Practical Experiences with DSpace in Tanzania

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Disclaimer Statement

Materials in this presentation are not intended for campaigning or marketing DSpace software, rather they are based on our experiences in using DSpace platform.

What is DSpace?

- DSpace is an open source repository software package typically used for creating open access repositories for scholarly and/or publishing digital contents.

- DSpace allows to capture, store, index, preserve and distribute digital materials including text, video, audio and data.

Dspace : A brief history

- **The beginning: 2000**
    - ❖ [DSpace](#) was developed by the Massachusetts Institute of Technology (MIT) Libraries and the Hewlett-Packard Labs,
    - ❖ It was first released in 2002 and has become one of the most widely used platforms for open access publishing.
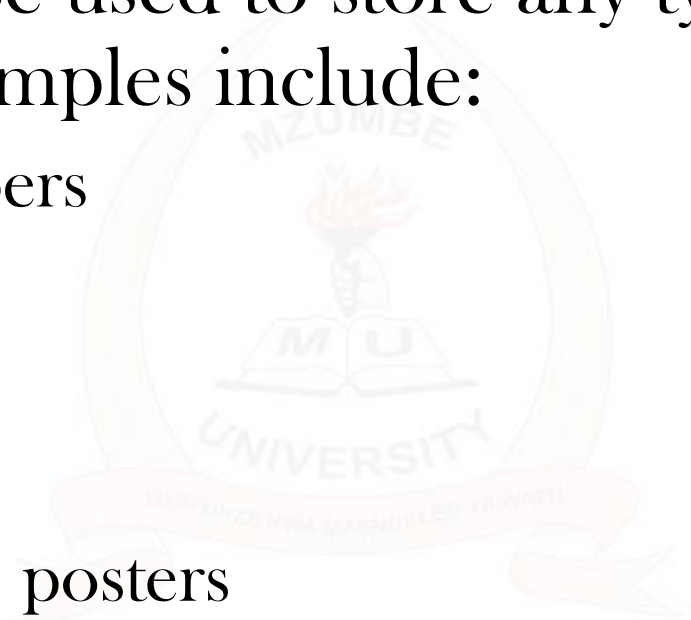- **Software releases**:
    - Multiple versions – from 1.0 to 6.3 current and stable version

What can be stored in DSpace?

DSpace can be used to store any type of digital medium. Examples include:

- Journal papers
- Data sets
- Theses
- Reports
- Conference posters
- Videos
- Images

IR/Digital Library Software in Tanzania

s/n	Institute/University	Software
1	University of Dar es Salaam	Dspace
2	TaCCIRE	Dspace
3	TACAIDS Digital Repository	Dspace
4	Sokoine University of Agriculture	Dspace
5	SUZA Repository	Dspace
6	NM-AIST Repository	Dspace
7	Mzumbe University Scholar Repository	Dspace
8	Mario Mgulunde Learning Resource Centre Repository	Dspace
9	MUHAS Institutional Repository	Dspace
10	Digital Library of the Tanzania Health Community	Eprints
11	Digital Library of Open University of Tanzania	Eprints
Dispace = 9, Eprints = 2 Total = 11		

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Advantages of using DSpace Software

- DSpace has largest community of users and developers world wide : More than 800 digital repositories in the world are using DSpace , which is the highest than any other software (Surendran, Kumar and Kabir, 2013).

Advantages

- **Used by educational, government, private and commercial institutions:**
  - ✓ The DSpace platform is used by higher education institutions for whom the platform was initially developed, while also showing a much broader appeal.
  - ✓ The software can also be used by museums, archives, National Libraries, and commercial companies to manage their digital assets.

Advantages of Dspace

- DSpace Software supports – Digital Object Identifier, (DOI) and handle server) it has its own accession number which is called as internal ID. The DSpace accession is unique for each live item deposited.

- DSpace supports weeding out policy which is called withdraw, which does not completely remove the item from the archive, but from public view

Advantages

- DSpace has mechanism to retrieve forgotten password by sending an email to the end user for retrieving forgotten passwords.

- DSpace does not have any vendor lock in or copyright, (has no restriction, everyone can use, study, modify and distribute the software, regardless of a person's position, wealth, social conditions etc.).

Advantages of Dspace

DSpace by default supports to upload the following file formats in DSpace repository: Adobe PDF, AIFF, audio/basic, BMP, CSS, FMP3, GIF, HTML, image/png, JPEG, Latex, MARC, Microsoft Excel, Microsoft Powerpoint, Microsoft Project, Microsoft Word, MPEG, MPEG Audio, PhotoCD, Photoshop, PostScript, Real Audio, RTF, SGML, TeX, Tex dvi, Text, TIFF, Video QuickTime,Wav, Word Perfect, XML.

Disadvantages

- **DS**pace does not carry out duplicate checking. If the same digital document is submitted multiple times it gets added into the repository.

- **S**ystem does not support uploading digital objects from existing **URL**, the document has to be available on local disk.

Disadvantages

- **D**space can not support functions supported by Library Information Management System (cataloguing, circulation, serial management, acquisition) **DS**pace was especially designed for creating institutional repository of any organization.

- **D**space does not show on the screen how many documents are retrieved within how many seconds.

- **S**ystem does not keep track of existing and inactive members.

Disadvantages

- **DS**pace cannot provide any notification when hardware technology changes are needed.

- **DS**pace does not support Z39.50 (Z39.50 is used to create a client application that allows users to search and retrieve records within a bibliographic database)

- It does not provide citation data

Conclusion

There are very few DSpace local experts in Tanzania:

Implication:

- Failure of some institutions in Tanzania to match with released DSpace versions. Currently DSpace is in its 7.0 version, only Nelson Mandela, SUZA & UDSM are currently having version 4 and 5 five respectively.