Assessing Digital Preservation Readiness
Assessing Readiness

• How are we doing just now?
• How do we want to improve?
Benchmarking

- Strengths and weaknesses
- Goals and timescales
- Incremental
- Planned improvements
- Not just about techniques

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Maturity Models

Today:
• Digital Preservation Capability Maturity Model
• NDSA Levels of Digital Preservation
But also:
• Adrian Brown’s advice on Maturity Modelling
• AIDA and CARDIO
• Cornell’s 5 stages
• DRAMBORA

http://www.securelyrooted.com/dpcmm/
Some Questions Before Starting....

- How much of the organisation is in scope?
- How much can you rely on others?
- What will you gain from the exercise?

How much of the organisation is in scope?
Just your team or IT, management etc.

How much can you rely on others?
What about outsourced services?
What to do about collaborative services?
What about purchased products?

What to gain from the exercise?
Your own improvements?
Investment?
Work planning?
http://www.securelyrooted.com/dpcmm/

Based on software development maturity models. Very closely related to the OAIS standard and related certification standard. Two main goals: to help practitioners assess their DP capabilities and identify gaps, also to help gather information that can be used for advocacy purposes, drawing attention to the importance of digital preservation.

15 Components abstracted from OAIS to develop ‘best practice’

7 infrastructure components
• Policy, Strategy
• Governance
• Collaboration
• Technical Expertise
• Open standards
• Designated Community
8 preservation service components

- Ingest
- Storage
- Media Renewal
- Integrity
- Security
- Metadata
- Access
- Record Survey

Each component is scored 0-4 based on the organisation’s capability in that area.
Five Stages of Maturity

- **Open-Ended**: In Stage 5, no electronic records that merit long-term preservation are at risk.
  - Evaluate capabilities & requirements for Stage 5.
- **Advanced**: Few electronic records that merit long-term preservation are at risk.
  - Evaluate capabilities & requirements for Stage 4.
- **Intermediate**: In this environment, some electronic records that merit long-term preservation remain at risk.
  - Evaluate capabilities & requirements for Stage 3.
- **Mature**: Many electronic records that merit long-term preservation are at risk.
  - Evaluate capabilities & requirements for Stage 2.
- **Nurturer**: Most, if not all, electronic records that merit long-term preservation are at risk.
Final Assessment

<table>
<thead>
<tr>
<th>Capability Levels</th>
<th>Composite Index Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Digital Preservation Capability</td>
<td>0</td>
</tr>
<tr>
<td>Minimal Digital Preservation Capability</td>
<td>1 - 15</td>
</tr>
<tr>
<td>Intermediate Digital Preservation Capability</td>
<td>16 - 30</td>
</tr>
<tr>
<td>Advanced Digital Preservation Capability</td>
<td>31 - 45</td>
</tr>
<tr>
<td>Optimum Digital Preservation Capability</td>
<td>46 – 60</td>
</tr>
</tbody>
</table>
NDSA Levels of Digital Preservation

- Focused on technological solutions
- Assesses maturity in 5 categories against 4 levels

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Categories and Levels

- Storage and Geographic Location
- File Fixity and Data Integrity
- Information Security
- Metadata
- File Formats

- Level 1 – Protect Your Data
- Level 2 – Know Your Data
- Level 3 – Monitor Your Data
- Level 4 – Repair Your Data
## Example: File Formats

<table>
<thead>
<tr>
<th>Metadata</th>
<th>Level One (Protect Your Data)</th>
<th>Level Two (Know Your Data)</th>
<th>Level Three (Monitor Your Data)</th>
<th>Level Four (Repair Your Data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inventory of content and its storage location</td>
<td>- Store administrative metadata</td>
<td>- Store standard technical and descriptive metadata</td>
<td>- Store standard preservation metadata</td>
<td></td>
</tr>
<tr>
<td>- Ensure backup and non-collocation of inventory</td>
<td>- Store transformative metadata and log events</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Building on Results

- Identify stress points/risks
- Help set objectives
- Prioritise developments
- Use as an advocacy tool

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The Other Side of the Coin

- Accreditation or Certification
- Consider when establishing aims
- Choose the best fit for your organisation

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