

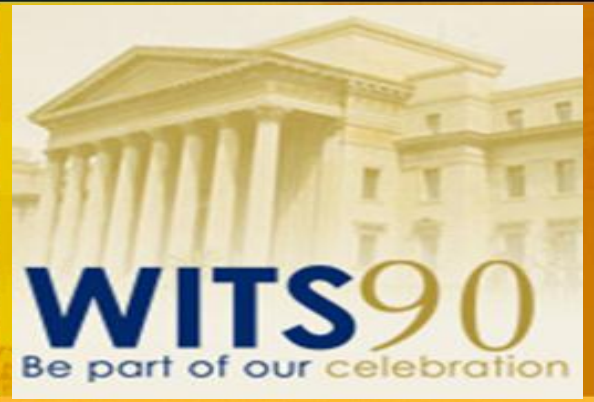
A POLICY FRAMEWORK FOR THE DIGITAL LIBRARY

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OVERVIEW



- Introduction
 - Digital Library Policy
 - Convergence of Cultural Institutions
- Background: International Digital Library Policy
- Digital Library Policies: The International Picture
- The South African Scene
- Conclusion And Recommendation



INTRODUCTION



- Digital Library programmes complement the provision of electronic journals and databases - digitised collections, digital publishing and digital exhibits
- Increasing impact on research, teaching and learning
- DLs justify their investment in digital developments as a powerful means of realizing the larger institutional goals of the academic communities they serve



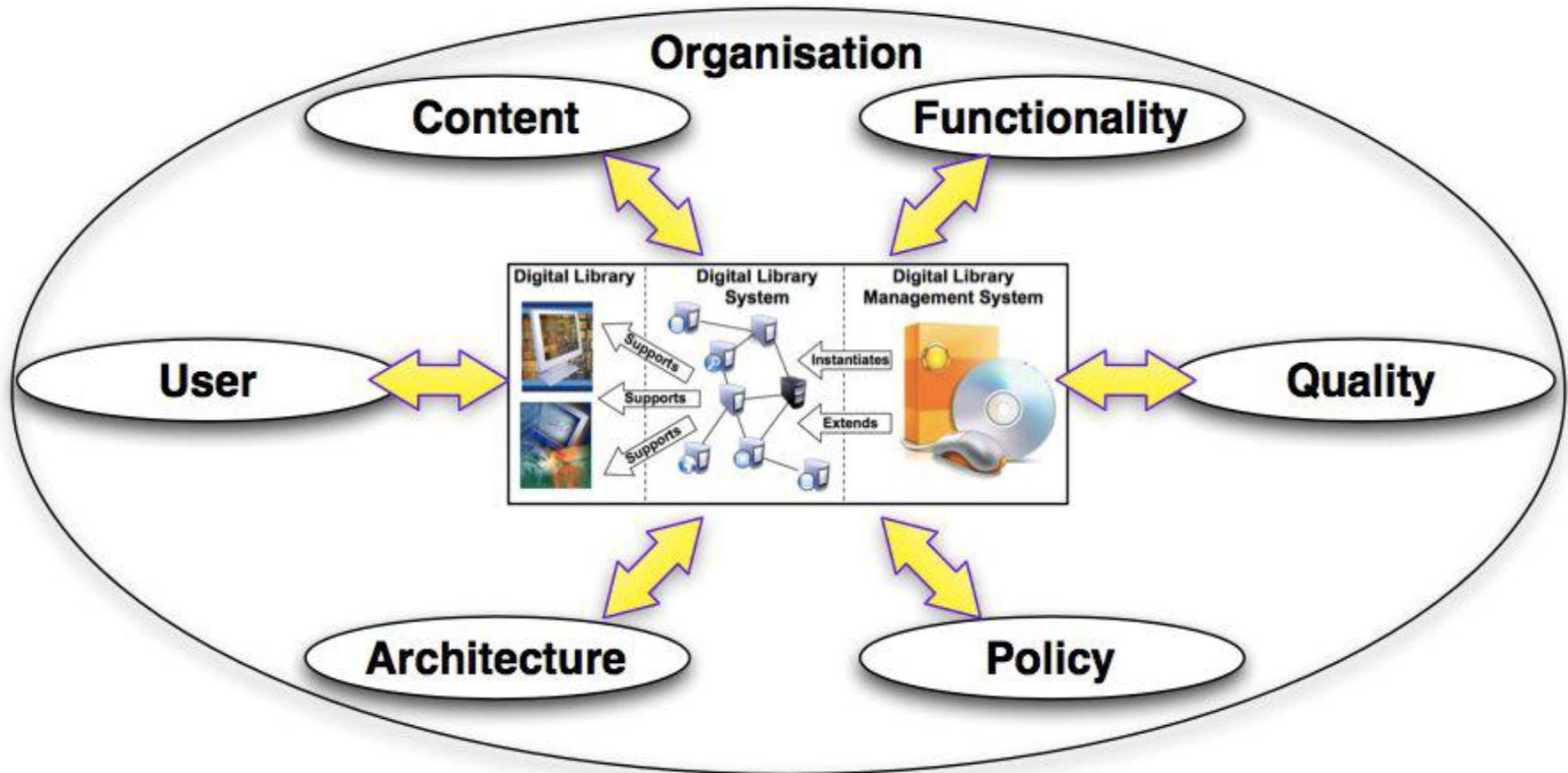
INTRODUCTION



Definitions:

- The Digital Library Federation: DLs are "organizations that provide the resources, including the specialized staff, to select, structure, offer intellectual access to, interpret, distribute, preserve the integrity of, and ensure the persistence over time of, collections of digital works so that they are readily and economically available for use by a defined community or set of communities" (n.d. - <http://old.diglib.org/roles/survey1a.htm>)
- *Digital Library Reference Model (DLRM)*: "A potentially virtual organisation, that comprehensively collects, manages and preserves for the long depth of time rich digital content, and offers to its targeted user communities specialised functionality on that content, of defined quality and according to comprehensive codified policies"(p17)

THE DIGITAL LIBRARY UNIVERSE: MAIN CONCEPTS



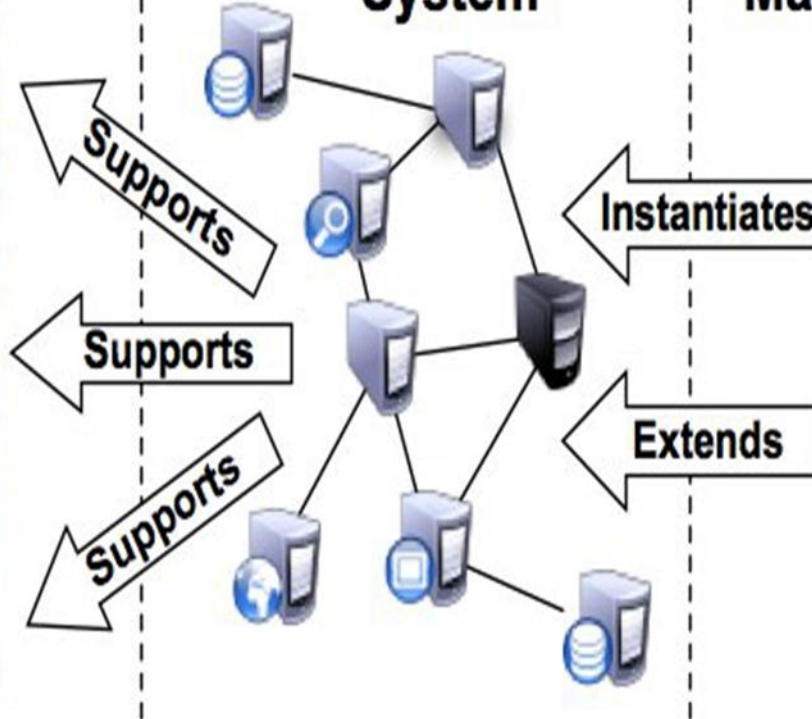
Source: <http://bscw.research-infrastructures.eu/pub/bscw.cgi/d222816/D3.2b%20Digital%20Library%20Reference%20Model.pdf>

DL, DLS and DLMS: A Three-tier Framework

Digital Library



Digital Library System

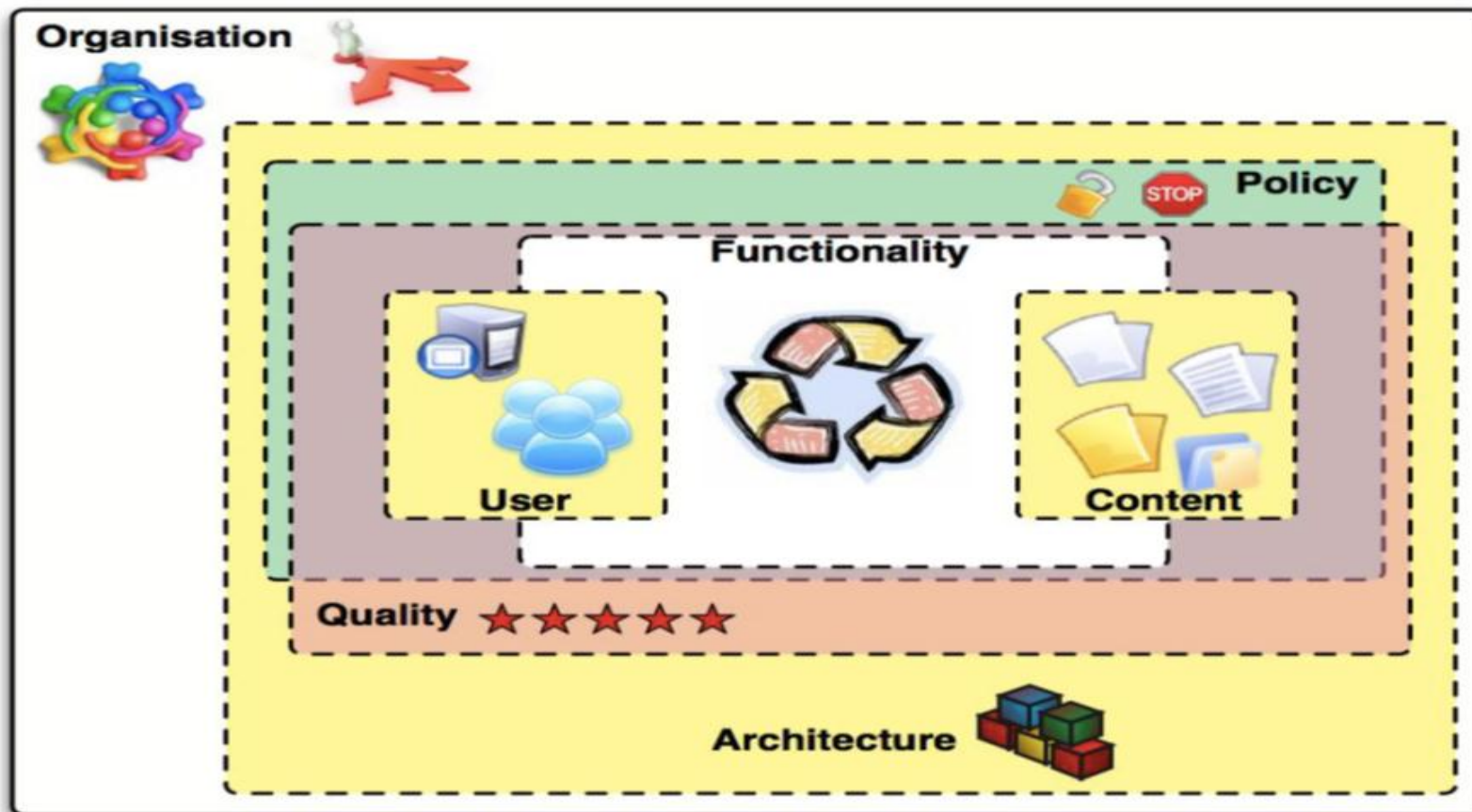


Digital Library Management System



- Source: <http://bscw.research-infrastructures.eu/pub/bscw.cgi/d222816/D3.2b%20Digital%20Library%20Reference%20Model.pdf>

THE DIGITAL LIBRARY UNIVERSE: THE MAIN CONCEPTS IN PERSPECTIVE



Source: <http://bscw.research-infrastructures.eu/pub/bscw.cgi/d222816/D3.2b%20Digital%20Library%20Reference%20Model.pdf>



THE SEVEN CONCEPTS

- **Organisation:** social arrangement pursuing a well-defined goal (the digital library service). Should not be confused with “the” Organisation/Institution that decided to set up the Digital Library
- **Content:** information objects that the Digital Library handles
- **User:** various actors (whether human or machine) entitled to interact with the Digital Library
- **Functionality:** the services that a Digital Library offers to different users, whether individual users or user groups



THE SEVEN CONCEPTS

- **Policy:** this concept represents the set or sets of conditions, rules, terms and regulations governing every aspect of the Digital Library service. These include acceptable user behaviour, digital rights management, privacy and confidentiality, charges to users, and collection formation
- **Quality:** parameters that can be used to characterize and evaluate the overall service of a Digital Library including each aspect of it, such as the seven main concepts listed above
- **Architecture:** represents a mapping of the overall service offered by a Digital Library (characterised by the seven core concepts above), on to the hardware and software components



DIGITAL LIBRARY POLICY

- Oxford English Dictionary refers to policy as “a course or principle of action adopted or proposed by an organisation or individual”
- Digital Library Reference Model defines policy as “a set of guiding principles designed to organise actions in a coherent way and to help in decision making” (p.123). These principles -- specific ‘rules’, ‘conditions’, ‘terms or ‘regulations’ -- are captured through the Policy concept and are manifested through a document which usually consists of policy statement, rationale, enforcement and responsible office



DIGITAL LIBRARY POLICY

- The Policy concept represents the set or sets of conditions, rules, terms and regulations governing every single aspect of the Digital Library service including acceptable user behaviour, digital rights management, privacy and confidentiality, charges to users, and collection formation. Policies may be defined within the Digital Library, be superimposed by the Institution establishing the Digital Library, or outside of that (e.g., Policy governing our Society). Policies can be extrinsic or intrinsic ... capture the rules and conditions regulating the overall Organisation (p. 20)



DIGITAL LIBRARY POLICY

- DLRM further states that:
 - Underpinning every digital library is a policy framework
 - The policy framework makes the DL viable - without a policy framework a DL is little more than a container for content
 - even the mechanisms for structuring the content within a traditional library building as container (e.g. deciding what will be on what shelves where) are based upon policy
 - Policy governs how a digital library is instantiated and run; a library without policy therefore is similar to a Ferrari in a world without roads and populated only by blind drivers. ... Policy permeates the digital library from conceptualization through to operation (p. 123)



CONVERGENCE OF CULTURAL INSTITUTIONS

- Content and formats of DLs incorporate all the types of holdings stored traditionally and separately in libraries, museums, archives and galleries
- Digital technology has blurred the boundaries
- Trend to merge or forge close collaboration - Library and Archives Canada (LAC) - with a museum mandate; USA - collaborative endeavours and collaborative projects; New Zealand - merger of the Archives New Zealand and the National Library with the Department of Internal Affairs
- New title: 'Deputy Head and Librarian and Archivist of Canada and Chair, Heads of Federal Agencies'



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY



A good digital collection:

- Is based on high-quality master files that can support a range of uses over time; it is "born-archival"
- Facilitates discovery, access, analysis, interoperability, and re-use
- Combines objects, metadata, and user interfaces to create a satisfying user experience.



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY



Nine principles that apply to good digital collections:

- **Intentional:** created according to an explicit policy
- **Clear:** described in manner to allow one to determine the authenticity, integrity, and interpretation (scope, format, restrictions on access, ownership) of the item
- **Curated:** actively managed during its lifecycle
- **Accessible:** avoiding unnecessary impediments to use, and accessible to persons with disabilities
- **Respectful:** conscious of the intellectual property rights of all partners



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY



Principles that apply to good digital collections:

- **Useful:** supplies data that allows standardized measures of usefulness to be recorded
- **Interoperable** with other systems, both local and international
- **Integrated** into the user's teaching and research workflows
- **Sustainable** over time, with the appropriate digital preservation commitment, knowledge, and infrastructure in place



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

- In many institutions DL activities started as isolated work units that lacked a unified approach
- Early digital library activities as an intrusion, others exhibited impressive eagerness to collaborate and cooperate in developing solutions
- Digital collection development has now however moved from being an ad hoc “extra” activity to a core service in many cultural heritage institutions



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

- Ownership and control of digital library services still remains a vexed question in some institutions
- Others are consolidating digital library services under names such as Digital Library and Archives, Digital Library, and similar terms.
- Some digital libraries are housed outside the main institutional library: e.g., the California Digital Library is a unit within the department of Academic Planning, Programs and Coordination at the University of California Office of the President. This may be to highlight the fact that digital library development cuts across various departments in the University, including archives, museums, the herbarium and others.



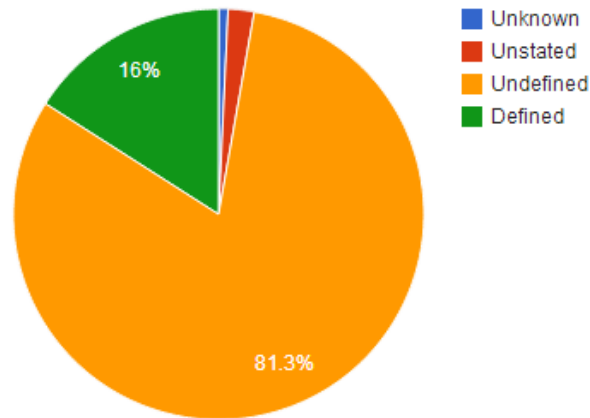
BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

- Many DL initiatives embarked upon without any policies and no mandate
- Many preservation policies were preceded by de facto policies on file formats and transformations without provision for acquiring source versions (Hitchcock et al., 2007).
- Observations are validated by the statistics available on OpenDOAR

BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

Recorded Content Policies – Worldwide for 2154 repositories on OpenDOAR as at 14 February 2013

Recorded Content Policies - Worldwide



Total = 2154 repositories

OpenDOAR - 14-Feb-2013

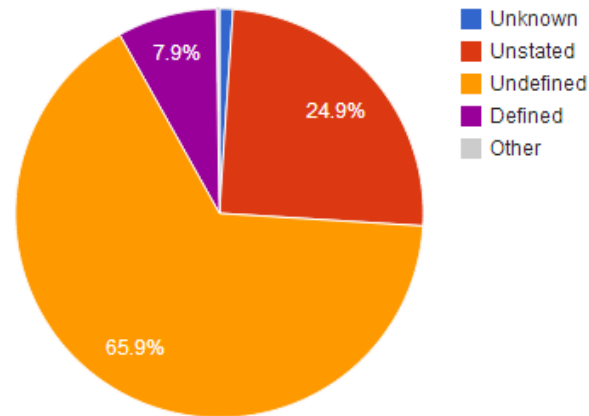
- 344 (16%) had defined content policies
- 16 (0.7%) had unknown content policies
- 44 (2%) had no stated content policies
- 1752 (81.3%) had undefined content policies

Source: [OpenDOAR](#)

BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

Statistics of Recorded Preservation Policies – Worldwide showed that:

Recorded Preservation Policies - Worldwide



Total = 2154 repositories

OpenDOAR - 14-Feb-2013

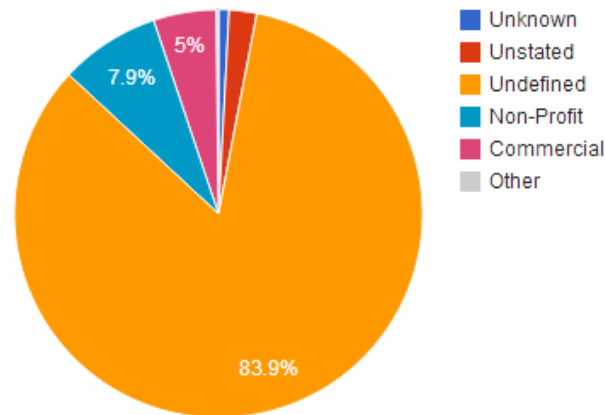
- 170 (7.9%) were defined
- 23 (1.1%) were unknown
- 537 (24.9%) were unstated
- 1420 (65.9%) were undefined

Source: [OpenDOAR](#)

BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

Statistics of Recorded Metadata Re-use Policies – Worldwide showed that:

Recorded Metadata Re-use Policies - Worldwide



Total = 2154 repositories

OpenDOAR - 14-Feb-2013

- 171 (7.9%) were not-for-profit
- 107 (5%) were commercial
- 18 (0.8%) were unknown
- 47 (2.2%) were unstated
- 1809 (83.9%) were undefined

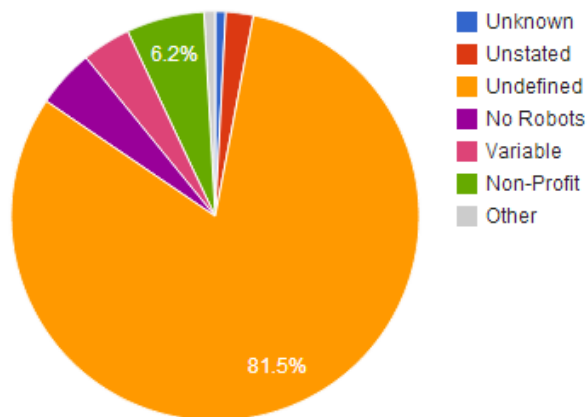
Source: [OpenDOAR](#)

BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY



Statistics of Recorded [Full-text] Data Re-use Policies – Worldwide showed that:

Recorded [Full-text] Data Re-use Policies - Worldwide



Total = 2154 repositories

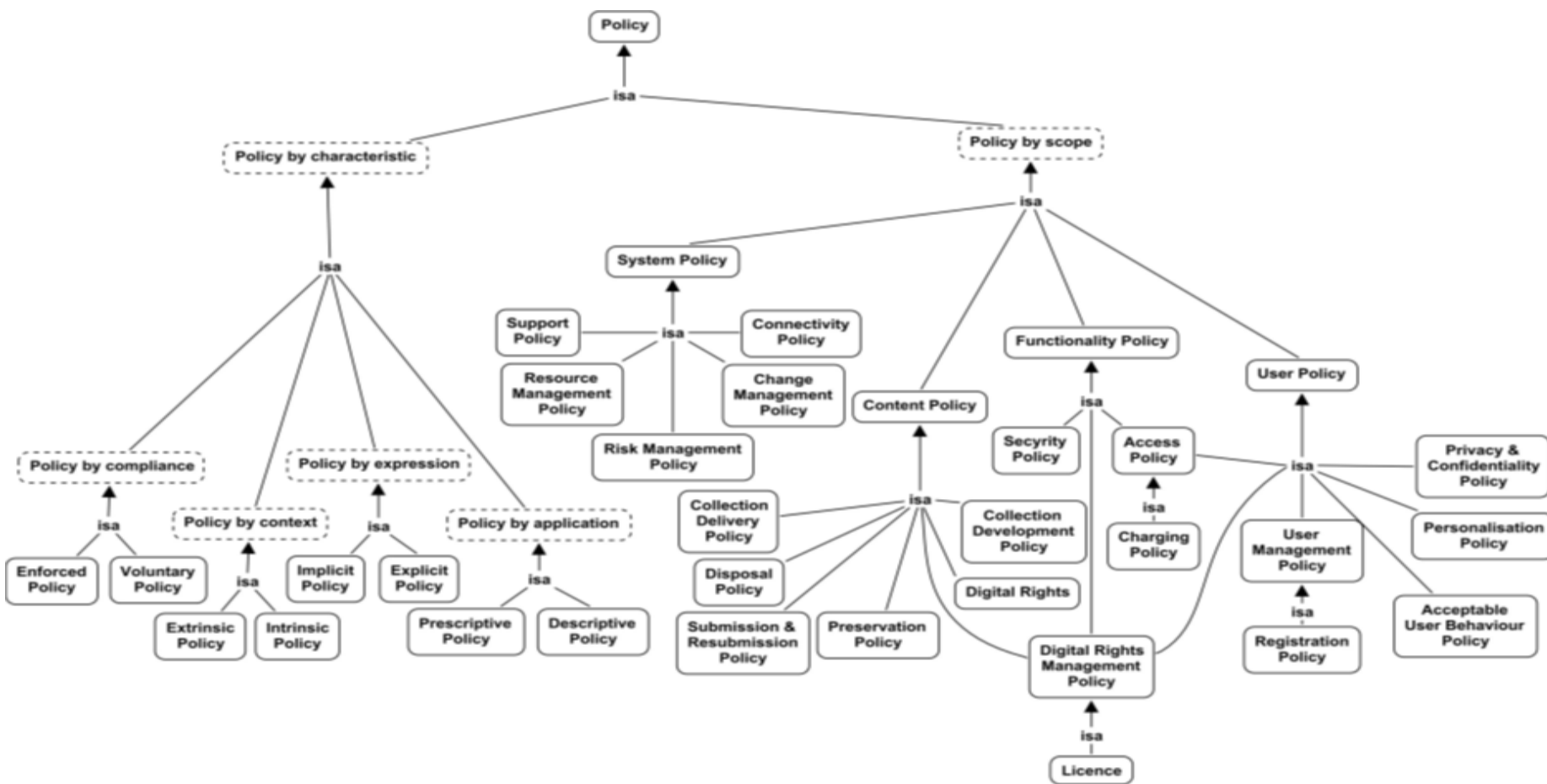
OpenDOAR - 14-Feb-2013

- 133 (6.2%)
- 18 (0.8%) were unknown
- 47 (2.2%) were unstated
- 1757 (81.5%) were undefined
- 99 (4.6%) had no robots
- 83 (3.8%) were variable

Source: [OpenDOAR](#)

BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

Policy by characteristics and *Policy by scope*





BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

- **Extrinsic policy:** imposed by a body outside the Digital Library (e.g., legal and regulatory frameworks).
- **Intrinsic policy:** defined inside, and applied within, i.e. policy within the policy (e.g., documentation of software specifications using a production database).
- **Explicit policy:** stated and approved. (e.g., limitation for upload of files over a specified size).
- **Implicit Policy:** is inherent in the system (e.g., unstated limitation for upload of files over a specified size)



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

- **Prescriptive policy:** constrains or manages interactions between system and users (e.g., registration policy; termination of file upload, if the file is of a format that is not permitted)
- **Descriptive Policy:** provides explanation on a certain policy (e.g., the Collection Development Policy describes the scope and coverage of the digital library)
- **Enforced policy:** deployed and strictly applied within the DL (e.g., a Charging Policy)
- **Voluntary policy:** policy that is either not deployed within the DL, or which might be followed by the user through own choice (e.g., the Collection Development Policy might be outlined in broad terms, but not enforced in practice)



BACKGROUND: INTERNATIONAL DIGITAL LIBRARY POLICY

Digital Policy Scope and Classes

Policy Scope	Policy classes
System policy	Change management policy, Connectivity policy, Risk management policy, Resource management policy, Support policy.
Content policy	Collection development policy, Digital rights, Digital rights management policy, Preservation policy, Submission and resubmission policy, Disposal policy, Collection delivery policy.
Functionality policy	Access policy, Security policy
User policy	Privacy and confidentiality policy, Personalisation policy, Acceptable user behaviour policy, User management policy, Digital rights management policy, Access policy.



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE

- A desk research exercise was used to gather international information on digital libraries and repositories with digital library policies
- 12 largest repositories by volume of content identified on the Registry of Open Access Repositories (ROAR)
- Policies of these repositories were searched in OpenDOAR
- Eight repositories had some form of policy, but unfortunately these policies were not available on the institutional repository sites



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE



Name	Policies
National Taiwan University	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
Universidad Nacional Autónoma de México	Commercial metadata re-use permitted; Re-use of full data items permitted for not-for-profit purposes; Content policies defined; Submission policies defined; Preservation policies explicitly undefined
UCL (University College London)	Metadata re-use permitted for not-for-profit purposes; Re-use of full data items permitted for not-for-profit purposes; Content policies explicitly undefined; Submission policies defined; Preservation policies explicitly undefined
Digitaal Wetenschappelijk Archief Utrecht - University of Utrecht	Commercial metadata re-use permitted; Rights vary for the re-use of full data items; Content policies defined; Submission policies defined; Preservation policies defined
DSpace at Cambridge (UK)	Metadata re-use permitted for not-for-profit purposes; Harvesting full data items by robots prohibited; Content policies defined; Submission policies defined; Preservation policies explicitly undefined
u:scholar - University of Vienna Library and Archive Services, University of Vienna, Austria	[Not yet analysed] – no data available



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE



Name	Policies
Wageningen University and Research Centre	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies defined ; Submission policies defined ; Preservation policies not stated
University of Queensland eSpace	Metadata re-use permitted for not-for-profit purposes; Re-use of full data items permitted for not-for-profit purposes; Content policies defined; Submission policies defined; Preservation policies explicitly undefined
University of Ghent UGent Institutional Archive	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies defined
Digital Academic Repository van de Universiteit van Amsterdam (UvA-DARE)	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies not stated
Massachusetts Institute of Technology	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies not stated
DASH (Digital Access to Scholarship at Harvard)	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies defined; Submission policies defined; Preservation policies explicitly undefined



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE



Policies from searching Google:

- [California Digital Library Policies](#) include [CDL Information Technology Key Security Guidelines & Baseline Supporting Practices](#); [CDL Privacy Policy](#); [CDL Accessibility Policy](#); [Guidelines for CDL-Hosted Web Sites, Wikis, LISTSERVS and Blogs](#); [Policy for the Use of California Digital Library Resources for Research \("CDL Research Use Policy"\)](#)
- [The Dartmouth Digital Library: Program, Priorities, and Policies](#)
- [Glasgow Digital Library policy documents](#) include [GDL Collection Development and Management Policy](#); [Draft GDL Metadata Standards Policy](#)
- [HathiTrust Digital Library Policies](#) include [Access and Use](#); [Digital Preservation](#); [Copyright](#); [Quality](#); [Privacy](#)
- [The National Science Digital Library policies, guidelines, rubrics, and best practices for collection building](#) include [NSDL Collection Policy](#); [Privacy Policy](#); [NSDL Collection Development Blueprint](#); [NSDL Resource Quality Checklist](#); [NSDL Resource Metadata Rubric](#); [NSDL Annotation Metadata Rubric](#);
- [York Digital Library PolicyNSDL Paradata Metadata Rubric](#); [NSDL Weeding Plan 2012, v.1](#); [Best Practices for Metrics Collection and Analysis: Final Report of the NSDL Metrics Working Group](#); [Recommendations to the NSDL Community for Privacy Policy Implementation](#); [Contribute A Resource or Collections](#)



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE



A few digital preservation policies were also retrieved:

- [Cornell University Library Digital Preservation Policy Framework](#)
- Library and Archives Canada [Digital Preservation Policy](#)
- [H-Net Digital Preservation Policies and Procedures](#)
- [ICPSR Digital Preservation Policy Framework](#)
- [University of South Carolina Libraries' Digital Preservation Policy Framework](#)
- [Yale University Library Digital Preservation Policy](#)



DIGITAL LIBRARY POLICIES: THE INTERNATIONAL PICTURE



Digital Preservation Policy Frameworks of ICPSR and CUL

ICPSR Digital Preservation Policy Framework (reflects the seven attributes of a trusted digital repository)	Cornell University Library Digital Preservation Policy Framework
1 OAIS Compliance	1. Purpose
2 Administrative Responsibility	2. Objective
2.1 Purpose	3. Mandate
2.2 Mandate	4. Scope
2.3 Objectives	5. Challenges/Incentives
3 Organizational Viability	6. Principles
3.1 Scope	7. Roles and Responsibilities
3.2 Operating Principles	8. Cooperation/Collaboration
3.3 Roles and Responsibilities	9. Selection and Acquisition Criteria
3.4 Selection and Acquisition	10. Access/Use Criteria
3.5 Access and Use	11. Definitions
3.6 Challenges and Risks	12. References
4 Financial Sustainability	
4.1 Institutional Commitment	
4.2 Cooperation and Collaboration	
5 Technological and Procedural Suitability	
6 System Security	
7 Procedural Accountability	
7.1 Audit and Transparency	
7.2 Digital Preservation Policy Framework Administration	
7.3 References	

South African Repositories on OpenDOAR

University	Software	Policies (stated in OpenDOAR)
Cape Peninsula University of Technology	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
Durban University of Technology	DSPACE	Metadata policies not stated; Full data item policies not stated; Content policies not stated; Submission policies not stated; Preservation policies not stated
North-West University	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
Rhodes University	Eprints	Metadata re-use permitted for not-for-profit purposes; Re-use of full data items permitted for not-for-profit purposes; Content policies explicitly undefined; Submission policies defined; Preservation policies not stated
Stellenbosch University	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined



THE SOUTH AFRICAN SCENE

[University of Cape Town - Computer Science Archive](#)

Eprints

Commercial metadata re-use permitted; Rights vary for the re-use of full data items; Content policies defined; Submission policies defined; Preservation policies not stated

[University of Cape Town Law Archive](#)

DSPACE

Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined

[University of Fort Hare](#)

DSPACE

Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined

[University of Johannesburg](#)

DSPACE

Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined



THE SOUTH AFRICAN SCENE

<u>University of KwaZulu-Natal</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
<u>University of Limpopo</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
<u>University of Pretoria</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies not stated
<u>University of South Africa</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined



THE SOUTH AFRICAN SCENE

<u>University of the Free State</u>	ETD-DB	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
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<u>University of the Western Cape</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
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<u>University of the Witwatersrand, Johannesburg</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
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<u>University of Zululand</u>	DSPACE	Metadata re-use policy explicitly undefined; Full data item policies explicitly undefined; Content policies explicitly undefined; Submission policies explicitly undefined; Preservation policies explicitly undefined
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CONCLUSION AND RECOMMENDATION

- The commitment to ensuring continued access to digital information in the future is predicated on the implementation of sound strategies, policies, standards and best practice
- Appropriate policy framework would ensure the long-term success of a digital library programme -- System policy, Content policy, Functionality policy and User policy
- The institutional library should ensure that in developing digital library activities it exercises a leadership role and supports and encourages other institutional entities to work within an appropriate policy framework, especially in those situations where the library is not responsible for institutional archives and other special collections
- Generally accepted that institutions can adapt policies already in use by other institutions

Thank you

Questions?

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