

## Risk management and digital preservation

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

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

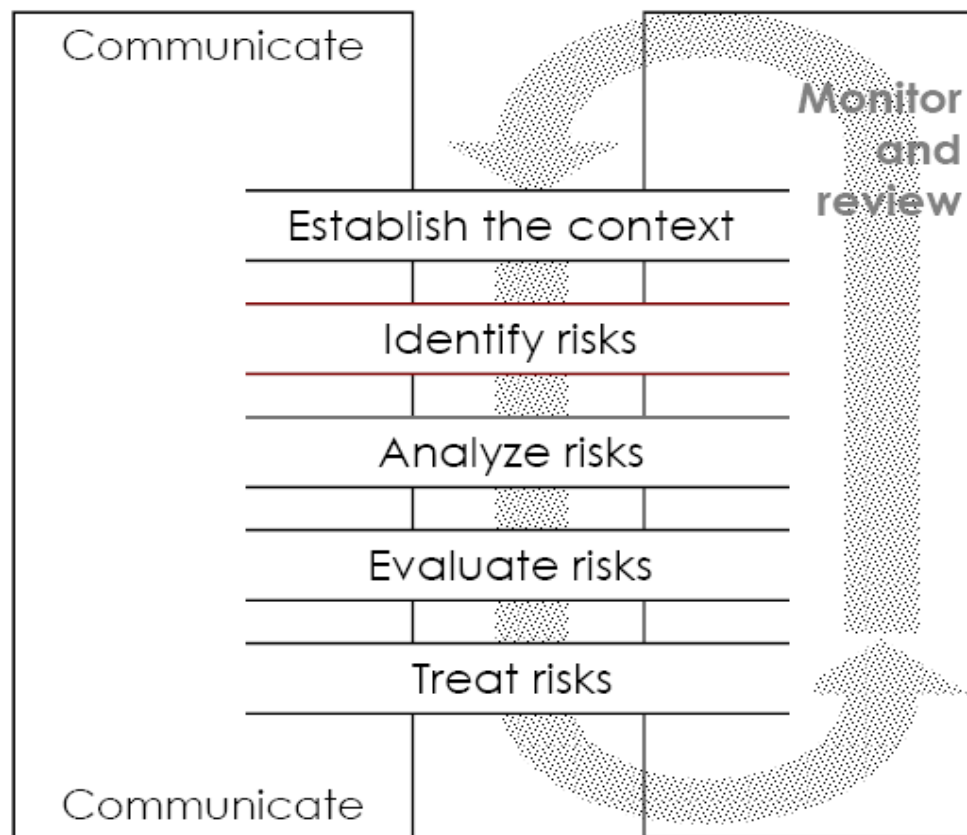
## Digital preservation basics

- 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<br>(TIFFS and PDFs) | TIFFs on CD<br>PDFs on server  |
| c. 500 photographs (TIFFs<br>and JPEGs)          | TIFFs on CD<br>JPEGs on server |
| c. 100 data tables (held as<br>text)             | On CD                          |
| c. 25 Excel spreadsheets                         | On CD                          |



## Risk assessment

| RISK                | That CDs are not readable  |
|---------------------|--|
| Consequence         | Data loss<br>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<br>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)