Practical Experiences with DSpace in Tanzania

Mosha, G & D. Mwashiuya
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.
Dsphere : 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

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

**Dispace = 9, Eprints = 2  Total = 11**

Source: [http://v2.sherpa.ac.uk/view/repository_by_country/tz.html](http://v2.sherpa.ac.uk/view/repository_by_country/tz.html)
Advantages of using DSpace Software

- DSpace has the largest community of users and developers worldwide: 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

• DSpace does not carry out duplicate checking. If the same digital document is submitted multiple times it gets added into the repository.

• System does not support uploading digital objects from existing URL, the document has to be available on local disk.
Disadvantages

• Dspace can not support functions supported by Library Information Management System (cataloguing, circulation, serial management, acquisition) DSpace was especially designed for creating institutional repository of any organization.

• Dspace does not show on the screen how many documents are retrieved within how many seconds.

• System does not keep track of existing and inactive members.
Disadvantages

• DSpace cannot provide any notification when hardware technology changes are needed.

• DSpace 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 respectively.