Identifying Risks and Benefits

DigitalPreservationCoalition

This training session was developed in partnership by the International Internet Preservation Consortium (IIPC) and the Digital Preservation Coalition (DPC)

IIPC netpreserve.org

Why Risk Management?

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Digital Preservation (and by extension Web Archiving) is:

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

Digital Preservation Handbook
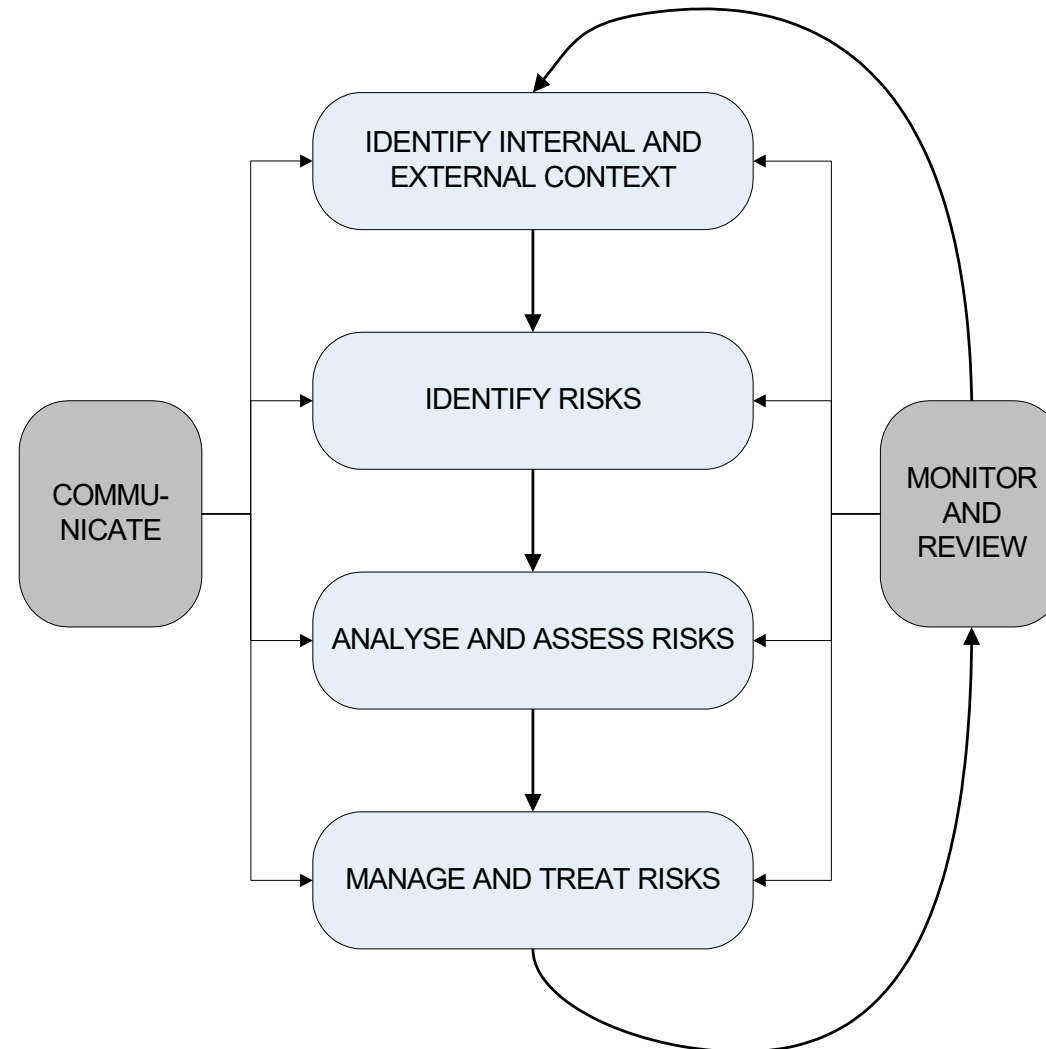
Risk Management Basics

- Risk = event or action with negative impact
  - Risk Management
  - Proactive management of risk
- Reduce likelihood and/or impact
- Established standard: ISO:31000
- Why is risk management a good thing [for web archiving]?

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Overview of Risk Management Process

Risk Registers

1. Risk
2. Consequences
3. Unmitigated scores
   - Likelihood, Impact, Overall
4. Mitigation Steps
5. Update scores (as above)
6. Frequency/Proximity
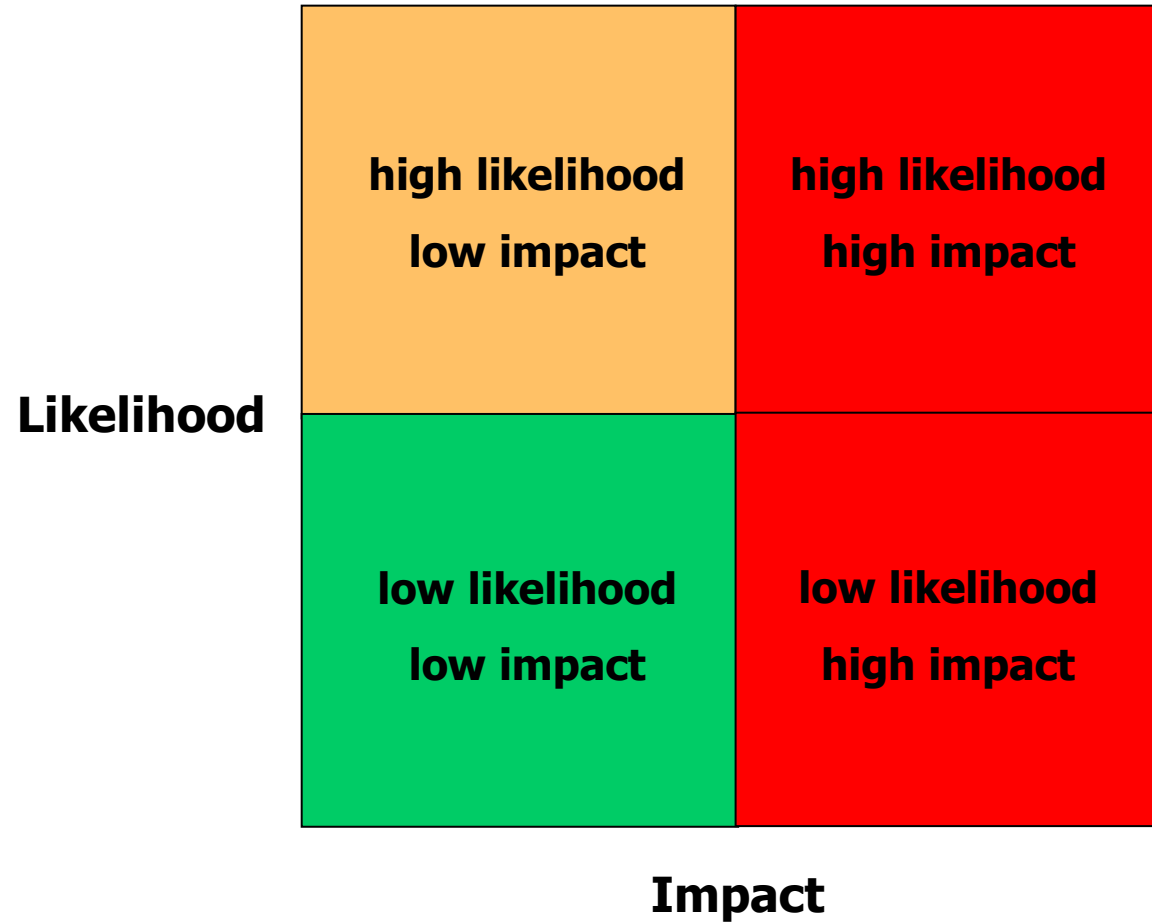7. Owner
8. Trend
9. Review

Can also:
- *Assign risk areas*
- *Define appetite*

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Risk Appetite

Some Possible Risks…

- Capture processes don't scale

- Lack of context

- Obsolescence (formats, software, hardware, skills…)

- Content disappears before is it captured

- Can't gain permission sites with multiple owners

- Viruses

- Capture tools can't harvest new content types

- Unable to access necessary plug-ins

- Lack of resources (staff, funding, storage…)

- …etc…

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An Example Risk

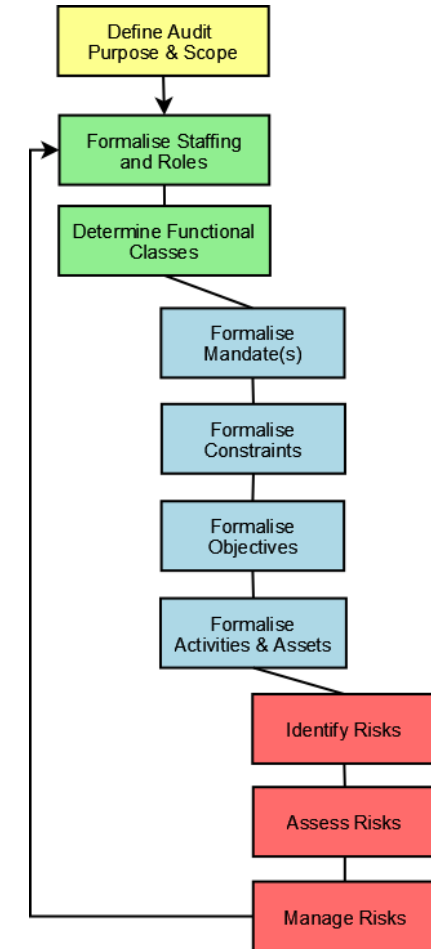| RISK	Capture process doesn't scale
Consequence	Capture must be segmented and takes more time, content missed, more resources expended
Likelihood	4
Impact	4
Score	16
Frequency	Weekly
Owner	Web Archivist
Response	Processes thoroughly designed and tested, robust tools identified, appropriate workflow software identified, suitable hardware purchased.
New Likelihood	2
New Impact	4
New Score	8
Frequency of Review	Quarterly

Useful Tool: DRAMBORA

- Originally a toolkit for audit self-assessment

- Frames preservation through the lens of risk management

- Provides:
  - Description of processes for risk management
  - Templates for completing an assessment
  - List of generic risks

Useful Tool: DiAGRAM

https://nationalarchives.shinyapps.io/DiAGRAM/

Some Other Resources

ISO:31000 - Risk management. Principles and guidelines

https://www.iso.org/publication/PUB100426.html and
https://www.iso.org/standard/65694.html
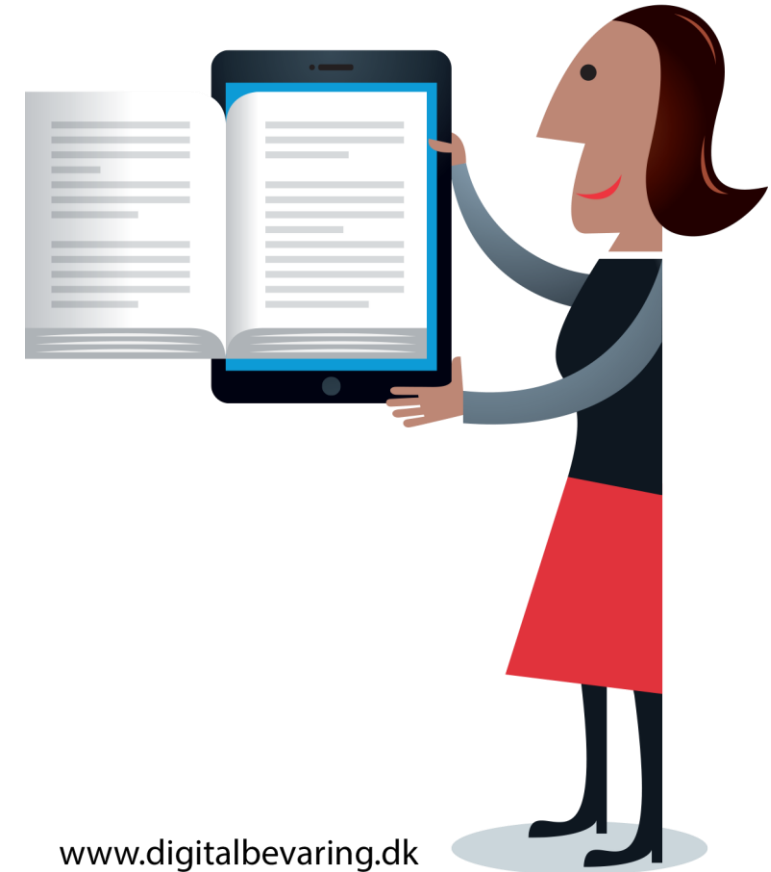
The UK National Archives

https://www.nationalarchives.gov.uk/information-management/manage-information/managing-risk/

SPOT Model of Risk Assessment

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

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Benefits Analysis

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Why Identify Benefits?

- Useful for advocacy

- Information for Business Case

- Help set goals

- Steer preservation decisions

- Prioritise developments

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Benefit Registers

1. Benefit
2. Barriers
3. Actions
4. Owner
5. Time Profile
6. Date of Review
7. *Scores*
   a. *Likelihood, Impact, Creep, Overall*

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Key Benefits of Web Archiving

- Broadening the historic record
- Capturing content only available on the web
- Fulfilling legal mandate/record retention requirements
- Documenting events
- Easy to archive/accession audio/video material at scale
- Diversifying the types of people/communities represented in the archive
- Ability to archive "social snapshots" (conversations on SM, hashtags, etc)
- Automatic redirects from not-live web address / 404 to an archived version of that webpage
- Facilitates large-scale computational data analysis

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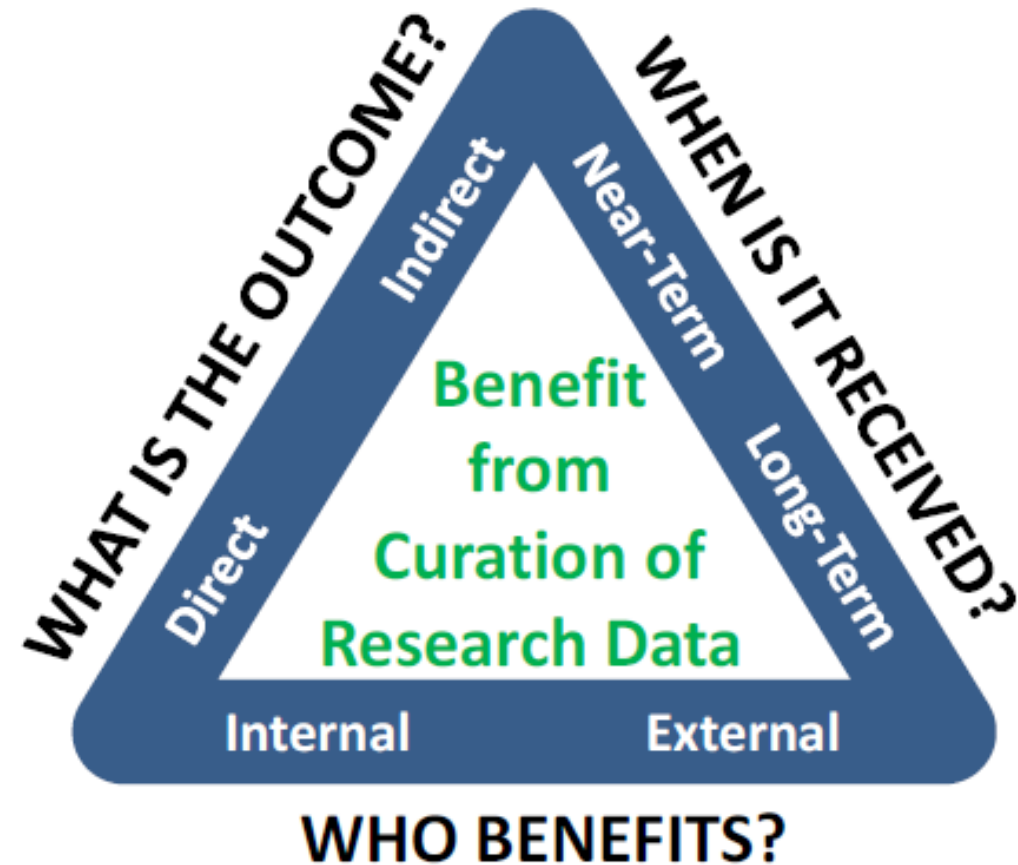
An Example Benefit

Benefit	Document Important Historical Events
Barriers	May need to be responsive to emerging events, Capturing across platforms, no way to accurately predict scale, possible privacy issues
Actions	Develop workflows that: • can be deployed quickly • use tools for all required platforms • are scalable Monitor trending news and hashtags Policy and procedures for handling privacy issues
Owner	Web Archivist
Time Profile	May be planned or sudden
Review	Yearly
Likelihood	4
Impact	4
Creep	1
Overall Score	16

Useful Tool: KRDS

http://www.beagrie.com/krds/

Risk Register Exercise

- Select a risk and complete an assessment based on the scenario provided

- Your risk can be related to technology, resources, or organisation

- Complete all sections of the supplied worksheet including:
  - Consequences
  - Mitigation steps
  - Scores

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