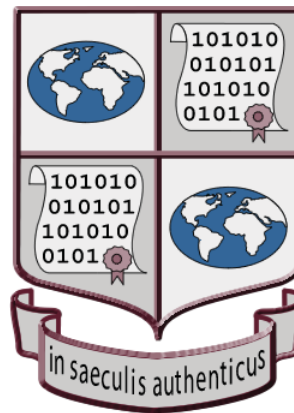


InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems



Describing and analyzing the recordkeeping capabilities of metadata sets

Joanne Evans

School of Information Management and Systems
Monash University, Australia

Lori Lindberg

Graduate School of Education and Information Studies
UCLA, USA



InterPARES Project

Joanne Evans and Lori Lindberg
Description Cross-domain

Outline

- Introduction
- Recordkeeping metadata
- Metadata schema registry
- Analyzing recordkeeping capabilities
- Current Status
- Future Work and Conclusion



Introduction

- Recordkeeping
 - ‘making and maintaining complete, accurate and reliable evidence of business transactions in the form of recorded information’
Australian Standard 4390 Records Management
 - the capture and efficient management of metadata relating to the content, structure and context of records creation and use is key to ensuring the authenticity, integrity and reliability of records as evidence of business and social activities.



Introduction

- Digital environments – both a threat and an opportunity for recordkeeping
- Potential for automated metadata capture and re-use
- Need to understand:-
 1. What is the recordkeeping metadata to capture and maintain?
 2. Is it captured in existing metadata sets and standards, and if so, where and how?



Recordkeeping Metadata

- What is recordkeeping metadata?
 - standardized information that identifies, authenticates, describes, manages and makes accessible, through time and space, documents created in the context of social and business activity.
- Initiatives
 - Australian SPIRT Recordkeeping Metadata Project (1998 – 1999)
 - ISO 23081 Metadata for Records and Records Management Processes (2003 – 2005)
 - InterPARES Benchmark and Baseline Requirements for assessing and maintaining the authenticity of electronic records (1999 – 2001)



InterPARES 1

- Initiated in 1999 and concluded in 2001.
- Focused on the preservation of the authenticity of records created and/or maintained in databases and document management systems in the course of administrative activities.
- In addition, a component of the project was dedicated to the exploration of the issues related to the long-term preservation of digital sound, the findings of which in part led to InterPARES 2.



InterPARES 2

- International Research on Permanent Authentic Records in Electronic Systems (InterPARES) 2 Project: Experiential, Interactive, Dynamic Records

http://www.interpares.org/ip2/ip2_index.cfm



InterPARES Project

Joanne Evans and Lori Lindberg
Description Cross-domain

InterPARES 2

- Initiated in 2002 and expected to be completed in 2006.
- In addition to dealing with issues of authenticity, it delves into the issues of reliability and accuracy from the perspective of the entire life-cycle of records, from creation to permanent preservation.
- Focuses on records produced in complex digital environments in the course of *artistic*, *scientific* and *e-government* activities.



Description Cross-Domain

- Investigating the role of metadata schemas and standards in records creation, control, maintenance, appraisal, preservation and use in both traditional and emerging digital and web-based environments within the three focus areas.

http://www.interpares.org/ip2/ip2_description.cfm



Metadata Schema Registry

- Research tool of Description Cross Domain
- Purposes:-
 - To describe relevant metadata schema and their features in a standardized way
 - To provide an overview of existing and emerging schemas
 - To describe the scope and purpose of the schemas
 - To specify what type of metadata they cover
 - To identify related encoding schemes
 - To provide an overview of the applicability of the schemas to recordkeeping and archival functions



Metadata Schema Registry

- Developed through prototyping and instantiation
- Descriptive requirements:-
 - Registration
 - Identification
 - Description
 - Documentation
 - Rights
 - Provenance
 - Relationships
 - Accessibility
 - Administration



Analyzing recordkeeping capabilities

- Why?
- Assumption that much of the metadata required for recordkeeping is available in business systems
- Automated capture of metadata only sustainable method of metadata creation
- Assess existing metadata sets to identify what recordkeeping metadata is captured and what is not
- Strategically address the disparities:-
 - Engage with other metadata communities to address recordkeeping requirements within their schemas, or
 - Own recordkeeping metadata schemas providing the mechanisms to fill the gaps



Analyzing recordkeeping capabilities

- How?
- Assess against best practice instruments:-
 - ISO 23081 Records management processes – Metadata for records
 - InterPARES Benchmark and Baseline requirements
- Importance of assessing degree to which a schema meets a requirement



Analysis Process

- Familiarity with best practice instruments
- Examine documentation to gain familiarity with structure and semantics of elements and a schema's conceptual basis
- Complete analysis worksheet:—
 - 1. General, 2. Recordkeeping General, 3. Assessment against ISO 23081, 4. Assessment against InterPARES Benchmark Requirements, 5. Assessment against InterPARES Baseline Requirements, 6. Classification of Recordkeeping Metadata Purpose, 7. General Comments
- Extract results into summary document and add links to analysis worksheet and summary document in documentation section of the registry



Example: DCMES 1.1

- DC is a simple, 15 element schema designed for resource discovery rather than recordkeeping functions.
- Lacks the packaging of information for:-
 - Function
 - Aggregation
 - Location
 - Disposition
 - Mandate
 - Histories of use, management and preservation



Current Status

- Exploratory prototype
- Diversity in presentation of information about metadata sets:-
 - infrastructure for persistent identification
 - standardized metadata about metadata schemas (feedback into ISO 23081)
- Validating analysis process
 - analytical data to be provided to the ISO working group (ISO TC46/SC11-WG1) developing the Recordkeeping Metadata Standard (ISO 23081).



Future Work

- Production version
 - Web based application supporting distributed data entry
 - Incorporate analysis results into database structure as recordkeeping capabilities
- Release to wider audience
 - Sustainability
 - Specification of Infrastructure
- Other entities:-
 - Application profiles
 - Encoding schemes
 - Crosswalks



Conclusion

- Identifying, describing and analyzing archival and recordkeeping capabilities helps us to:-
 - Understand commonalities and differences
 - Identify what recordkeeping metadata is captured in existing metadata sets and what is not as the basis for strategic collaborations
- Part of framework to foster harmonization and exploit the power of metadata in digital environments



Acknowledgements

Description Cross Domain

Professor Sue McKemmish (co-chair)

Monash University, Melbourne, Australia

Anne J. Gilliland PhD (co-chair)

University of California, Los Angeles, USA

Nadav Rouche

University of California, Los Angeles, USA

Funding support for InterPARES is provided by the Social Sciences and Humanities Research Council of Canada, United States' National Historical Publications and Records Commission and the National Science Foundation

Support for Joanne Evans is provided through an Australian Resource Council (ARC) Linkage Grant in conjunction with Monash University, National Archives of Australia, State Records Authority of New South Wales and the Australian Society of Archivist's Committee on Descriptive Standards.



InterPARES Project

Joanne Evans and Lori Lindberg
Description Cross-domain