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## The Role of Librarians on the Use of Institutional Repositories in Higher Learning Institutions in Kenya

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### **Abstract:**

*Purpose-* the purpose of this paper is to explore and understand the potential roles of librarians in institutional repositories in Kenya. Knowledge management practices and processes have roots in library practices anteceding institutional repositories. Thus, the library as an avenue for knowledge management can effectively become a physical or virtual place for open access and scholarly communication only if librarians' step outside traditional roles. Unfortunately, institutional repositories are not fully developed in some academic institutions. Unawareness of librarians of their roles, and being unskilled in implementing the institutional repository has been incriminated for this problem. Despite this, little has been explored to understand the roles of academic librarians in institutional repositories in higher learning institutions in developing countries.

*Design/methodology/approach-* Using analytical method, this paper analyses and presented various the matical issues on Institutional Repositories in relation to the roles of librarians, while highlighting limitations and proposing solutions for its sustainability.

*Findings-* the paper found that globally most universities have embraced IRS. However, the unawareness of librarians of their roles and low technical skills in the use of institutional repository has been incriminated for low visibility of research output notwithstanding the many research activities undertaken by universities. In fine the academic librarians have not played their roles in institutional repositories as extensive as expected.

*Originality/value:* Despite the high uptake of IRs by higher learning's institutions, little has been documented on the role of librarians in the use of institutional repository.

*Implications:* the review helps higher learning institutions and academic librarians to understand how academic librarians' roles have been transformed by the emergence of institutional repositories.

**Keywords:** Librarians, higher learning institutions, institution repositories

### **1. Introduction**

Globally institutional repositories (IRs) are catalytic of transformative role in academic knowledge management (KM). This role is vital to knowledge activities including the acquisition, creation, conversion, sharing, dissemination, transfer, preservation, and reuse of knowledge in higher education (Arjun, 2017). Knowledge management practices and processes have roots in library practices anteceding institutional repositories. Thus, the library as an avenue for knowledge management can effectively become a physical or virtual place for open access and scholarly communication only if librarians' step outside traditional roles (Laura, 2010). IRs continues to play such a transformative role through digital curation and dissemination of knowledge in the changing landscape of scholarly communication, and sharing such knowledge within and beyond the parent institution (Arjun, 2017).

A repository, deposit or file is a centralized website where digital information, usually databases or computer files are stored and maintained. They can contain files on the server or reference from its website to the original accommodation. They can be of public access, or may be protected and need a pre-authentication (Álvarez, Segoviano & Quintana, 2012). An institutional repository (IR) is defined to be a web-based database (repository) of scholarly material which is institutionally defined (as opposed to a subject-based repository); cumulative and perpetual (a collection of record); open and interoperable (e.g. using Open archive initiative-compliant software); and thus collects, stores and disseminates scholarly information (Ware, 2004). Institutional repository is a basic constituent of every knowledge management system.

The phrase 'institutional repository' is often used informally to differentiate between systems and services to collect and disseminate scholarly content (peer-reviewed articles written by faculty, electronic theses and dissertations) versus those systems and services supporting other types of digital objects (i.e., digital images of artwork) (Clobridge, 2010). The leading effect of existing institutional knowledge databases is not obvious and IRs are generally unknown because of a lack of positive publicity and promotion (Fang, 2013). The repository and its role in compliance with mandates may not be seen as an integral part of every library service and every librarian's professional mindset. Besides librarians may assume that the repository is now the place for open access and the transformation of public services and collection development may not be a reality (Zhang, Zeng, Li & Liu, 2012). However, for an institutional repository to successfully meet the needs of its various user communities, it should provide not only preservation and access to digital objects but also a range of services that make these objects useful which calls for the intervention of the librarians (Witten, Bainbridge & Nichols, 2009).

Mower and Chaufty (2009) explained the capacity of IRs to enhance opportunities for academic libraries to support and participate in the scholarly communication through digital information channel among research communities. They eluded also that, thee trend of establishing IRs to support scholarly communication process to enhance the visibility of research output and providing access through intranet or internet to the scholars. The creation of IRs has dual benefits for contributors and consumers of information. Hockx-Yu, (2006) expresses that digital preservation is the basic purpose of Institutional Repositories which have gained acceptance in the academic community as they enhance access to scholarly content. Once a repository starts to bed down in an institutional culture it can seem a hard task to respond to the growing demands made of the service. Therefore, the librarians who are the repository managers should effectively present a picture of the role of repositories in the institutional knowledge-processes (White, 2009). Llibrarians have been supporting the establishment of IRs by doing what they do best: providing secure storage, preservation, cataloguing, retrieval, and delivery (Corrado & Sandy, 2017). However, the librarians have found it difficult to attract faculty participation from the perspective of user needs and work practices (Bell, Foster & Gibbons, 2005). This calls to question the role of librarians in institutional repositories.

## 2. Statement of the Problem

The changing needs of modern scholarly communication calls for the adoption of effective tools and services of institutional repositories. This is underpinned by the dynamism of technological development which has enhanced creation and accessibility of digital information (Martín-Gutiérrez, Mora, Añorbe-Díaz & González-Marrero, 2017). Thus, accessible virtual technologies remain a recipe for breaking the boundaries of knowledge creation and dissemination. However, institutions have been grappling with how to manage the digital intellectual output. Besides, many materials are not usually made accessible to many users and they remain marooned in the authors' computers (Jain, Bentley & Oladiran, 2009). In addition, institutional repositories remain an underutilized resource in many universities, for they are often inconsistently and poorly designed (Betz & Hall, 2015; McKay, 2007), revealing a lack of common understanding between the various stakeholders (Jean, Rieh, Yakel & Markey, 2011). Scholarly publication from Africa also lack global visibility (Chen, Lughofer & Ezema, 2013). In Kenya IR is a victim of lack of motivation, incentives to stakeholders and absence of support strategies for open sharing (Makori, Njiraine & Talam, 2015). If this trend is allowed to continue then the repercussion would be the disengagement of IR end-users, who are loyal IR devotees. These underscore the recognition of the growing need for librarians to potentiate the use and maturity of institutional repositories.

The solution of this problem relies on the role of librarians to advocate and sensitize the stake holders on for a more innovative use of Information and Communication Technology. This argumentation is underpinned by the fact that an effective institutional repository of necessity represents collaboration among librarians, information technologists, archives and records managers, faculty, and university administrators and policymakers (Lynch, 2003). A collaboration which is of essence in building the knowledge economy by tailoring the content and accessibility of institutional repositories to the interests and needs of both contributors and end-users. In addition, the effective use of the repositories remains key to the ability of institutions to respond to future needs for more dynamic cross boundary communications services (Yeates, 2003).

Literature highlights institutional repositories as mechanisms to support a transition of the traditional scholarly material to open access models. In this regard institutional repositories are used worldwide (Bailey, 2008). This is because progress in most academic disciplines relies largely on the amount of available information (Ezema, 2011). Despite this promising potential of open access to improve scholarly communication in developing countries, the new form of scholarly communication is little exploited in such countries when compared to developed countries (Durrant, 2004; Jain, Bentley & Oladiran, 2009). IR studies in Africa and by extension Kenya have focused on development concerns and not the crucial roles of librarians in institutional repositories. Besides Africa accounts for less than 5% of the world's research output notwithstanding the many research activities occurring on the continent (Moahi, 2012). This invokes the need to much more carefully explore and understand the potential roles of librarians in institutional repositories in the context of developing countries.

## 3. Specific of Objectives

- To find out the librarian's role in collection management and stewardship of collection of institutional repositories
- To determine librarian's role in establishing a standard metadata and comprehensive catalogue system of institutional repositories
- To examine the role of librarian's in Promotion and marketing of institutional repositories

#### 4. Methodology

This paper uses a systematic literature review (SLR) and analytical method, to present various thematic issues on use of IRs in relation to the role of academic librarians.

##### 4.1. Search Strategy

The search included 10 databases which included Google Scholar, Code4Lib Journal, and Journal of Medical library association, Science Direct, Willey Online Library, African Journals, Springer, The Journal of Academic Librarianship, and Emerald with search terms from two categories:

- Institutional repositories and librarians. For example, universities, research organizations or academic librarians.
- Terminologies related to institutional repositories, open access, academic librarians' roles

##### 4.2. Inclusion/Exclusion Criteria

###### 4.2.1. Studies Were Included If They Met the Following Inclusion Criteria

- Empirical study, regardless of the research methods;
- Focusing on links between librarians' roles and institutional repository
- Academic institutions and other organizations setting;
- English language;
- Published in a peer reviewed scientific journal.
- Reports related to academic libraries

###### 4.2.2. Studies Were Excluded Based on the Following Exclusion Criteria

- Studies not focusing on librarian roles as collection management and stewardship of collection, establishing a standard metadata and comprehensive catalogue system, Promotion and marketing
- Institutional repositories responsibilities not managed by librarians

#### 5. Literature Review

##### 5.1. Librarian's Role in Collection Management and Stewardship of Collection of Content for Institutional Repositories

Repository managers are in fact librarians (Cassella & Morando, 2012). For an IR to succeed, it is essential that they be involved in its planning, implementation, and operation. So, librarians have critical roles to play in both establishing and maintaining an IR (Jain, Bentley & Oladiran, 2009). Within this landscape of proliferating information and diminishing buying power, it is not surprising that when the Digital Library Federation launched an informal survey of the major challenges confronting research libraries In January 2000, respondents identified digital collection development as their greatest challenge (Greenstein, 2001). However, it has become clear that traditional librarian skills do not suffice anymore to run successful repositories (Cassella & Morando, 2012). In this regard there is a need for providing librarians with a richer set of skills in the domains of communication skills, technical skills, and expertise with regard to access rights and preservation of digital content. For the librarians to play a key role in collection management there is need to develop the key skills. Collection development and metadata expertise, familiarity with project management and expertise in repository workflow design are also highly rated (Jaguszewski & Williams, 2013). Technical skills are needed to deal with interoperability standards and protocols of IR.

The areas that training for the digital age should focus on are: awareness of digital projects, the tools and resources for building digital collections, collection development and management and the marketing of the digital resources (Chiware, 2007). Chiware, (2007) adds that African university libraries need to continue research into what kind of models should be used to enhance the librarians working conditions and training of African librarians for the digital age to retain skilled manpower. Thompson (2015) accentuates that there are library staff that have more traditional skill sets that may be able to contribute time and theoretical expertise, but require training. This altogether underscores the impact of technical skills as an embargo for librarians to discharge their role in collection and stewardship in the African context. Collection remains key in user engagement. Noting that user's engagement is a driving factor in identifying which services are, or should be offered by research libraries (Jaguszewski & Williams, 2013). The overarching framework for all changes is an increasing focus on what users do (research, teaching, and learning) rather than on what librarians do (collections, reference, library instruction). In fine the librarian's trainings should involve the use of various computer hardware and software packages that are commonly used in building digital collections (Chiware, 2007).

According to Allard, Mack and Feltner-Reichert, (2005) responsibilities of librarians in the IR environment is to: understanding software, project planning and management, collection definition, metadata guidance, submission review, and author training. Nabe (2010) opines that Librarians traditionally have served as stewards of information and undertaking this role for the institution's digital materials is a natural next step. He asserts that librarians are drawn to the role in order to remain relevant to their institutions, suggesting that this opportunity is an evolution of the librarian's traditional role. Nabe's passion for IRs informs the author's belief that repository needs managers who are willing to invest time and energy as IR champions within their institutions. The complex planning, management, and technical work of repository developers is increasingly dependent on coordination with liaison librarians and their existing relationships with faculty. The study further noted that the most pronounced differences amongst university libraries stem from how the initiatives are balancing content acquisition and service provision (Palmer, Tefteau & Newton, 2008).

Literature also indicates that librarians are facing problems in collection management because the acquisition of collections is in the hands of faculties (Allard, Mack & Feltner-Reichert, 2005). To settle the contents of institutional repository, students and faculties as authors should be involved with self archiving to submit their works to institutional repository (Foster & Gibbons, 2005; Barton, 2006; Bell 2004; Mackie 2004). Reference librarians are strategically placed to promote and administer institutional repository initiatives successfully. The professional challenge rests in reference librarians' readiness to become scholarly publishing change agents (Phillips, Carr & Teal, 2005). Knowledge accessibility is limited to the amount of knowledge librarians can collect and share. However, from literature there are limited studies which have explored the role of librarians in collection management and stewardship of collection of content for institutional repositories in the African context.

### *5.2. Librarian's Role in Establishing a Standard Metadata and Comprehensive Catalogue System of Institutional Repositories*

Metadata is data that provides information about other data. It describes the attributes and contents of an original document or work. Standard bibliographic information, summaries, indexing terms, and abstracts are all surrogates for the original material, hence metadata (Milstead & Feldman, 1999). Many distinct types of metadata exist, including descriptive metadata, structural metadata, administrative metadata, reference metadata and statistical metadata (Gregory, Heus & Ryssevik, 2011). Metadata librarian focuses on the creation, maintenance, and enrichment of metadata. Abrizah (2010) pointed to the creation of guidelines concerning metadata as a task for librarian. During an effort to provide a complete repository which can cover unique items, librarians should prepare a comprehensive system for cataloguing and indexing the materials. All of the reasons why indexing and cataloging are needed for print resources apply even more emphatically to metadata for electronic documents (Milstead & Feldman, 1999). In this regard, the collection development and metadata expertise are regarded as extremely important for librarians. The metadata constructed throughout the life cycle of a resource is especially valuable to many types of users, from creators of resources to publishers, subscription agents, book vendors, resource aggregators, system vendors, libraries and other institutions, and end users (Esse, 2013).

Librarian's technical skills are important in relation to interoperability standards and protocols of Meta data. The skills to develop and use metadata schema are strategic abilities for successful librarianship (Cassella & Morando, 2012). Increasingly, skills of a cataloguer are required in emerging organization of information (OI) activities related to digitization, and new titles such Meta data Librarian, E-Resource Librarians among others are becoming common (Cerbo, 2011). Without librarians with expertise in these areas, the benefits of well-cataloged collections will be lost to researchers, hampering organization and discovery of specialized resources and inhibiting research discovery. Several problems exist in cataloguing and classification of library resources. Such problems include the use of outdated cataloguing and classification tools, inadequate knowledge of cataloguing and classification rules and therefore poor interpretation and application of these rules, backlogs, lack of stationery, shortage of professional staff and manual systems (Muthee, 1996). Metadata expertise is key to quality and standards. As a matter of fact, the accuracy, completeness and consistency of metadata improve the interoperability among repositories and help build an effective digital infrastructure for knowledge dissemination (Park, 2009). Strong awareness of metadata quality correlates with the widespread adoption of various quality control mechanisms, such as staff training, manual review, metadata guidelines, and metadata generation tools (Park & Tosaka, 2010).

However, the prevalence of digital materials, user preference for online access and digitization of local resources are significant factors affecting new roles for cataloger librarians (Boydston & Leysen, 2014). The growing focus on institutional repositories provides another potential opportunity for cataloger librarians and technical services staff to apply metadata skills and experience (Park, Lu & Marion, 2007). Cataloger librarian roles and responsibilities are expanding to include more electronic resources such as e-books and digitized materials; yet, print material cataloging is continuing. Cataloger librarians are creating non-MARC metadata and more emphasis is being placed on the cataloging of local hidden collections (Boydston & Leysen, 2014). Creation of metadata for these digital resources is becoming an additional role for some cataloger librarians, the amount and level of their involvement varies with each institution based on personnel, organization, and funding. Increasingly, cataloger librarians are operating in a technologically-driven electronic environment (Boydston & Leysen, 2014). At some libraries, the cataloging of digital materials has been phased into the responsibilities of all catalogers and viewed as part of a regular workflow. Thus Anne, Thompson and Annie, (2010) posits that cataloger librarians could participate in a broader range of activities in metadata including figuring out how data elements, schemas, and controlled vocabularies can best be used in nascent projects, analyzing inherited metadata for batch actions that can give it valuable context when it is shared; planning and managing digital library projects; mapping across schemas; strategizing for the repurposing of metadata; and offering metadata consultations to members of a campus community (Riemer, 2009).

In more recent years, four roles of catalogers have become prominent in the literature: involvement in non-MARC metadata cataloging, work with institutional repositories, creating access to unique local library collections and reviewing vendor records for batch loading into the library's catalogue (Boydston & Leysen, 2014). Beacom, (2005), summarized the Yale approach to creating a metadata librarian position in a 2005 presentation, in which he laid out three areas of responsibility for the metadata librarian: standards development and documentation, metadata production, and collaboration on digital tools. The job description for the metadata librarian position at the University of Minnesota states that the metadata librarian will be involved in "facilitation of the integration of new types of data description into the traditional technical services workflow (Brian, 2004). According to Chapman (2011) Metadata librarian plays four roles in institutional repositories collaboration, research, education, and development Fleming, Mering and Wolfe, (2008) pointed out that in American Research Libraries (ARL) Non-MARC meta-data is created by non-cataloging librarians and

paraprofessionals from other departments as well as those who work in technical services. In Nigeria, Esse 2013, asserts that libraries are yet to practice user aboutness in their cataloguing which requires the cataloguer to know his users and their information needs. It is clear that in this information and communication technology age, it is not just about cataloguing; it is cataloguing for the clientele. Thus Atinmo, (2007) admonished cataloguers in Nigeria to master the use of existing metadata schema such as Dublin Core and/or be able to create in house metadata elements to describe digital documents.

According to Mavume (2013) Walter Sisulu University (WSU) libraries of the Eastern Cape, situated in the rural/disadvantaged area of South Africa Cataloguers are unable to access and practice information processing/cataloguing of electronic resource (e.g. electronic books, digital resources, etc.). Besides, the records that cataloguers were copying from online computer library center were of low quality and consumed more time when editing than creating original cataloguing. This has calls for continuous skills development especially in technology & a supportive environment is critical to meet the demands of technology oriented to users they serve. Kigongo-Bukenya and Okello-Obura, (2015) in their study on the correct language of cataloguing local publications in East Africa notes that rarely is a user the focus of choice of the subject term in the process of cataloguing. The terms assigned to local publications are generally too broad and, at times, border on inappropriateness. The situation is exacerbated by a lack of documented cataloguing policies and a waning interest in cataloguing matters from the profession. In Uganda numerous challenges that are related to digital content and collection, interoperability, standards, knowledge organization systems, users and usability, legal, organizational and social issues, staff education, infrastructure, language barrier, and technology compromising on Digitizing library resources for new modes of information remain (Byamugisha, 2010). In Kenya, there are constant challenges which greatly affect the population of metadata in the repositories occasioned by difficulty to convince faculty to take advantage of the institution repository. Besides past studies show that there is a lack of sufficient ICT skill among the general library staff population (Amollo, 2011). Despite all these the professional approach of library staff in executing their mandate in establishing a standard metadata and comprehensive catalogue system of institutional repositories remains bedrock for the usability theory. This is explained by the fact that metadata plays an important role in the multifaceted description of these objects, increasing the interoperability between software tools and the findability and shareability of the digital objects.

### *5.3. The Role of Librarian's in Promotion and Marketing of Institutional Repositories*

The emergence of institutional repositories has presented an alternative platform for the sharing of research data and other institutional documents of interest. Due to features such as reduced cost and unrestricted access, the repositories option enjoys higher level of acceptance among many academic institutions (Grundmann, 2009). However, most of these institutional repositories are often not sustainable, and in interrogating the causes of this high attrition rate, critical issues such as marketing and promotion of repositories are seldom considered (Martin-Yeboah, Alemna, & Adjei, 2018). Although the future shape of scholarly communication in institutional repositories remains unclear due to limited contribution by stakeholders (Abrizah, 2010). Thus, the library and information professionals have key roles to play in promoting and marketing institutional repositories (Revell & Dorner, 2009). For instance, librarians should encourage authors to submit their works to their university institutional repository. This can be done through employing various methods to publicise and promote institutional open access repositories and demonstrate their value to time stretched academic staff.

Literatures illustrate that submission of intellectual works by authors depends on the culture of scholarly communication within the institutions or universities (Katayoon & Abrizah, 2017). Librarians need to know all about the IR, its principles, benefits and operational processes in order to promote it and act as 'IR evangelists' (Ashworth, 2006). Librarians will need to develop advocacy programs, publicise IR through institutional news media and respond to questions by the stakeholders. However, there are known instances where librarians' in-charge of institutional repository are unaware of their roles, and are unskilled in implementing the institutional repository (Katayoon & Abrizah, 2017). In this regard the librarians should be enlightened of the role in promotion and marketing digital scholarship their communities produce, strive to optimise access to research outputs both before and after publication and also to increase the visibility and academic prestige of both the institution and authors.

It is essential that librarians be familiar with the library repository to efficiently promote institutional repositories (Katayoon & Abrizah, 2017). Besides, providing good search tools and cataloguing the repository materials will make institutional repository contents more accessible (Katayoon & Abrizah, 2017). In this regard, librarians are obligated to help users find the information they need, regardless of the budget-enforced limits on the library's own collection. Librarians promote institutional repositories by helping faculties increase their audience and impact, and help the university raise its research profile (Suber, 2010). Through IR librarians have the opportunity to work hand-in-hand with academia. By virtue of being subject specialists, librarians are ideal to work more closely with faculties to promote the repository (Suber, 2010). Libraries can benefit by leading the way and providing the skills required by librarians to develop and run an effective IR (Jain, 2012). Jain, (2012) adds that librarians need to play a critical role in developing IRs, by understanding faculty needs, simplifying the deposit process and promote IR benefits to faculty, students and other stakeholders and train them.

Effective marketing and promotion remain key for the successful implementation, visibility and use of institutional repositories. Librarians will need to address the prestige factor and the need to comply with promotion and tenure expectations in promoting repositories to faculty (Jantz & Wilson, 2008). Librarians can develop a targeted methodology to speed up the rate of adoption of the IR through an understanding of faculty social structure and

communication networks. Outreach activities can use “diffusion of innovation” theory as a framework for creating a plan for promotion of the repository. This theory to identify the proper communication channels at different stages in the process of adoption (Jones, Andrew & MacColl, 2006). The majority of libraries used a variety of outreach strategies: subject specialist advocacy, identifying likely depositors, presentations to faculty, and offering to deposit electronic materials for authors (University of Houston Libraries, 2006). Therefore, it is quintessential for Librarians in academic libraries to play a key role in the promotion of IRs and direct students and academics towards Open Access resources. If a library does not subscribe to a particular journal, often it does not occur to the librarian to refer to institutional repositories databases (Jain, 2012).

In Japan the Ministry of Education, Culture, Sports, Science and Technology has encouraged Japanese university libraries to develop institutional repositories to promote sharing of knowledge throughout Japan and internationally (Cullen & Chawner, 2009). Indian Medlars Centre promotes its e-journals, database and e-print archive through talks at local and international fora, local workshops, internationally through its association with Bioline International and advertises its services on its website and in the print version of the journal (Fernandez, 2006).

There is empirical evidence that knowledge of open access institutional repositories is very low among the major stakeholders including lecturers, researchers, librarian and students in Nigeria (Christian, 2008). In India both the top-down and bottom-up approaches are used to create awareness of open access. Besides, Majority of library users in Africa were unaware of the existence of the repositories because of lack of marketing and promotion (Makori, Njiraine & Talam, 2015). For instance, marketing open access institutional repositories in Ghana is done by publicity of the repository which is mainly limited to the immediate campus environment, and is done mainly through the word of mouth, use of fliers and notices as well as the use of the university websites and radio announcements (Martin-Yeboah, Alemna & Adjei, 2018). In Kenya majority of scholars were unaware of the existence of the repositories and the policies (Makori, Njiraine, & Talam, 2015; Ratanya, 2017; Chilimo, 2016). In this regard the librarians should intensify their promotion and marketing strategies in order to enhance IR awareness among the faculty and other users.

## 6. Conclusion

A cursory examination of the literature asserts that the role of academic librarians in adding value to the scholarly communication process cannot be gainsaid. It is thus necessary to appreciate the costs and the value they offer in building and supporting institutional repositories for the long-run. Their prerogative to organize the universe of resources in a library is of essence to the user community physically and intellectually. These behoove librarians to be custodians of high-tech skills and adapt to ever-changing media in the professional environment. This ensues the dispatch from the former perception of librarians' roles as gatekeepers of library resources, protect the artefacts, in which the information was contained, and had no connection with the users. This has been catalyzed by the multi-media environment which is a basis for information storage, information sharing and network communication amongst libraries. The ameliorated strategic position of librarians in energizing the development and operations of repositories as a recourse for teaching, learning and research mandate of academic institutions has been realized.

In spite of these positive indications, developing countries are still lagging behind in achieving the full objectives of institutional repositories using academic librarians. This calls for a strategic approach amongst learning institutions to enhance sustainability of repositories to avert possible failures. The libraries need to make critical decisions and choices in terms of building capacity of the librarians before designing or redesigning institutional repositories. This will help librarians in charge of institutional repositories aware of their roles and skilled in implementing the institutional repository whose absence would be an incessant recipe for failure. By training the librarians they are able to effectively improve their university institutional repositories promote and marketing the repositories thus encouraging authors to do self depositing enhancing the visibility of the scholars. Training of library staff will guarantee professional approach of library staff in executing their mandate in establishing a standard metadata and comprehensive catalogue system of institutional repositories remains bedrock for the usability theory. In conclusion owing to lack of skills and awareness of roles academic librarians have not played their roles as extensively as expected in institutional repositories.

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