Risk Management and Digital Preservation

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Getting Started with Digital Preservation

Risk Management and Digital Preservation

- Risk management basics

- Risks to digital media

- Having a go

- Taking it further

What is Digital Preservation?

"the series of managed activities necessary to ensure continued access to digital materials for as long as necessary"

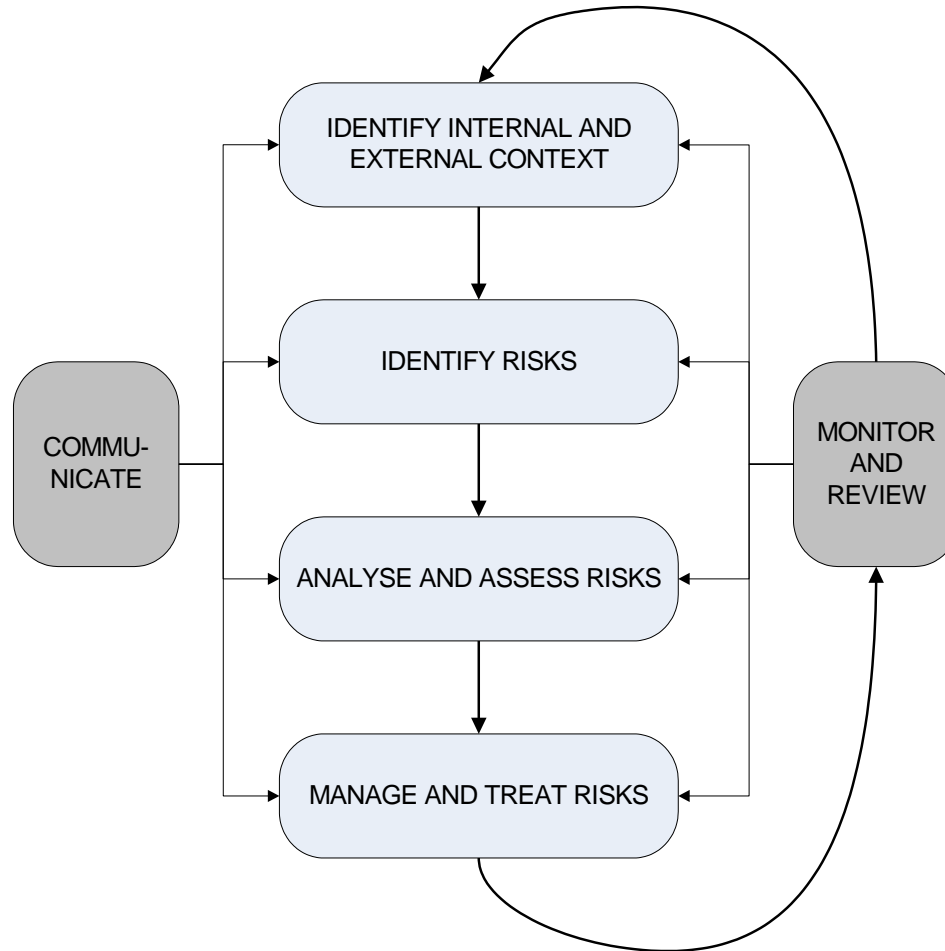(Beagrie & Jones, Digital Preservation Handbook)

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- What is risk?

- ISO:31000 "the effect of uncertainty on objectives"

- So what is risk management?

- Positive or negative

- Why is risk management a good thing [for digital preservation]?

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- Identify risk, and the consequence of it happening
- Assign values to likelihood and impact
- Determine mitigation techniques
- (Some models) assign risk areas and define 'appetite'
- Review periodically
- Also remember 'opportunity' as well as 'risk'

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Some examples of risks to digital media:

- File format obsolescence

- Media degradation (bit rot)

- Media obsolescence

- Hardware obsolescence

- Viruses

- Dissociation (loss of context)

- Network failures

- …etc…

Evaluating Risks

	Consequences		
Likelihood	Major	Moderate	Minor
Likely			
Possible			
Unlikely			

Example Risk

RISK	Contents of archive drive deleted by accident
Consequence	Data loss, Disassociation of other data sets
Likelihood	4
Impact	5
Score	20
Frequency	Weekly, sudden
Owner	Senior Information Risk Owner
Response	Regular tiered back-ups, integrity checking, access policy, strict control of permissions, staff training
New Likelihood	2
New Impact	2
New Score	4
Frequency of Review	Annual

Taking It Further

- Risk appetite

- Explosive risks

- Risk AND opportunity

- PRINCE2 project management

- Intelligent Risk Management

Some Resources

- ISO:31000
  Risk management. Principles and guidance
  www.ico.org/iso/home/standards/iso31000.htm

- DRAMBORA
  www.repositoryaudit.eu/about/

- TIMBUS
  www.timbusproject.net/

- TNA digital continuity service
  www.nationalarchives.gov.uk/information-management/our-services/dc-risk-opportunities.htm

- SPOT
  www.dlib.org/dlib/september12/vermaaten/09vermaaten.html

- In small groups pick select a risk and work through RM steps
  - Be clear on difference between risk and consequence
  - Think of possible mitigation steps
  - Decide scores for before and after mitigation
- 20 mins to discuss and then report back

A Simple Risk Assessment

- Identify Risk
- Consequence
- Likelihood
- Impact
- Score
- Owner
- Responses/Mitigation

- New Likelihood
- New Impact
- New Score
- Proximity
- Trend
- Frequency of Review

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