

## Risk management and digital preservation

Caroline Peach, Head of Preservation Advisory Centre

## **Risk management and digital preservation...**

- [Digital preservation basics (!)]
- Risk management basics
- Risks to digital media
- Having a go
- Taking it further

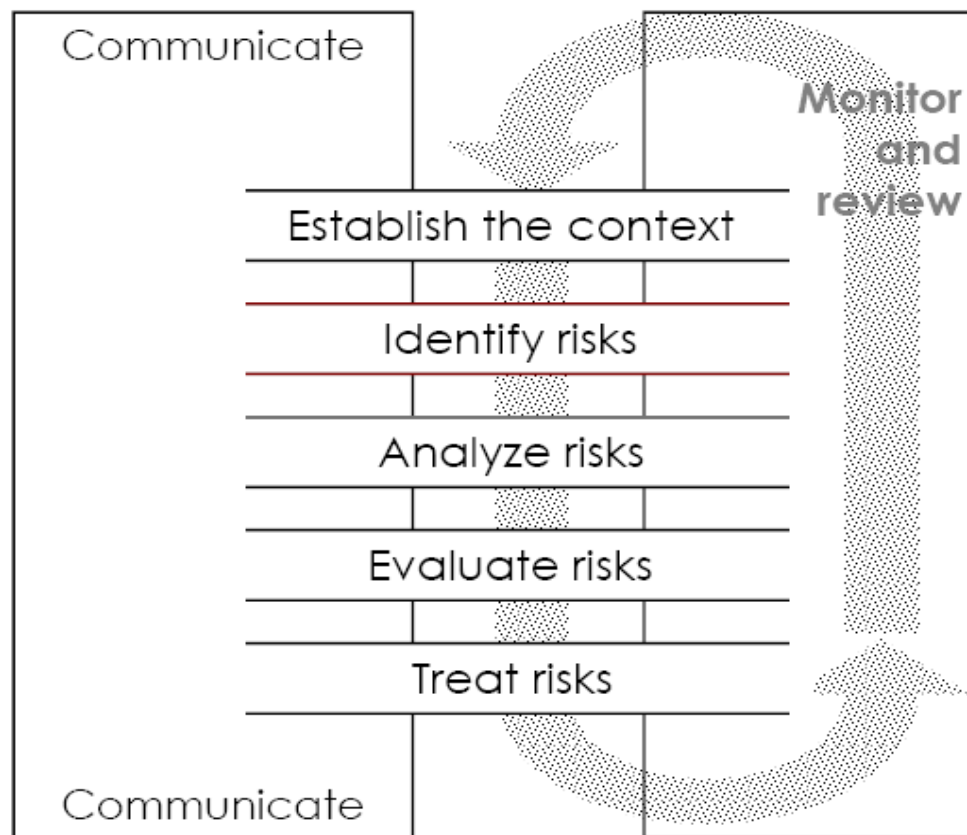
## Digital preservation basics

- 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”
  - Positive or negative
- So what is risk management?
- Why is risk management a good thing [for digital preservation]?

## Overview of risk management process



## Risk assessment: 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...

## Having a go: a simple risk assessment

- Identify risk
- Consequence
- Likelihood
- Impact
- Score
- Proximity
- Owner
- Responses
- New likelihood
- New impact
- New score
- Frequency of review

## Group example

### Archaeological excavation

c. 1000 pages digitized text (TIFFS and PDFs)	TIFFs on CD PDFs on server
c. 500 photographs (TIFFs and JPEGs)	TIFFs on CD JPEGs on server
c. 100 data tables (held as text)	On CD
c. 25 Excel spreadsheets	On CD



## Risk assessment

RISK	That CDs are not readable
Consequence	Data loss Disassociation of other data sets
Likelihood	4
Impact	5
Score	20
Frequency	Annual check
Owner	Senior Information Risk Owner
Response	Copy it, backup onto a network server Wrap information together into a single container
New Likelihood	2
New Impact	5
New Score	.10
Frequency of Review	Annual

## Evaluating risks

	Consequences		
Likelihood	Major	Moderate	Minor
Likely			
Possible			
Unlikely			

## Taking it further

- ISO:31000  
Risk management. Principles and guidance  
[www.iso.org/iso/home/standards/iso31000.htm](http://www.iso.org/iso/home/standards/iso31000.htm)
- DRAMBORA  
[www.repositoryaudit.eu/about/](http://www.repositoryaudit.eu/about/)
- TIMBUS  
[www.timbusproject.net/](http://www.timbusproject.net/)
- TNA digital continuity service  
[www.nationalarchives.gov.uk/information-management/our-services/dc-risk-opportunities.htm](http://www.nationalarchives.gov.uk/information-management/our-services/dc-risk-opportunities.htm)
- SPOT  
[www.dlib.org/dlib/september12/vermaaten/09vermaaten.html](http://www.dlib.org/dlib/september12/vermaaten/09vermaaten.html)