



Hans Hofman National Archives of the Netherlands

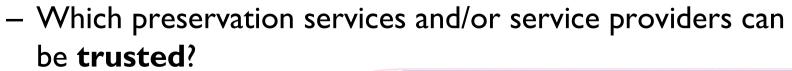
WePreserve Conference Nice, 30 October 2008



DRAMBORA Interactive: Nice, October 2008

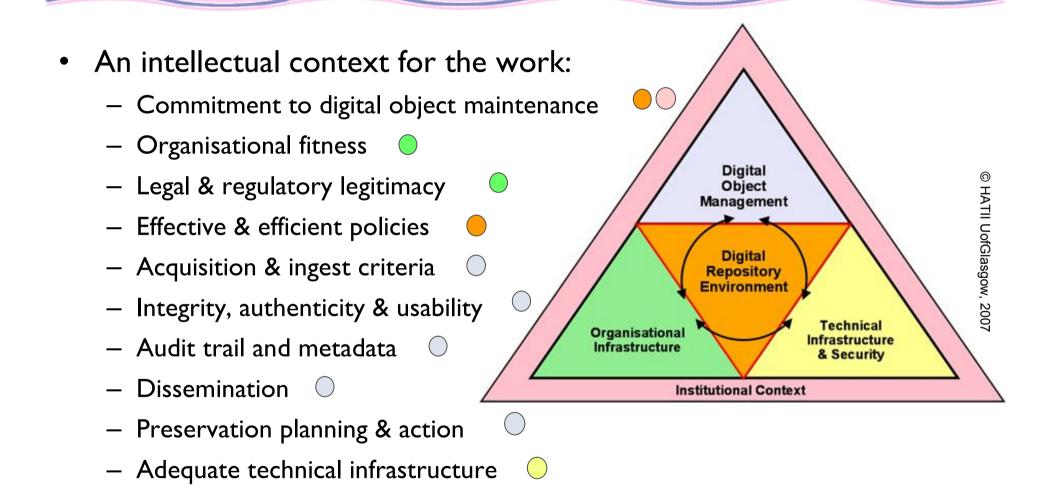
Digital Preservation Today

- Growth in creation of digital information with scholarly, scientific and cultural value continues to accelerate
- Practical approaches aimed at ensuring long-term authenticity, integrity and understandability of digital materials are emerging at a similar pace
- The discipline remains immature though:
 - Are adopted approaches successful?
 - What is the **metric** for defining success?
 - Which approaches are **appropriate** for particular digital preservation challenges?



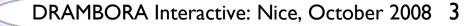


Digital preservation repository core criteria

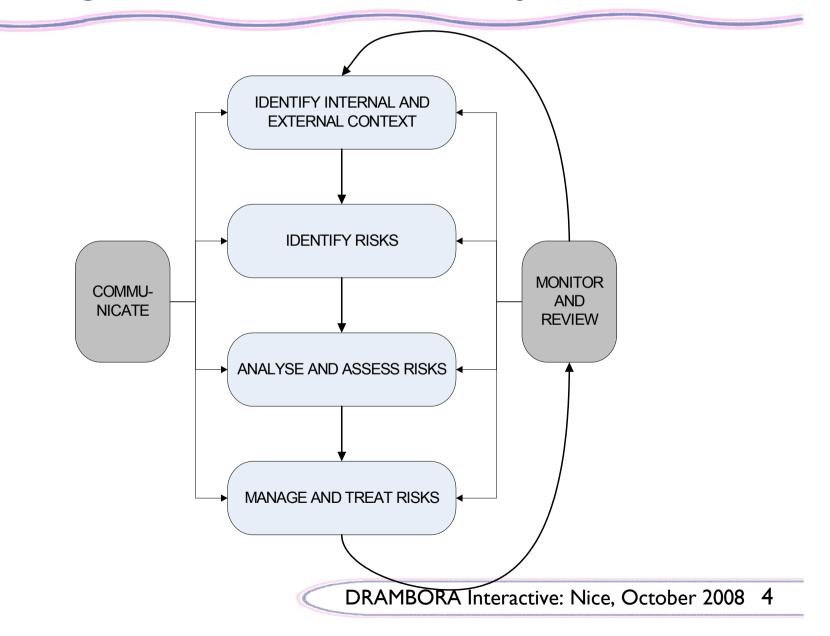


DCC

ligital preservation



Risk management: a recursive process





Chronology of this work

- **2002**: Trusted Repositories Attributes & Responsibilities
- 2002: Reference Model for an Open Archival Information System (standardised as ISO 14721 in 2003)
- 2005: RLG/NARA Draft Audit Check-list for Repository Certification released for public comment
- 2006-2007: CRL and DCC Pilot Repository Audits
- Dec 2006: Catalogue of Criteria for Trusted Digital Repositories published (en) by nestor
- Feb 2007: Digital Repository Audit Method Based on Risk Assessment (DRAMBORA) published by DCC/DPE
- Mar 2007: Trustworthy Repositories Audit & Certification (TRAC) Criteria and Check-list published by CRL
- Dec 2007: DELOS DRAMBORA Digital Library Audits Conducted
- Mar 2008: DRAMBORA Interactive released



DRAMBORA: The Beginning

- Easy to say establish evidence and recognise risk, but how do you do this and then take advantage of this knowledge
- Digital Repository Audit Method Based on Risk Assessment (DRAMBORA)
- Provides mechanisms to facilitate internal selfassessment & reporting
 - Validates appropriateness of repository's efforts
 - Provides means to generate appropriate documentation
- External certification less of a priority currently, and less immediately viable



DRAMBORA: History

- Follows lessons learned from DCC pilot audits
- A collaborative exercise between DCC and DigitalPreservationEurope (DPE)
- Audit methodology was released in March 2007
- <u>http://www.repositoryaudit.eu</u>
- Four public tutorials (London, the Hague, Arlington, JISC Repositories Conference)
- A test period within the DPE project



Testing DRAMBORA 1.0

- National Archives of Scotland, Edinburgh, UK
- National Library of the Czech Republic
- National Central Library of Florence, Italy
- International Institute for Social History, Amsterdam, The Netherlands
- Netarkivet (Danish Internet Archive), Denmark
- Ludwig Boltzmann Institute in Linz, Austria, in cooperation with the Ars Electronica Center
- E-LIS repository managed by CILEA, Rome, Italy
- Lithuanian Museum of Ethnocosmology, Lithuania

The NATIONAL ARCHIVES of SCOTLAND







E-prints in Library and Information Science



What DRAMBORA users learned...

- "Good, visible and persuading documentation of risks might help to improve conditions for their successful management. And, of course, as soon as you have the truly trusted repository, you need the good documentation and certification to prove it"
- "We discovered some points of weakness in the repository and also learned to stop fretting about the stuff we actually do very well"
- "Assessment will be continued and the risk register will be an integral part of the repository once it becomes operational"
- "We originally planned to use TRAC for both our internal and later external audit. We also looked at NESTOR. [...] we believe that regular self audits using DRAMBORA will make the external audit easier and cheaper"



DRAMBORA Interactive

- The pilot audits validated the methodology's effectiveness - audit as a standalone process has demonstrable value
- Development of DRAMBORA Interactive as an on-line tool to support and guide the audit
- Another round of pilot audits within the DPE to test the on-line tool and to provide feedback for improving it



DRAMBORA Interactive

DRAMBORA Online Tool :: Audit Centre :: Identify Risks - Mozilla Firefox	- • ×
<u>F</u> ile <u>E</u> dit <u>V</u> iew Hi <u>s</u> tory <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp	
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DRAMBORA interactive Digital Repository Audit Method Based on Risk Assessment	
Active Repository: Andrew Repository at University of Glasgow	Update
Register a New Repository DRAMBORA Online Tool :: Audit Centre :: Identify Risks	
Logged in: Andrew McHugh Audit Home Add Mandate Add Constraints Add Objectives Add Activities and Assets	
User Services Coordinator Another Staff Member id entify risks	⊟identified risks
at: Andrew Repository at University of Glasgow	New Interactive Rat
Last Login: 24 Jun 2008 risk, or one that you have already defined. Risks describe challenges or threats that impede the achievement of repository objectives, obstruct activities and prejudice the continued availability of essential assets.	
Log Out Build upon existing risk Define new risk from scratch	
Home Risk Name*: Management Failure	
Online Help Risk One or more aspect of organisational management is unsuccessful, resulting	Relate Risk To or From Risk(s)
User Admin Description*: in a failure to deliver an anticipated or required business outcome.	Assess Risk or Manage Risk
Before the Audit Audit Centre	
Report Results	. ■ defined activities
Latest News Risk Repository management fails to allocate sufficient	
Get Expert Help Vulnerability: resources to complete one or more business activities	Edefined objectives
	• 4
Submit Feedback Risk Management's adopted preservation strate Wulnerability: in information loss WUNCLED	ositoryaud
Done	8



Testing DRAMBORA Interactive

2007

- MBooks Michigan-Google Digitization Project, US
- CERN Document Server, Switzerland
- Kungliga Biblioteket, Stockholm
- Gallica, National Library of France
- BDI National Digital Library of Italy

2008

- Digital libraries in Europe
- Digital Libraries in North America
- Digital Libraries in Asia





DRAMBORA Interactive: Nice, October 2008 12

DRAMBORA: Present

- To allow comparisons between peer organisations, profiles of repository types need to be developed
- An attempt at a typical digital library risk profile included in the DELOS report "Investigation of the potential application of the DRAMBORA toolkit in the context of digital libraries to support the assessment of the repository aspects of digital libraries"
- Support for peer comparisons should be built into the DRAMBORA Interactive system

DRAMBORA: Present and Future

- Promotion of the assessment method and toolkit
- 1208 downloads of the toolkit
- 2052 downloads of the forms (Doc + Excel)
- 77 registered audits
- Accreditation of DRAMBORA Auditors (training courses)
- Development of training materials to support selfassessment
- Discussion with other working groups developing repository audit checklists

Conclusions

- In isolation, or combined with other assessment checklists, DRAMBORA offers benefits to repositories both individually and collectively
- DRAMBORA Interactive is offering more than just increased usability of the toolkit
- Need for training audit facilitators and guide the assessment process in the system
- The concept of 'trust' in repositories is evolving through this work and discussions with other

groups involved in similar work

