

An Open Access Week presentation 26/10/2022



# Institutional Repositories: An Introduction

**Presenter:**

1

**Vincent Bob Kiilu**

Senior Librarian

Karatina University

Email: [vkiiu@karu.ac.ke](mailto:vkiiu@karu.ac.ke)

# Outline

- Overview
- Types of Institutional Repositories
- Components of a repository system
- Institutional Repository Softwares
- Benefits of Institutional Repositories
- Characteristics of Institutional Repositories
- Constraints
- Insurance of repositories
- Conclusion
- References

# Introduction

- **Access to information is a very vital factor for success in any human endeavor.**
- **Repositories have existed ever since humans began collecting and storing important information and artifacts for safekeeping and long term use.**
- **“All institutions which maintain long-term collections of paper, recorded sound and recorded images have to make the shift to managing long-term electronic storage.”**
- **Two contemporary developments in particular have helped shape the nature of today’s institutional repositories:**
  - 1. The emerging knowledge management movement.**
  - 2. Advancing technology in the digital information management.**

## Introduction (conti...)

- ▶ Although institutional repository, in the current usage, originated in an institution (i.e. university) with a large corps of researcher and scholars, the practice has spread to other non-university establishments, especially research institutes, hospitals, security agencies, financial institutions and multi-national corporations (Chukwueke, Nnadozie & Okafor, 2020).

# Definition of Institutional Repository

- ▶ Institutional repository as the digital collection used for capturing and preserving the intellectual output of a single or multi-university community (Crow, 2002).

# Types of Repositories

## 1. Subject based repositories e.g

- ▶ arXiv (Pronounced archive) (scientific papers)
- ▶ Research Papers in Economics (RePEc).

## 2. Research Repositories eg. KARI Institutional Repository

3. National Repository systems (National Repository For The Kenya Agricultural Information Network (KAINet))

4. Institutional Repositories containing the various outputs of the Institution. Eg. A University Institutional Repository (Armbruster & Romary, 2010).

**NB.** For this matter, this presentation will be biased towards Institutional Repositories.

# Characteristics of Institutional Repositories

- **The Repository is institutionally defined — unlike a subject repository; it captures only the intellectual output of host institution.**
- **Content may be purely scholarly, or may comprise administrative, teaching and research materials, both published and unpublished.**
- **Content is cumulative (Once items are submitted they should not be withdrawn).**
- **Open Access: An institutional repository is published online and is basically open to the public.**

# Building a Repository Service: Components

- ▶ The process of developing an institutional repository requires:
- ▶ **Expatriate(s)**-For customizing or programming a software. The software can also be procured.
- ▶ **Basic Hardware**
  - ▶ **Servers**
  - ▶ **Storage**
  - ▶ **Back-up Systems**
- ▶ **Networking / Connectivity**
- ▶ **Power**
- ▶ **Security**



# Building a Repository Service: Components

## Softwares

- Commercial
- Open Source
- Home-grown

There are many world renowned softwares used to create repositories eg.

(a) GreenStone Digital library software (Developed in New Zealand)

(b) Dspace

(c) Eprint (developed as a part of digital library project at University of Southampton, UK).



# Building a Repository Service: Components

Registering the Repository:

1. Join Directory of Open Access Repositories (DOAR)
2. Registry of Open Access Repositories (ROAR)

# Communities of Institutional Repositories

This may include-

- Research reports submitted for publishing ; the text of journals articles accepted for publication.
- Revised text of published work with comments from academic readers.
- Conference papers.
- Teaching material.
- Student's projects.
- Doctoral thesis and dissertations.
- Database resulting from research projects.
- Committee papers, administrative papers.
- Computer software .
- Photographs and video recordings.

# Benefits of Institutional Repositories

- ▶ Long-term preservation of research papers and others
- ▶ Provide wider access and visibility to the research output
- ▶ Build Intellectual Leadership and Credibility- Preserves an Institution's heritage
- ▶ Increase the citation to the publications
- ▶ Avoid duplicate work/project
- ▶ Save the Library space
- ▶ Improved impact/ranking of Institutions
- ▶ Reaching a worldwide audience through exposure to search engines (such as Google)
- ▶ Archiving and distributing material

# Repository Policy

Elements for inclusion may entail:

## ➤ **Organizational**

- Repository Software
- Communities of the Repository
- Sub-communities
- Maintenance
- Support

## ➤ **Content and Metadata**

- Infrastructure
- Terms of Deposit
- Metadata
- Usage

## File Format Control

- Ownership
- Access Rights
- Administration
- Copyright
- Preservation content
- Repository Termination
- Technical Infrastructure
- Deposit agreement form



# Controls

There is need for controls in the management of a repository eg. by Systems Administrators, managers...

- Enforce policies
- Access controls
- Back-ups
- Versions



# Constraints of Institutional Repositories

Some constraints to academic institutional repositories include:

- Absence of a well defined Digital/Institutional Policy
- Lack of Institutional Repository expertise
- Diversity of content and the language used in the full texts
- Initial costs may be high as contributors perceive high risks and duplicate effort to reduce them.



# Constraints (Cont...)

- Hardware Failure
- Communication/Network Failure
- Software Failure
- Power Failure



# Evaluating Institutional Repositories

Performance indicators are mainly used to evaluate Institutional Repositories.

**Criteria for evaluation includes, but not limited to:**

- Effectiveness and flexibility of software used
- Qualification of Authors
- Number of items deposited
- Number of users of a particular repository
- Repository Communities



# Insurance of Repositories

Institutions need to consider insuring their repositories.

Identifying risks:

- Content Risks
- Infrastructure Risks
- Organizational Risks

## **Strategies before insuring**

Consider Actual value of the repository eg.

- Software Installation or reinstallation cost
- content/ content replacement cost

## The way forward

Institutional Repositories offer a convenient way to capture, manipulate, store, manage, share and curate a variety of digital material. Therefore, there is need for disaster planning, monitoring and recovery back-up systems, systems maintenance and repair. There is also need for institutions to have effective and efficient Institutional Repository promotion initiatives.

Managers need to have cordial relationships with a diverse community, including content creators, depositors, systems administrators as well as end users in starting, developing and using Institutional Repositories.

Institutions need to have Institutional Repository Policies for effective and efficient operation of their Institutional Repositories.

# References

- Armbruster, C., & Romary, L. (2010). Comparing repository types: challenges and barriers for subject-based repositories, research repositories, national repository systems and institutional repositories in serving scholarly communication. *International Journal of Digital Library Systems (IJDLIS)*, 1(4), 61-73.
- Aspesi, C., Allen, N., Crow, R., Daugherty, S., Joseph, H., McArthur, J., & Shockey, N. (2019). SPARC\* Landscape Analysis: The Changing Academic Publishing Industry—Implications for Academic Institutions.
- Chukwueke, C., Nnadozie, C. D., & Okafor, V. N. (2020). Enhancing academic visibility of faculty members in Nigerian university community: The role of institutional repositories. *Journal of Research and Scientific Innovation. IJRSI*, 7(9).
- Crow, R. (2002). The case for institutional repositories: a SPARC position paper.
- Demetres, M. R., Delgado, D., & Wright, D. N. (2020). The impact of institutional repositories: a systematic review. *Journal of the Medical Library Association: JMLA*, 108(2), 177.
- González-Pérez, L. I., Ramírez-Montoya, M. S., & García-Peñalvo, F. J. (2020). User experience in institutional repositories: A systematic literature review. *Digital Libraries and Institutional Repositories: Breakthroughs in Research and Practice*, 423-440.
- Hoskins, R. (2020). Visibility and accessibility of indigenous knowledge on open access institutional repositories at universities in Africa. In *Digital Libraries and Institutional Repositories: Breakthroughs in Research and Practice* (pp. 454-472). IGI Global.
- Johnson, R. (2002). Institutional repositories: partnering with faculty to enhance scholarly communication. *D-Lib Magazine*, 8(11). Retrieved from: <http://www.dlib.org/dlib/november02/johnson/11johnson.html>.
- Kodua-Ntim, K., & Fombad, M. C. (2020). Strategies for the use of open access institutional repositories at universities in Ghana. *Library Management*.
- Lynch, C. A. (2003). Institutional repositories: essential infrastructure for scholarship in the digital age. *portal: Libraries and the Academy*, 3(2), 327-336.

# References (Continued)

Saliba, K. (2020). *Academics' perspective of open access and institutional repositories, University of Malta: a case study* (Master's thesis, Aberystwyth University).

Shajitha, C. (2020). Digital curation practices in institutional repositories in South India: a study. *Global Knowledge, Memory and Communication*, 69(8/9), 557-578.

Singh, M., Kuri, R., TK, G. K. D., & Singh, K. D. (2020). Global Visibility of Open Access Institutional Repositories of SAARC Countries: An Explorative Study. *Library Philosophy and Practice (e-journal)*, 4451.

Woutersen-Windhower, S., Rodríguez, E. M., Sondervan, J., & Oort, F. J. (2020). University journals: consolidating institutional repositories in a digital, free, open access publication platform for all scholarly output. *LIBER Quarterly: The Journal of the Association of European Research Libraries*, 30(1), 1-15.

END

Thank you