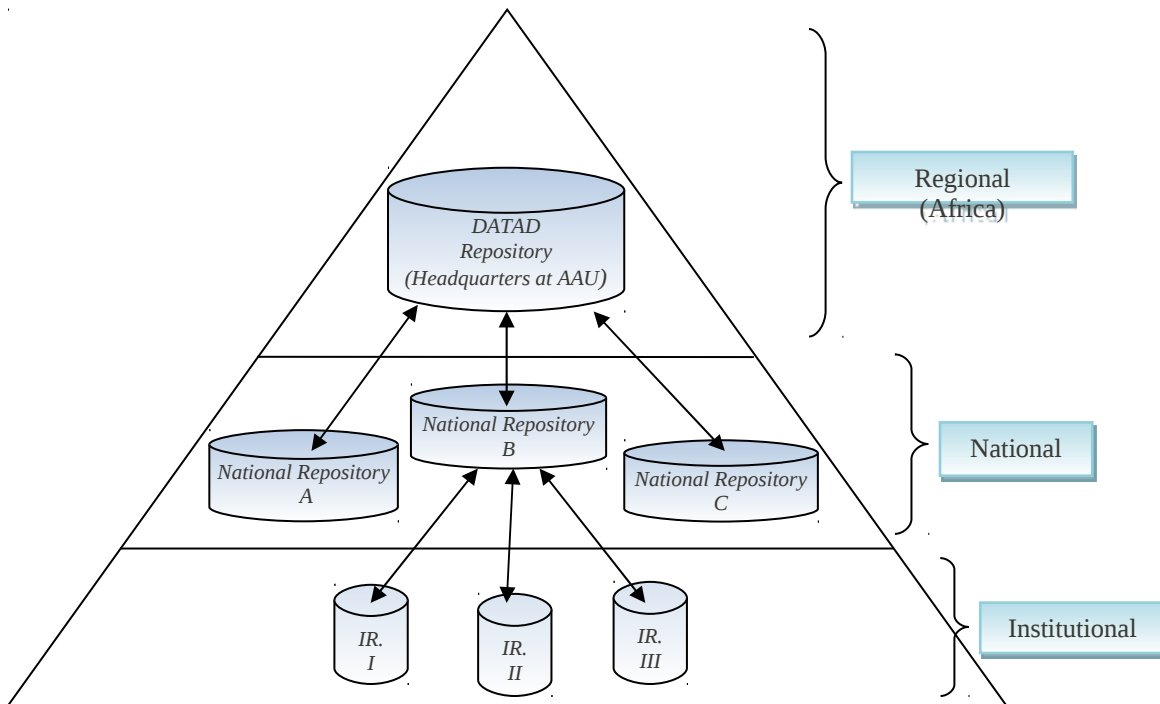
Three Tier Repository Model

Figure I: Three Tier INAR Model

In this approach, individual repositories are independent information systems with specific goals and have inputs, processes and outputs. A common goal at all levels is to update metadata of ETDs. Ideally the input of metadata should be done at the bottom level in the institutional repository before it is harvested into the national repository. At this stage data is verified and modified to meet the requirements of DATAD database before uploading at the top level. This is the best and most efficient practice. However, because institutions have different priorities, capacities and competences the ideal may not work. In some

circumstances the National Repository may have to input metadata from source. Whatever the approach librarians, who are the experts in information organization, should take leadership in the process.

A common concern at the institution is where the full-text ETDs are to be stored. There are three options available. First, the institutions are custodians having developed their own IR policies. The ETD metadata is passed on to the national repository before dispatch to DATAD. This is quite acceptable. Second option is where the national repository takes the responsibility for acquisition, organization, storage and facilitates access. This is the most efficient and suitable method. Lastly, ETDs are managed at DATAD headquarters. Obvious benefits include experience, access to suitable equipment, advocacy and sustainable budget.

Role of National Repository in Implementing INAR Model

The national repository is crucial in implementing INAR model. Its primary roles will be:

- Maintain record of all theses and dissertations produced in the country.
- Provide a single reference tool to scholarly research in the country.
- Play advocacy roles towards establishment of IR.
- Train and steer the development of IRs at all levels.
- Ensure that the ETD metadata conforms to the acceptable international standards.
- Facilitate assignment of Digital Object Identifier (DOI) to ETDs.
- Collaborate with national and regional services that work towards visibility and accessibility to scholarly work.

CONCLUSION

The need for controlling scholarly research from Kenyan universities is very critical in order to comprehensively conserve and increase visibility and provide researchers with a reliable and convenient repository. Individual universities are encouraged to establish institutional repositories that incorporates ETDs and links up with national repository that ensures quality indexing and enhances visibility in the African region and globally. The institutional, national and African-based repository proposed here promises better and sustainable system.

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(ENSURE THAT ALL REFERENCES ARE FULLY COMPLETE AND ACCURATE AS PER THE EXAMPLES – USE HARVARD/APA STYLE AS A GUIDE BUT INCLUDE URLS WHEREVER POSSIBLE)

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