The Workshop

This report includes all the outputs produced during the day but only captures a small percentage of the conversations, insights and knowledge shared between participants. The key aims of the day were to build a stronger network/community, to make further sense of the DNA of a record and to begin developing a research agenda for the future.
Map

The participants were divided into six groups.
Each group was given a complete set of all the ‘record ‘components’ (Yellow hexagons) created during the on-line crowd sourcing exercise.
They were asked to make sense of these by patterning the material into connected groups.
They could also discard, rewrite and replace, or add any missing components (Blue hexagons)
Finally they were asked to give any groupings/clusters a name (Pink hexagons)
Group 1

Map

- Classification
- Open source code
- Structured data elements through templates etc
- Longevity of file format
- Form, context, context
- Algorithms
- Encapsulated information
- Storage device
- Software
- Extrinsic information
- Discernibility
- Metadata
- Creator
- Open Standard format
- Closure date
- Creation date
- Not open source coded
- Secure from tampering
- Not open source coded
- Deletion trail
- Authority! Legal admissibility
- The content of the record
- The content of the record
- The message
- The history
- An audit trail
- The trustworthiness
- Conditions concerning generation
- The circumstances under which the data were generated
- The circumstances under which the data were generated
Group 2

Map
Group 2

Map

- Technical Environment
- Format
- Open Standard format
- Encryption
- Deletion trail
- Complete trustworthy system
- ISO 16363 Standard for trusted repositories
- Trusted managers of systems
- Storage device
- Not open source coded
- Power source
- Servers
- Longevity of file format
- The material form of the record
- Secure from tampering
- intellectual property mark
- IP mark
- digital or biological
- Cells which contain and convey data and may be open
- Open Standard format so that readability is not platform specific.
Group 2

**Stakeholder/User Perspectives**

**People to interpret & use**
- The record - I don't want a world where AI are the legal decision makers
- This depends on the research question

**Ethics**

**It survives over time**

**The need to use it as evidence in the first place**

**Intrinsic values**
- The need for society to social justice

**What you need to evidence**
- Does the informational content of an email from Trump to Putin matter more/less than its very existence?

**It's a spectrum.**
- For some uses (e.g., genealogy) next to no evidential value will be enough. For use in court you need more proof for evidence.

**Capabilities to translate**
- The message in terms of language and the technical aspects to plain English

**Analogue??**
- Audible
  - Like video tapes
  - Music tapes??

**Genealogists don't just use names and dates of birth/significance of record components.**
Group 2

Map

- Audit trail of the record (story)
- Two identical records under different management regimes – the government/organization and the citizen
- Deletion confirmation
- An audit trail
- Deletion trail: the trace once the record has been disposed of
- The history of the record over its life
- Relationship to other information
- Closure date: which triggers retention period & audit trails

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Group 4

Map
Group 5
Group 5

Map

- Longevity of file format
- An audit trail
- Thesaurus & keyword
- Access rights
- Closure date
- Findability
- Algorithms
- Structured data elements through templates etc
- Deletion trail
- Ethics
- Naming conventions
- Deletion confirmation
- Authority/Legal admissibility
- Software
- Complete trustworthy system
- IP mark
- Trusted managers of systems
- Storage device
- Electronic signature
- Impact of the legislation
- What you want to evidence
- Recuperate
- The need to use it as evidence in the first place
- It’s a spectrum.
- Electronic

We could consider what the site conditions are for you, photograph, map a digital record.
Group 6

Map

- User
- Access rights
- Context
- Ethics
- Juridical context
- Owner
- Creator
- Trusted managers of systems
- Servers
- Storage device
- Bit stream
- [User] perspective
- Accountability
- Wider context
- Social context
- Technology Context
- Identification
Group 6

Map
In the same six groups:

They were asked to add, on cards (white hexagons) descriptions of ‘what you would find’ in an ideal (future) Evidence Base.

Once complete we rotated the groups so that they could compare and contrast at least four other ‘Ideal’s.
Group 1

- Engaging
- Exciting
- Confidence
- Ideal evidence base
- Why wasn't this kept? (over-time, can change)
  - What was not kept and why?
- History of every technical interaction with record
- Environmental sustainability
- Render in diverse environments (but technical, cultural, language)
- History of human interaction with the record (even if anonymized)
- Appropriate regard to privacy/security
- Can provide the evidence needed
- Can answer any question posed
- Can enable new insights
- Can render original as creator did
- Ability to view the record in ways that suit the needs of the user

Ideal
Group 2

IDEAL EVIDENCE BASE

ideal

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Group 3
Group 6

Flourishing
Leafy

FRAMEWORK
ENCOMPASSING
INTERNATIONAL
JURISDICTIONAL
VARIATIONS

CONTINUOUS
CURATION OF
INVIOCATE
‘ORIGINAL’

PROVENANCE

CHAIN OF
CUSTODY

ACCESSIBILITY

DEMONSTRATE
INTEGRITY
&
SHOW IDENTITY

UNDERSTAND-
ABILITY

PERDURANCE
distinct parts
but continuous identity

TRUSTWORTHINESS

WORKABLE

Robust
- universal -
proagmatic
concept: EVIDENCE

Stage 1:
Understanding the
exiting use of
“evidence”
internationally
across sectors

Sitting on a
BEACH!

Job done!

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In the final part of the workshop, still in the same groups, participants were asked to:

- Identify any research questions that still need to be answered/studied
- Flesh out at least one question in detail
- Present this to all the other groups
- Receive feedback on what might make the question better and what resources might be offered by the other participants.
Research Ideas (This sheet populated throughout the earlier sessions)

- What is a record?
- Is the record scalable by human? Does it matter?
- How do you manage the metadata that accumulates over time, avoiding the record itself?
- Creator - (different?) owners over time
- Effect of changing purposes [value] over time
- Records exist without metadata, but can still be truthful, therefore does metadata necessarily = Record? Think: cycle.
- What were the best things archive/paper? What extra is needed, responsibility?
- What is the best thing at the moment?
- Different uses of digital objects = "records" - e.g., photos, people, buildings, events, ecology, relax

- Can there be a "record" without metadata?
- Discussion of query behavior
- Time lapse from record creation to multiple reuse
- Question?
Research Ideas

- How do we get humans to trust machines/AI?
- Or vice versa?
- How do we present 'technical proofs' to humans?
- What 'evidence is out of scope' why?
- What signals do we generate?
- What data are needed to use archival resources?
- How much research data is available?
- What rhetoric is needed to recover an audience in a VR environment?
- How boring would it be to be scared of (knee) everything?
- How do we show off the 'paper paradigm'?
- What should we encode?
- How do we make using archival content fun?
- ethnographic study
- How do we encode more of the things we can't 'see' at the moment?
- What makes people feel grounded, today?
- What do people enjoy in using archival data to?
Research Ideas

...
Research Ideas

- Big Whoop!
- Emulation, understanding, development of technical specifications for systems
- How do we implement DP practice into digital records management/curation?
- To transparency processes for the information and separately practice?
- Information literacy & digital literacy skills for archives
- Automated systems for appraisal [making processes more transparent]
- What should AI do and what should human do?
- What are the ethical implications of access to archives as an access mediator (gated access) in a digital world?
Research Ideas

- Better Interfaces/Tools for Interrogating It
- How do we tell the story of a record through our current access tools?
- How do we create records that archive our interactions with them?
- How do we design records that die?
- How best to describe all the things you didn’t keep?
- Standard for a record’s tombstone
- What do users really want/need?
- How might attitudes to privacy change?
- Accumulation, aggregation, accessibility — what is the cumulative risk to privacy?
Research Ideas

- How much impact does a custodian have on the availability of the digital record?
- How to better decide what to keep?
- Does a gender gap between custodians and systems/IT developers influence the digital record?
- Can you create standards for the integrity of a record?
- Can we create standards for the authentication of a record?
- Where best to automate?
- How to better link related records that links currently exist?
Research Ideas

...
### Achieving the vision - the usable digital evidence base

#### Research question/practical problem

What are the ethical implications of the archives as an access medium (gradual access) in a digital world?

#### Objectives

- Understanding how we (as a profession) view our role around mediated access to information in a world where society expects immediate and open accessible information and views archiving with suspicion.
- How do other professions (computer science, law, and allied) view about mediated access?
- Understanding other disciplinary perspectives
- Look at the implications for the future profession.

#### Knowledge & skills/roles needed

- Data Ethics
- Computer Science
- Law
- Archives & Records Management

#### Names of developers from the group

- Catrina Sales
- David Anderson
- Sara Oliveras
- Luke Burton
- Elizabeth Lomas
<table>
<thead>
<tr>
<th>Research question/practical problem</th>
<th>To access information through time.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives</td>
<td>To mandate capture basic technical information of systems &amp; file formats.</td>
</tr>
<tr>
<td></td>
<td>[Cheap now but expensive in retrospect]</td>
</tr>
<tr>
<td>Knowledge &amp; skills/roles needed</td>
<td>Comp Sci</td>
</tr>
<tr>
<td></td>
<td>Total is trained in a project.</td>
</tr>
<tr>
<td>Names of developers from the group</td>
<td>Luke Barton, Anthea Seber, Enzo, Endes, David Anderson, Elizabeth Lemo</td>
</tr>
</tbody>
</table>

* For practice purposes this is akin to a project. For research purposes this is akin to a research bid.
<table>
<thead>
<tr>
<th>Research question/practical problem</th>
<th>To access information through time in an affordable manner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>To look at LJS Information Library Frameworks for Archives</td>
</tr>
<tr>
<td><strong>Objectives</strong></td>
<td>To take existing LJS IL frameworks, GC&amp;MU etc and review for archive 'post truth' worth</td>
</tr>
<tr>
<td></td>
<td>↓</td>
</tr>
<tr>
<td><strong>Knowledge &amp; skills/roles needed</strong></td>
<td>Need to translate to ARM programmes and other IS programmes</td>
</tr>
<tr>
<td><strong>Names of developers from the group</strong></td>
<td>Luke Burton, David Amir, David Fidler, Anthea Setos, Sonja Church, Elizabeth Burns</td>
</tr>
</tbody>
</table>

*For practice purposes this is akin to a PID. For research purposes this is akin to a research PID.*
### Research Ideas

<table>
<thead>
<tr>
<th>Research question/practical problem</th>
<th>How do we implement appropriate data protection policies &amp; practices into digital records management?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives</strong></td>
<td>To come up with standards which are legally and philosophically justified, which can be practical at different levels—from creation of record, to its management and use—and sustainable over time. Should also be reviewable due to experience, changing legal and ethical understandings, etc.</td>
</tr>
</tbody>
</table>
| Knowledge & skills/knowledge needed | - Legal knowledge & understanding  
  - Philosophical “ax”  
  - Knowledge of records management  
  - Knowledge of stakeholder engagement  
  - Stakeholder engagement |
| Names of developers from the group | - Possibility for mapping work  
  - Practical advice  
  - Knowledge of stakeholders  
  - Experience & practical advice |

* For practice purposes this is akin to a PID. For research purposes this is akin to a research bid.

Val Johnson  
Elizabeth Lyons
Research Ideas

RESEARCH QUESTION
How do we understand the existing cultural and societal use of evidence across international & domain boundaries?

OBJECTIVES

Using American Pragmatism & Phenomenological reduction to construct a universal framework to understand the concept of evidence as related to digital records.

KNOWLEDGE/SKILLS/ROLES

Philosophy & law
Rhetor Phenomenology
Multiple domain knowledge & evidence of digital records/archives
Ethnography

Corrie Rogers
Susan Stuart
Jane Winter
Tim Collins

Thomais Cross
The participants were divided into four groups.

Each group was asked to silently and personally capture, on post-its, what they think would be the benefits of delivering this project. They then placed their benefits with those of the group and looked for patterns.

This ‘silent start’ is designed to reduce ‘group-think’ and ensure that everyone has an input into the method.
RECOGNITION OF SOCIAL CONTEXT AS A RECORD CONTENT

Phenomenological methods
- primary reduction
- eidetic reduction
- secondary check
have relevance in this context

NEED 3-D MODEL

Record as changing its ecological niche over time

Knowing the components of a record is not enough!

Issues of trust & allied quality issues remain vital in digital environment.
Because of unforeseen uses - can archives select or should they take everything?

Importance of structure but changed nature in digital ecosystem - not unit/linear & how much ex ante/ex post?

Encoding to bridge levels of abstraction

Content
- Information
- Context
- Knowledge
- Learning

Structure
- Form
- Algo

Is R-DNA contingent on context?

Document/data + legal evidence + metadata = record?
Growing a network

All through the workshop we encouraged new connections between participants in the hope that we can grow a vibrant and useful network around the issue of digital records.

We encouraged the sharing of business cards and maximised the opportunity for social engagement during exercises and most importantly at tea, lunch and after the event.
A brief introduction to Knowledge Ecology

Ron Donaldson is a knowledge ecologist and facilitator, experienced in applying Creative Problem Solving, PNI, Cognitive Edge and TRIZ methods

Taking an ecological perspective enables you to focus on the communities, flow of knowledge and realisation of insights within a narrative landscape.

The sharing of knowledge via relationships across an organisation is much more an ecology that needs to be nurtured, than a precisely defined machine that can be managed.

Ecology has at times been called the ‘subversive science’, since it subverts our egocentric insistence on separateness, and with it, our inclination to ride roughshod over the rest of the natural world.

A much more appropriate approach for the complexity of knowledge sharing and uncertainty of outcome in modern day organisations is proposed by Cynthia Kurtz (PNI) and by Dave Snowden of Cognitive Edge and is based around the use of narrative and natural sense-making.

By extending these principles, and focus, to the entire ecosystem you can generate strategic beneficial impact by way of an integrated approach to the management of Knowledge, Innovation, Change, Learning, Leadership and Decision making. Leading to Resilience, Agility and Adaptability, and of course Sustainability.

Insights derived from such a workshop need to be met with emotional engagement, so that people can find not just the reason but also the motivation to create change.

By running a facilitated Knowledge Ecology workshop you will:

- create the starting conditions for new relationships and collaboration
- explore the narrative landscape
- remove constraints and disrupt linear thinking, to allow an anticipatory awareness of the present to emerge
- seed, trigger and encourage creative thinking
- amplify the positive and dampen the negative, by way of feedback.
- promote storytelling as a way to share knowledge and ideas
- embed beneficial learning and new ideas to add greater value to the open innovation ecosystem.

More info at http://rondon.wordpress.com/about/
Ecology of Knowledge
Narrative – Complexity - Community

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Accredited Knowledge Associates, Cognitive Edge & TRIZ/MATRIZ practitioner
Founding member of Participatory Narrative Inquiry (PNI) Institute - pni2.org