Development of a Digital Repository Prototype applied to Faculty of Pharmacy, University of Lisbon

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Topics

- Problem and Main Goal

- Digital Libraries and Repositories Evaluation

- Prototype Development

- Prototype Evaluation

Access and Processing of information in digital format

- Technologically diverse
- Not enough technical knowledge about its proper handling

Main Goal

- Libraries' role
- Tools and methodologies

To provide, in an organized and validated way, the wide range of existing information in digital format

=> Digital Repository Prototype

Digital Libraries and Repositories Evaluation

- Comparative study of the universities digital libraries

    - National (Portuguese):
        - Higher Education Institutions

    - International:
        - *Virtual Library: Pharmacy Pages: Schools, Colleges, Faculties, and Departments*

Digital Libraries and Repositories Evaluation

- Stage 1: 362 institutions
  - Problem: Diferent assignments to digital libraries and repositories

  - Were eliminated the institutions that:
    - ✓ Had no digital library
    - ✓ Digital library do not allow access to general users

- Stage 2: 300 institutions

Digital Libraries and Repositories Evaluation

- New Criterion:

  - «**True Digital Library**» – based on a structured and organized platform enabling basic and advanced searching functionalities

  - «**False Digital Library**» – only a list of resources or digital collections

- Result: 45 digital libraries and repositories

Digital Libraries and Repositories Evaluation

- Evaluation Grid:

4 levels
- Available Information at the Institution Homepage
- Available Information at the Library Homepage
- Available Information at the Digital Library or Repository Homepage
- Features of Digital Library or Repository

Digital Libraries and Repositories Evaluation

Geographical Distribution
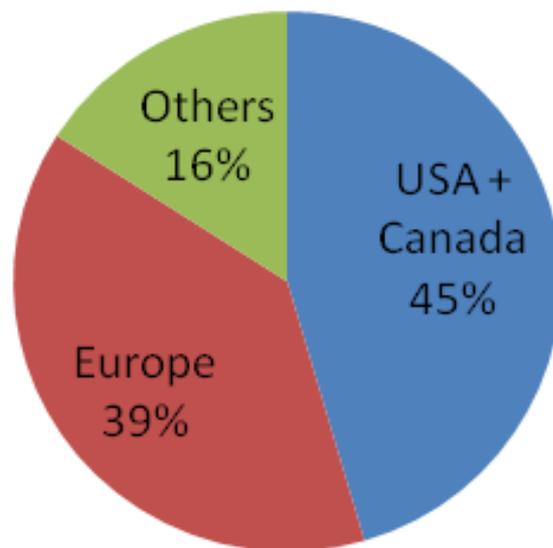
45 digital libraries and repositories from USA, UK, Spain, Netherlands, South Africa, Australia, Portugal, Austria, Canada, South Korea, Norway, Peru, Sweden, Switzerland and Turkey.

Digital Libraries and Repositories Evaluation

Institution Webpage
- Homepage -
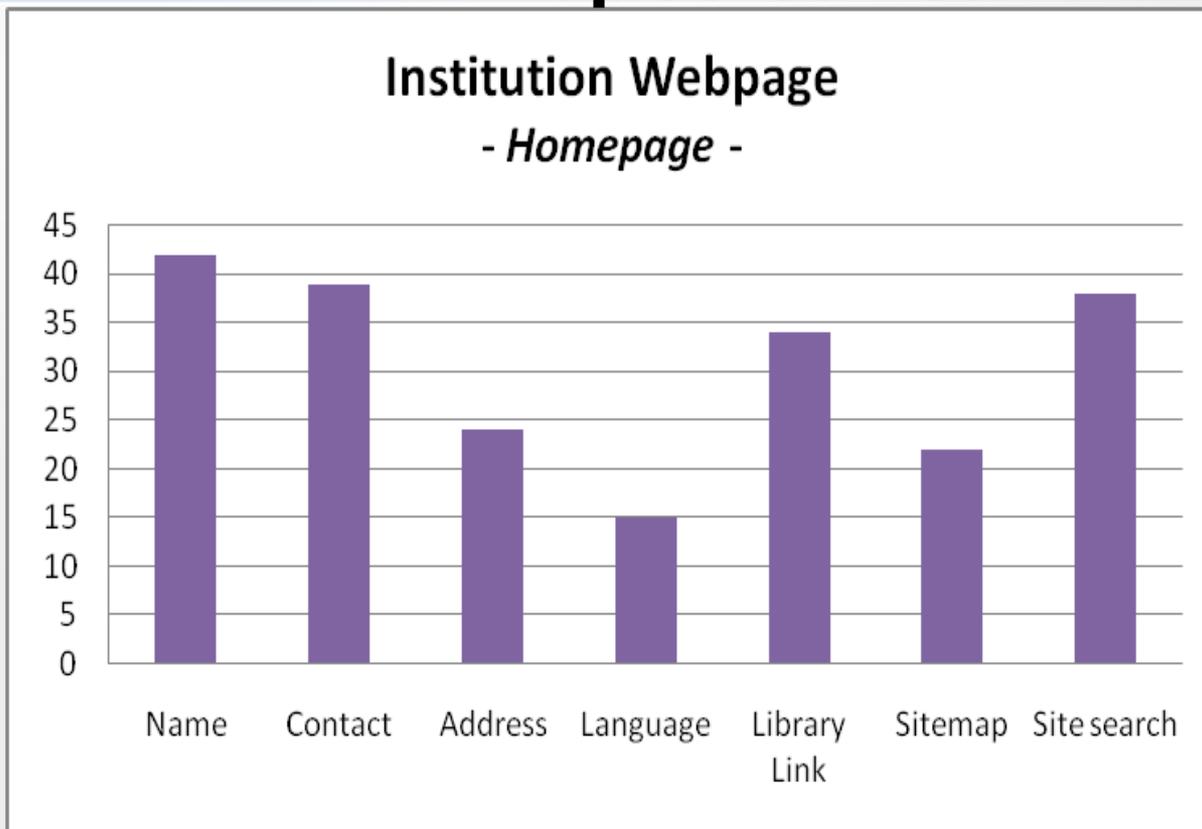
None of the 45 institutions homepages provide all indicators considered in the evaluation grid.

Digital Libraries and Repositories Evaluation
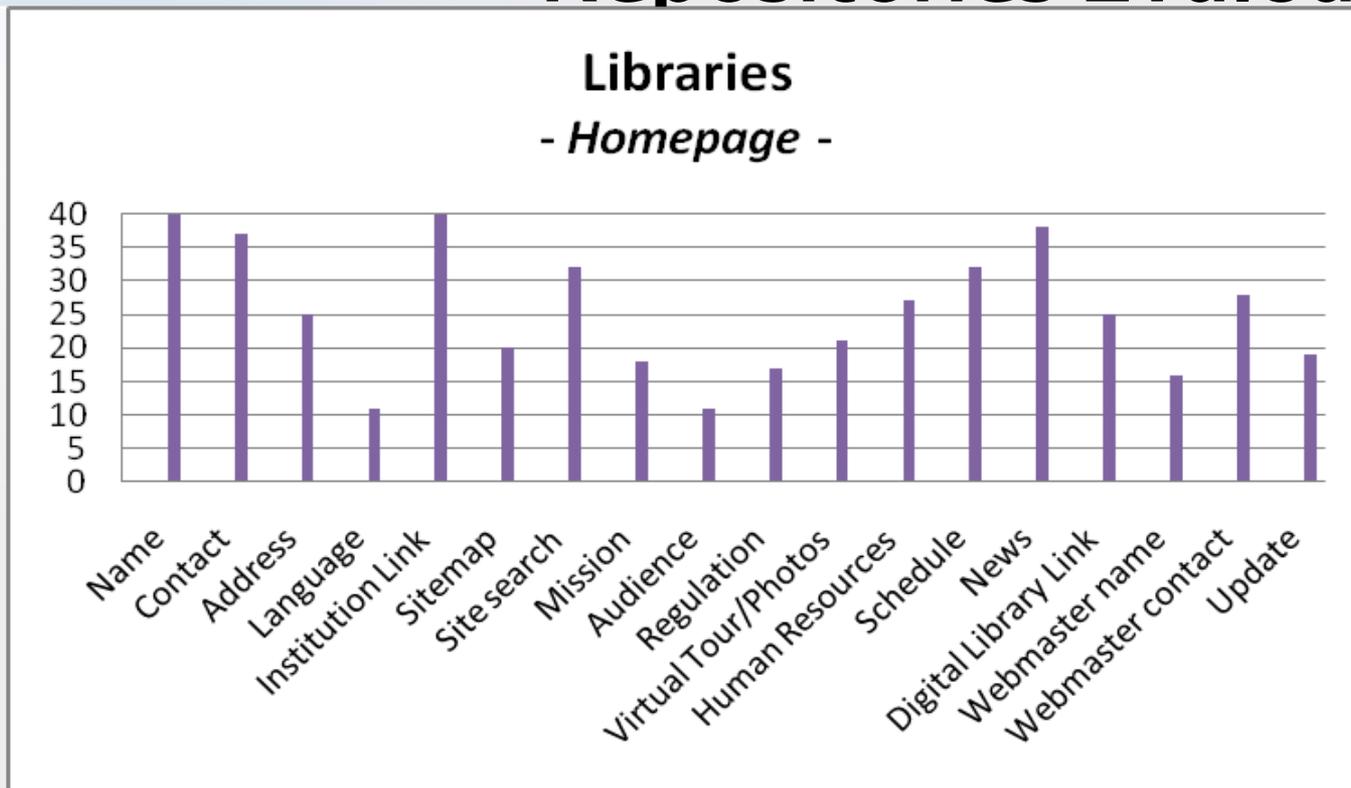
In some cases, the information was only accessible beyond the homepage, after browsing thru not very well structured access points.

Digital Libraries and Repositories Evaluation

Digital Library
- Homepage -
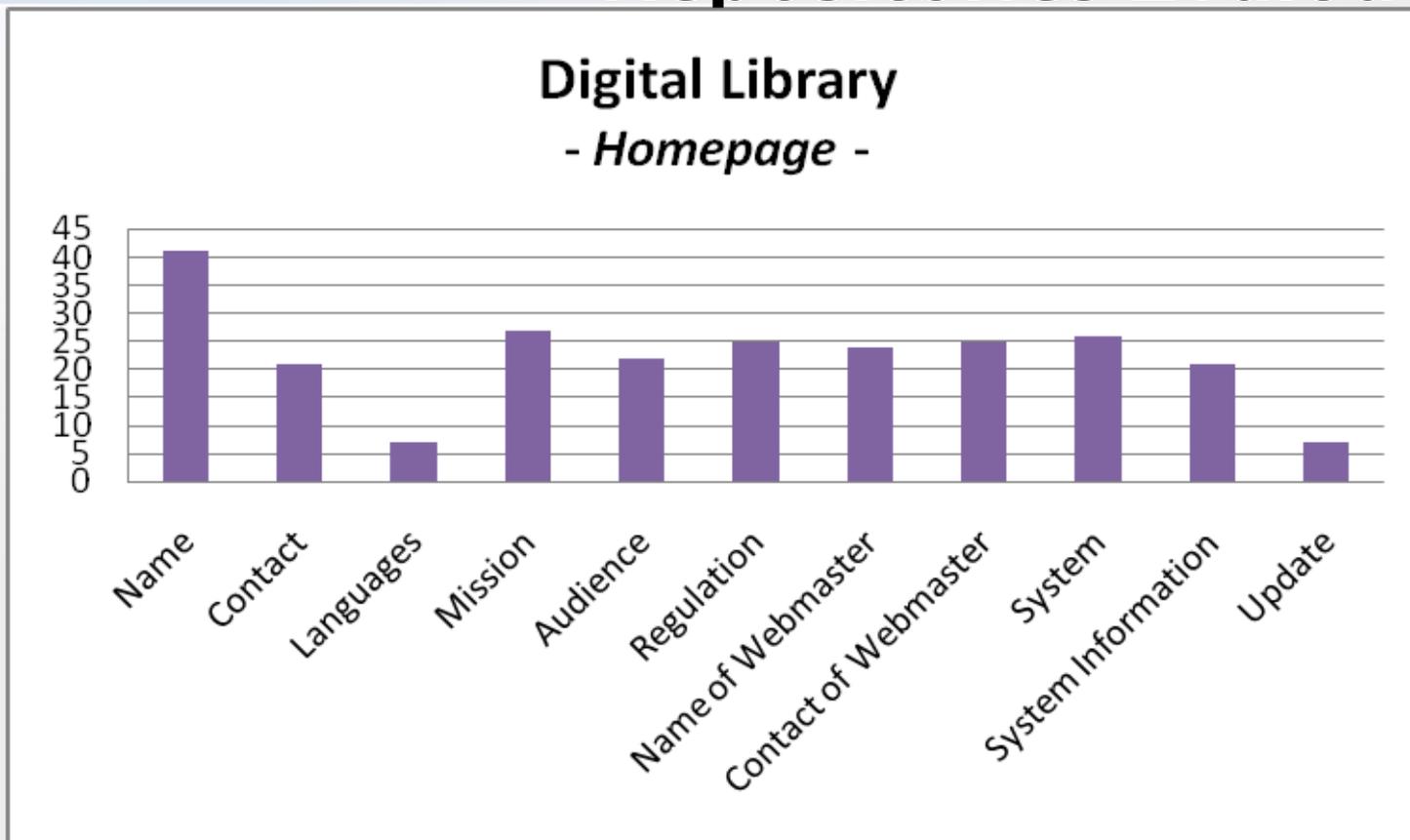
The difficulty of the libraries to integrate in one place all the digital resources available in the institution.

Digital Libraries and Repositories Evaluation

Platforms

- Dspace — 29%
- CONTENTdm — 21%
- E-prints — 10%
- bepress — 5%
- Greenstone — 2%
- Outros — 14%
- Desconhecido — 19%
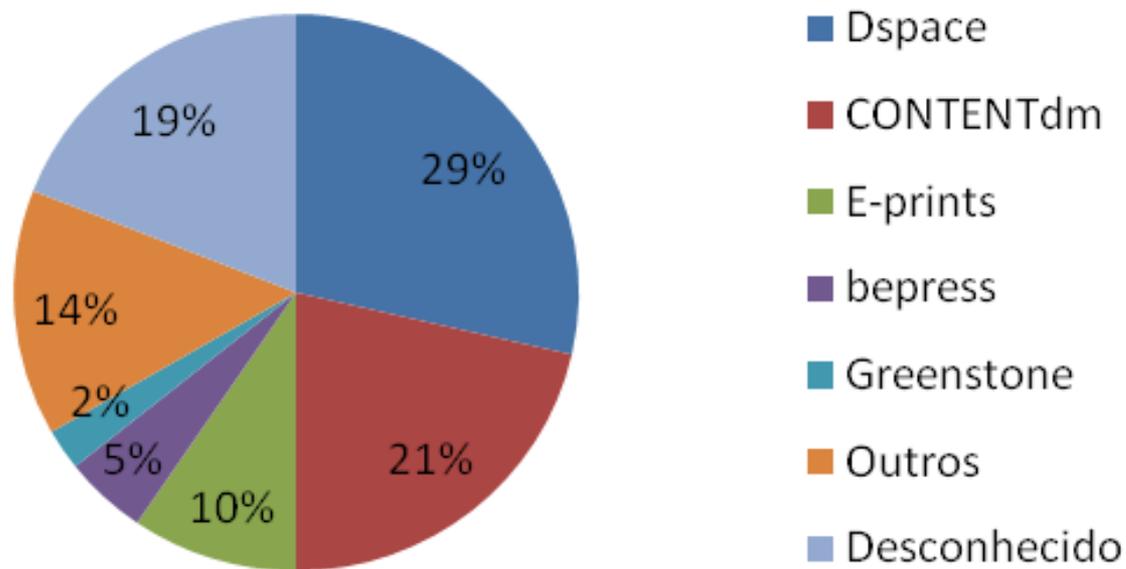
Digital Libraries and Repositories Evaluation

- The digital libraries and repositories tools depend largely on the platform used.

- Dspace has been the most identified and used in the study, by the tools it provides.

- Only ten digital libraries and repositories provide information on accessibility or identify concerns about accessibility issues.

- Missing links on the digital libraries webpage either to the library webpage either to the institution webpage.

Digital Libraries and Repositories Evaluation

Information Available
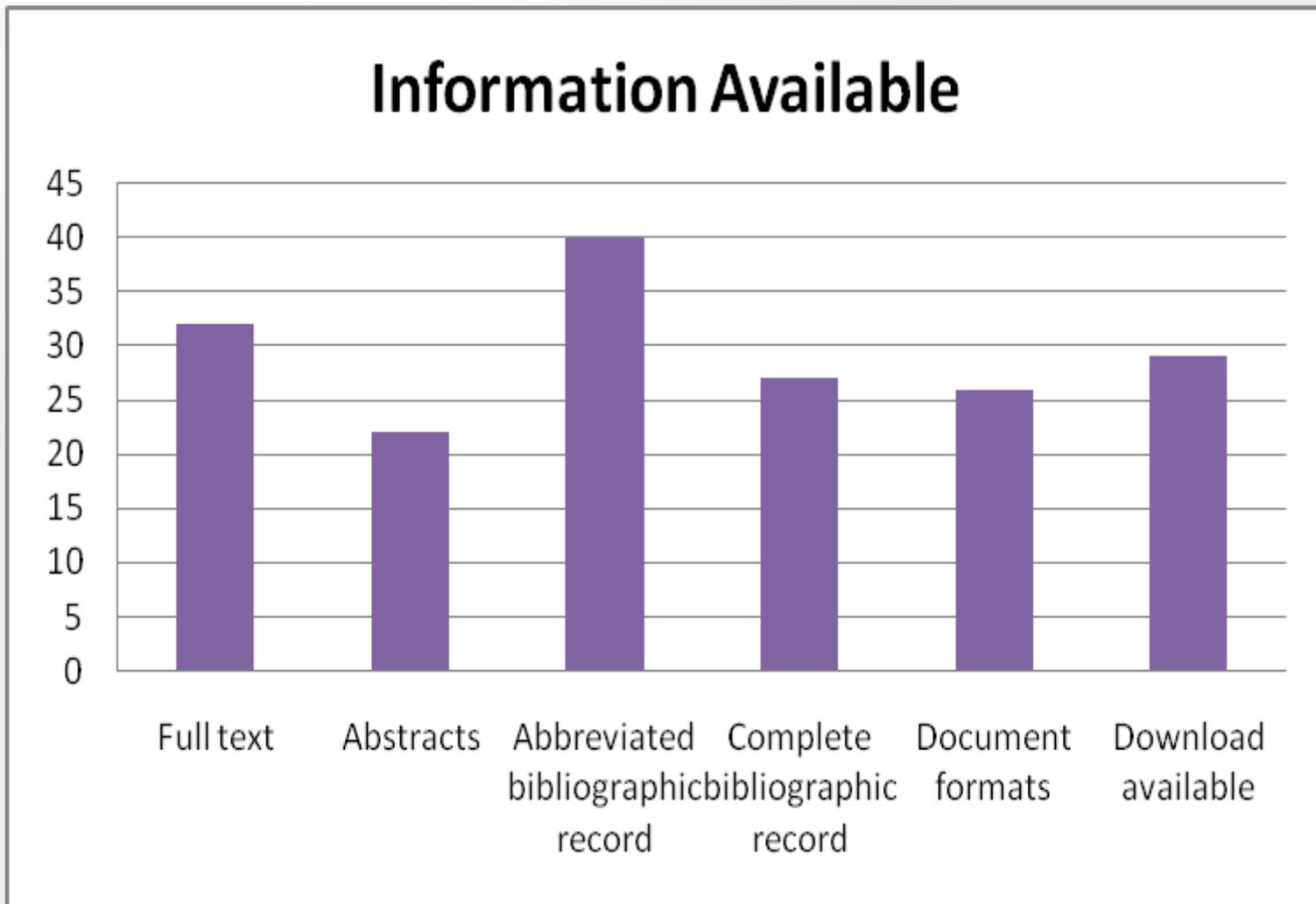
Digital Libraries and Repositories Evaluation

- Many digital libraries provide access to full text in an image format, where each image corresponds to a document page, making it difficult or impossible any search, editing or printing.

- It is possible to understand the purpose of the creation of some digital libraries and it is also possible to correlate this with the software adopted.

Digital Libraries and Repositories Evaluation

Collections' Organization

- Resource type — 30%
- Subjects — 32%
- Communities — 29%
- Others — 0%
- n.a — 9%
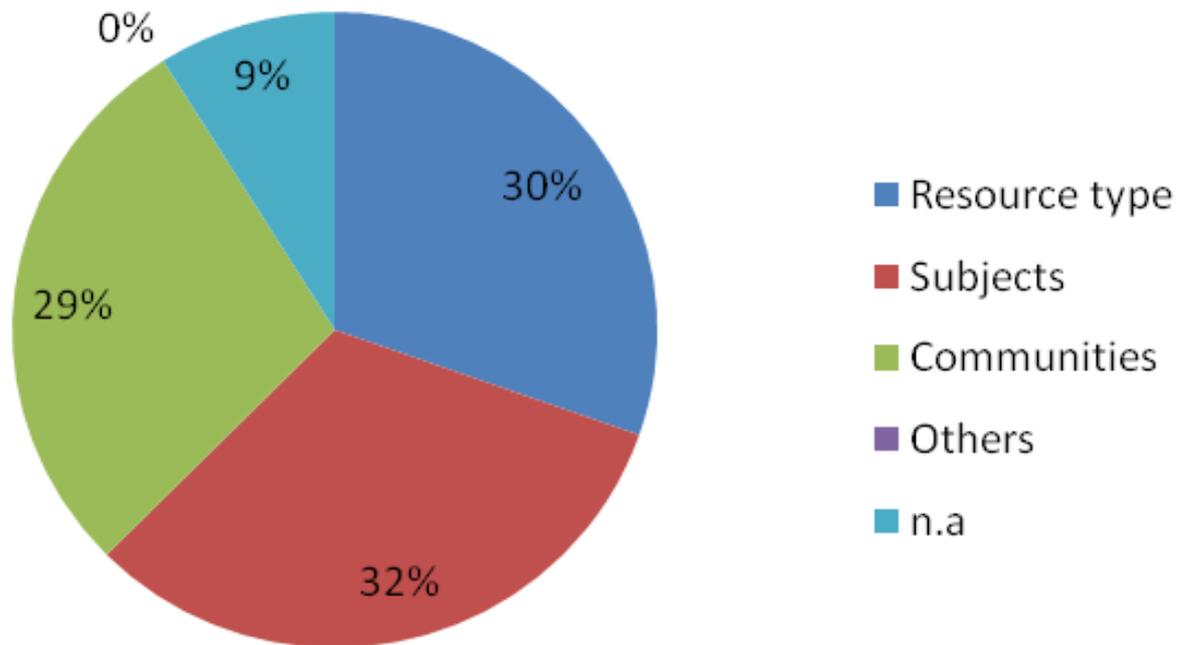
Digital Libraries and Repositories Evaluation

- The organization of the collections in digital libraries is given in subject areas, resource type or by communities.

- In general, when collections were organized in communities, they were also organized, in a secondary level, by type of resource.

Digital Libraries and Repositories Evaluation

Document Types

- Special Collections — 30%
- E-journals — 2%
- E-books — 2%
- Electronic Documents — 57%
- Others — 7%
- n.a — 2%
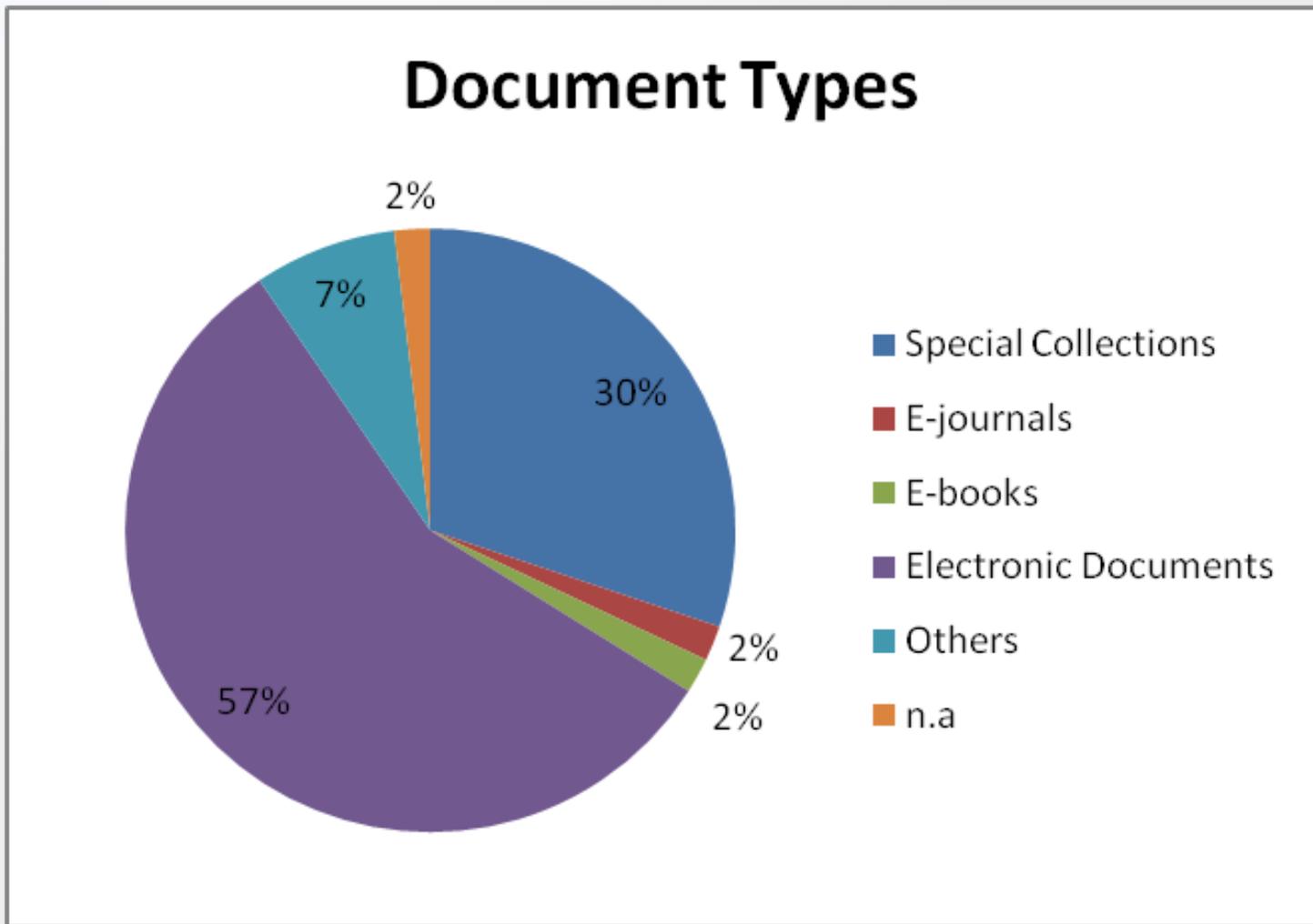
Digital Libraries and Repositories Evaluation

- We found out the platforms best suited for the different type of documents that was intended to provide.

- CONTENTdm is more used to "Special Collections" while Dspace and Eprints are best used for "Electronic Documents".

Digital Repository Prototype to Faculty of Pharmacy, University of Lisbon

- Characterization of Institution

- Platforms for Digital Repositories (Eprints / Dspace)

- Building of the Prototype

  - Software

  - Colors and Logo

  - Handle System (Identifiers)

  - Dublin Core (Metadata Schema)

Digital Repository Prototype to Faculty of Pharmacy, University of Lisbon

– Information organization

- **Communities** (example: Research Centers)

- **Sub-communities** (example: iMed.UL)

- **Collections** (document types example: articles; conference papers; working papers; patents; reports)

Digital Repository Prototype to Faculty of Pharmacy, University of Lisbon

- Features of the Prototype
  - Homepage
  - Search tools
  - Administration Tools
  - User Login
  - Self-archive Workflow
  - Statistics

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- Administration Tools

Digital Repository Prototype to Faculty of Pharmacy, University of Lisbon

- Users Login ("My Dspace")
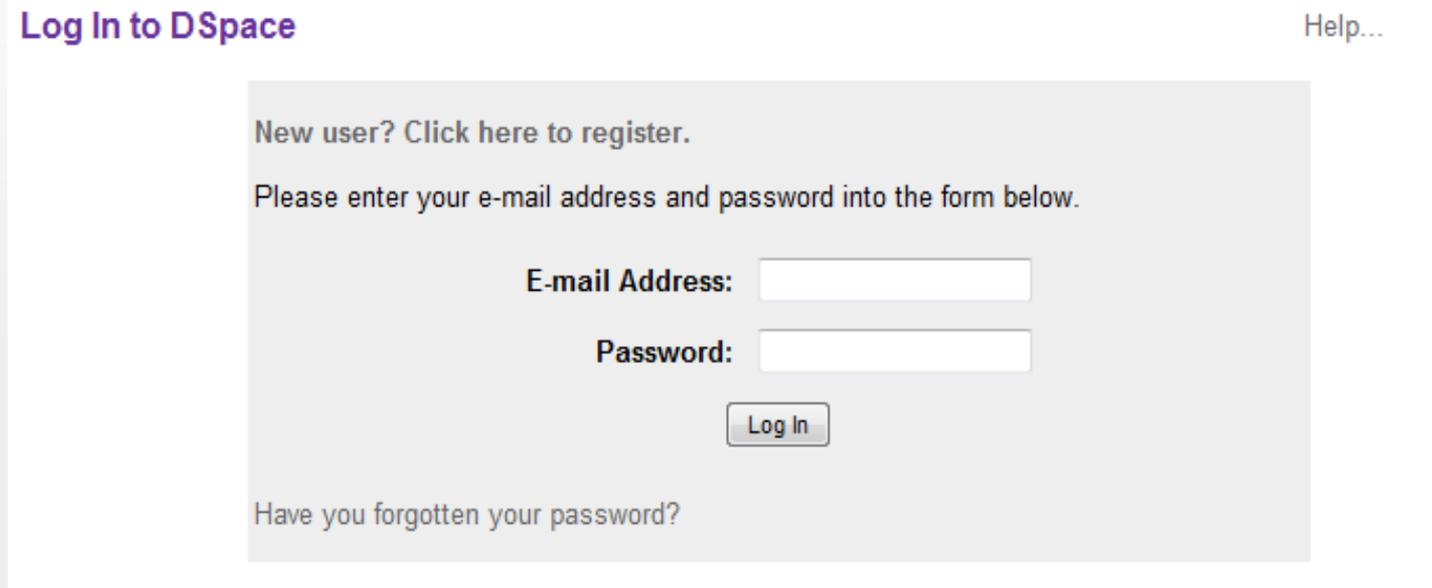
- – Dpsace allow LDAP (*Lightweight Directory Access Protocol*) authentication

Digital Repository Prototype to Faculty of Pharmacy, University of Lisbon

- Self-archive Workflow

  – Available to authorized users

  – Each collection can have a different workflow

  – Different templates are made to each collection accordingly with document type

- Statistics

  – PERL

  – Setup several parameters

  – Documents submitted, items viewed, registered users,…

Digital Repository Prototype Evaluation

- Contact with potential users

- Brief explanation of the prototype

- Explanation of the purpose of evaluation

- Usability tests

- Answer to a questionnaire

Digital Repository Prototype Evaluation

- Tasks:

  - Prototype analysis

  - Organization analysis

  - Search by author

  - View results

  - Download fulltext

  - User Login

  - Self-archive a document

Digital Repository Prototype Evaluation

Disagree   Agree

1. I think I would use this tool frequently

1	2	3	4	5

2. I think the system too complex

1	2	3	4	5

3. I think the system was easy to use

1	2	3	4	5

4. I think I would need technical support for using this system

1	2	3	4	5

5. I found the various features of the system were well integrated

1	2	3	4	5

6. I think there are too many inconsistencies in this system

1	2	3	4	5

7. I think that most potential users will learn to use the system easily

1	2	3	4	5

8. I found the system very heavy

1	2	3	4	5

9. I felt very confident when using the system

1	2	3	4	5

10. I need to learn many things in order to use the system

1	2	3	4	5

Conclusions

- A digital repository is the tool that allows the access, the preservation and archiving of all academic and scientific results produced in the institution.

- Libraries should develop a very friendly service and prepare briefings, training sessions and some tutorials to help users in the more complex tasks, to ensure that the community sees it as added value

- We should try to approach the organization of information in the digital repository to the reality of the institution

Conclusions

- The implementation of digital repositories in the university context is now of undeniable importance:

    – For greater transparency of scholarly communication,

    – For the institutional value,

    – For the treatment of information in digital format,

    – For improving access and retrieval of scientific information.

Thanks for all your attention!

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