



Digital**Preservation**Coalition

Risk Management and Digital Preservation

Sharon McMeekin

Head of Training and Skills, DPC

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)

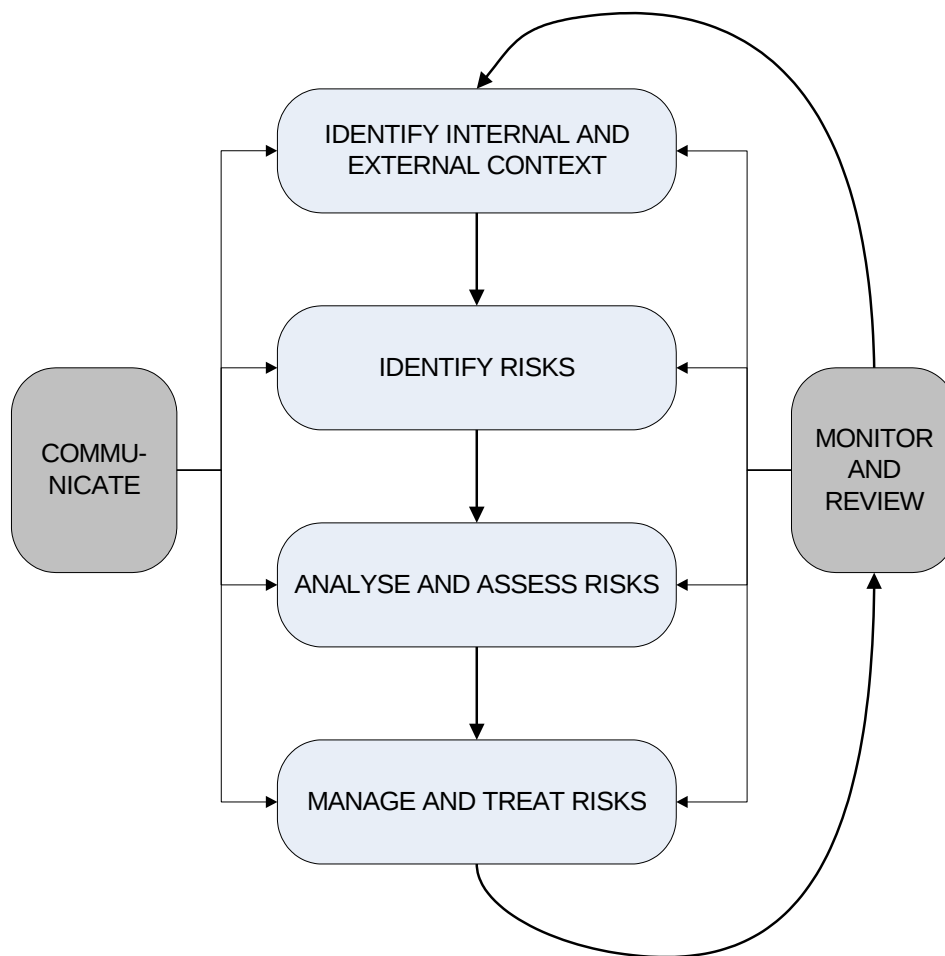


Risk Management Basics

- 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]?



Overview of RM Process



- 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’

Identifying Risks

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

Sharon McMeekin

sharon@dpconline.org

@SharonMcMeekin

www.dpconline.org

Taking It Further

- Risk appetite
- Explosive risks
- Risk AND opportunity
- PRINCE2 project management
- Intelligent Risk Management



Digital**Preservation**Coalition

Some Resources

- ISO:31000
Risk management. Principles and guidance
www.iso.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



Exercise

- 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