Stellenbosch University's Institutional Data Repository Pilot Project

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Introduction

- Background
- Motivation prudent assessment
- Goal
- Context

Research Design

Project Objectives	Research	Data Collection Methods	Sources of data	Data Analysis	
	Methodology			Techniques	
Objective 1	Case study	Direct observation	Figshare staff members	Grounded theory	
			and Figshare users		
		Semi-structured interviews	Figshare staff members		
		Documentation	Figshare documentation		
		Participant observation	Figshare web-based		
			interface		
Objective 2	Case study	Documentation	OAIS reference model	Grounded theory	
		Documentation	Figshare documentation		
Objective 3	Case study	Participant observation	Figshare web-based	Grounded theory	
			interfaces		
Objective 4	Case study	Direct observation	Participating researchers	Grounded theory	
		Documentation	Existing research data		
		Participant observation	SU library metadata		
			management division		
Objective 5	Survey research	Self-administered	Participating researchers	hers Statistical analysis	
		questionnaire			

- Documentation
- Components and features
- Platform's environments
- Interfaces for searching, browsing and information retrieval

• Home



• Uploads



• User account - home

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• Browsing, searching and information retrieval

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Objective 2 - Figshare and the OAIS reference model



Objective 2 - Figshare and the OAIS reference model

- Functional model entities and sub-components
- Limitations of analysis technique
- Functional requirements
- Unanswered question

<u>Objective 3 – Figshare's Information Architecture</u>

- Information architecture framework formulated by Rosenfeld, Morville and Arango (2015):
 - 1. Organisation System
 - 2. Labeling System
 - 3. Navigation System
 - 4. Searching System

Objective 3 – Figshare's Information Architecture

Components	Findings
1. Organisation System	• Organisation scheme and structure were largely satisfactory.
2. Labeling System	• Types and variety of labels appeared to be satisfactory (when viewed in isolation).
3. Navigation System	 A number of aspects could be improved upon. When the labels were analysed in conjunction with the navigation a number of flaws were found. Some problems with embedded, supplemental and advanced navigation.
4. Searching System	 User interface has some good features but leaves a lot to be desired. It could certainly use a number of enhancements. This is the case for the following components: (1) selection of searches (2) presentation of results and (3) the design of the search interface. Basic search anatomy and search algorithms were not assessed.

Objective 3 – Figshare's Information Architecture

- Red flags
- Compliance with FAIR data sharing principles
- Different methods users attempt to find information:
 - 1. known-item seeking
 - 2. exploratory seeking
 - 3. exhaustive research

Objective 4 – Development of Support Services

- Research data uploads
- Metadata assignment

	Researcher 1	Researcher 2	Researcher 3			
Files	File 1	File 1	File 1	File 2	File 3	File 4
Number of metadata fields completed	14	13	4	6	8	4
Percentage of completed metadata fields	64%	59%	18%	27%	36%	18%

Objective 4 – Development of Support Services

• Results from Metadata Management Division



Objective 5 – User experience of research participants

• Feedback from research participants

Lessons learned

- 1. It is advisable to pilot technological infrastructure.
- 2. Multi-prong approach is beneficial.
- 3. Approach and sequence of analyses matters.
- 4. Extensive research should be conducted read, read and read!
- 5. Functional capabilities should be assessed.
- 6. Governance framework is very important.
- 7. Technology should be assessed along with associated services.
- 8. Information architecture should be assessed.

List of References

- Consultative Committee for Space Data System. 2012. Reference Model for an Open Archival Information System (OAIS). Accessed: https://public.ccsds.org/pubs/650x0m2.pdf [2017, September 11].
- Rosenfeld, L., Morville. P & Arango, J. 2015. *Information Architecture For The Web and Beyond*. Sebastopol: O'Reilly.

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Dankie Thank you Enkosi



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