Assessing Digital Preservation Readiness

Assessing Readiness

- How are we doing just now?
- How do we want to improve?

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Benchmarking

- Strengths and weaknesses
- Goals and timescales
- Incremental development
- 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

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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?

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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?

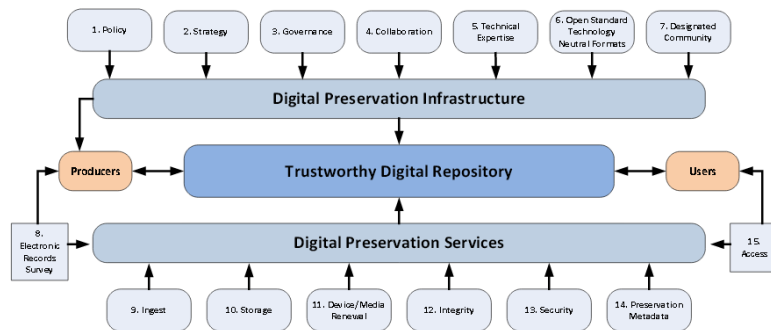Work planning?

Figure 2. Digital Preservation Capability Maturity Model

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'
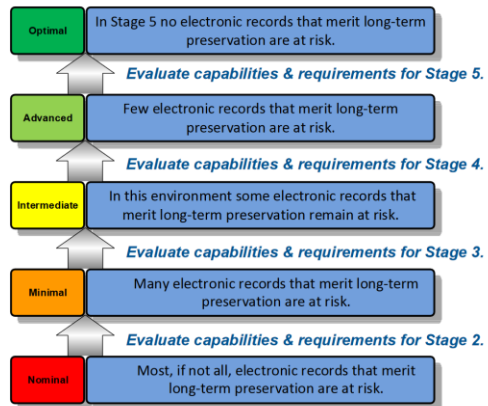
7 infrastructure components
- Policy, Strategy
- Governance
- Collaboration
- Technical Expertise
- Open standards
- Designated Community

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

Optimal	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.
Minimal	Many electronic records that merit long-term preservation are at risk.
	Evaluate capabilities & requirements for Stage 2.
Nominal	Most, if not all, electronic records that merit long-term preservation are at risk.

Final Assessment

Capability Levels	Composite Index Score
Nominal Digital Preservation Capability	0
Minimal Digital Preservation Capability	1 - 15
Intermediate Digital Preservation Capability	16 - 30
Advanced Digital Preservation Capability	31 - 45
Optimum Digital Preservation Capability	46 – 60

NDSA Levels of Digital Preservation

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

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http://www.digitalpreservation.gov/documents/NDSA_Levels_Archiving_2013.pdf
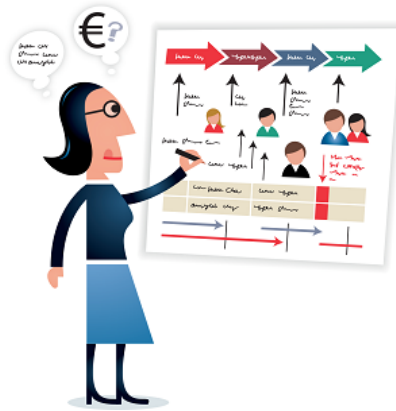
Categories and Levels

- 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

	Level One (Protect Your Data)	Level Two (Know Your Data)	Level Three (Monitor Your Data)	Level Four (Repair Your Data)
Metadata	- Inventory of content and its storage location - Ensure backup and non-collocation of inventory	- Store administrative metadata - Store transformative metadata and log events	- Store standard technical and descriptive metadata	- Store standard preservation metadata

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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