THE DRAFT NATIONAL POLICY ON DIGITISATION AND INSTITUTIONAL CAPACITY BUILDING

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Wits-NRF Digitisation Capacity Development Initiative
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QUESTIONS ON CAPACITY DEVELOPMENT

What was recommended in 2011 with the Draft National Policy on Digitisation?

Are the 2011 recommendations relevant today?

What are the emerging needs of this generation?

What are the dimensions and scope of “capacity”?

Who should be developing what type of capacity?

How should capacity be developed?
WHERE WE FIT

Data Models
- Universal Semantic Data Models
- Meta-metadata
- Layered Metadata Models

National Projects
- SA Heritage Resource Info Sys
- National Policy on Digitisation
- National Art Bank
- Heritage Building Guidelines
- Guidelines for Built IKS

The ETHER Initiative – ETERNAL HERITAGE
- Collection management
- Education
- Governance
- User Experience
- Conservation
- Digitisation

Contributions to Standards
- SPECTRUM 5 – Collections Trust
- Open Data in a Big Data World – Science International
- Europeana Inside – Rapid Ingestion
BUSINESS CASE FOR A NATIONAL POLICY?

NEEDS
- preservation
- access
- foreign-funded projects

BENEFICIARIES
- the entire country
- the national memory
- universities/research institutions
- secondary/primary educations
- interested parties/tourists
- future generations
SCOPE OF POLICY

Original Scope = Heritage

- National Museums
- National Archives
- National Library

Proposed Scope = Inclusive

- Research Data / Outputs
- Scientific/Environmental/etc.
- Arts/Culture
- Government Data Sets
- Non-government Data Sets

ANYTHING with ENDURING VALUE

- Archives / National Library

National Custodians?

- DAC? DST? DOC?

Who should be the government body responsible for digital heritage?

Or should this be located outside of government?
STRUCTURE OF THE DRAFT NATIONAL POLICY

WHAT / WHY

Policy
27 policy statements

Governance
Strategy
Repository
Contracts
Access
Preservation
Metadata
Capacity

HOW

Mechanisms
Implementation recommendations
and interventions

HOW TO

Digital Heritage
Body of Knowledge
(DHBOK) : Best-practice framework to create a Digital Institution in line with policy
POLICY STATEMENTS SPECIFIC TO CAPACITY DEVELOPMENT

Policy 22: Creating a Community of Practice - the Institution of Digital Heritage (IDH)


Policy 24: Develop and Measure Institutional Capacity

Policy 25: NARS to take lead for capacity development in Electronic Records Management

Policy 26: Promote Research and Development
A first pass at a Body of Knowledge

Helps to identify areas for capacity development
HIGH-LEVEL PROCESS MODEL

1. PLAN
2. CREATE
3. STORE
4. USE

MONITORING / EVALUATION

PERFORMANCE / CAPABILITY MATURITY MODEL
<table>
<thead>
<tr>
<th>Participants</th>
<th>Processes</th>
<th>Products / Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custodian</td>
<td>Scoping</td>
<td>Audit, Status Quo, Digital vision, Gap analysis</td>
</tr>
<tr>
<td></td>
<td>Strategising</td>
<td>Digitisation strategy: Programmes/Projects/Plans</td>
</tr>
<tr>
<td></td>
<td>Planning</td>
<td>Project management: Deliverables, Resources, Schedules</td>
</tr>
<tr>
<td>Producer</td>
<td>Preparing</td>
<td>Project start-up: facilities, resources, in-process</td>
</tr>
<tr>
<td></td>
<td>Capturing</td>
<td>Digital objects: reproductions, born digital, migration</td>
</tr>
<tr>
<td></td>
<td>Describing</td>
<td>Metadata: context, creation, preservation, …</td>
</tr>
<tr>
<td>Repository</td>
<td>Loading</td>
<td>Digital masters, digital preservation/provenance, identity/naming</td>
</tr>
<tr>
<td></td>
<td>Storing</td>
<td>Digital repositories: long-term preservation, reformatting</td>
</tr>
<tr>
<td>Consumer</td>
<td>Accessing</td>
<td>APIs / Search requests / results / user interfaces</td>
</tr>
<tr>
<td></td>
<td>Using</td>
<td>User content, fair use, licensing, repackaged products</td>
</tr>
</tbody>
</table>
MECHANISM 1

THE INSTITUTE FOR DIGITAL HERITAGE

❖ Community of practice as the professional body for digitisation practitioners
❖ Develop and publish the Body of Knowledge
❖ Develop and promote national standards and vocabularies
❖ Mentoring, monitoring, guidance
❖ Specialist unit for near-obsolete technologies
❖ Annual skills audit
❖ Support institutional capacity measurement
❖ Certify the National Digital Repositories
❖ Financially self-sufficient after a given period
MECHANISM 2
SKILLS FRAMEWORK FOR THE DIGITAL HERITAGE

To define jobs and associated skill requirements
For: training, professional development, recruitment

Generic skills
• IT
• Research
• Governance,
• Human Resource management
• Project management
• …

Digital skills:
• Digital preservation, metadata/documentation
• Capture from all media + quality management + packaging
• Migration of media, formats, metadata
• Repository management
• …

DEFINE A JOB
Senior ingestion engineer
Format migration specialist
Format compliance manager
Integrity manager
Digital rights compliance officer
Redundancy engineer

Seven levels of authority and responsibility (Ref: SFIA):
• Level 1: follow
• Level 2: assist
• Level 3: apply
• Level 4: enable
• Level 5: ensure, advise
• Level 6: initiative, influence
• Level 7: set strategy, inspire, mobilise
# MECHANISM 5

## INSTITUTIONAL DIGITISATION CAPACITY SCORECARD

A Capability Maturity Model (CMM) for the digital heritage.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Practice Level</th>
<th>Cost</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governance</td>
<td>CURRENT</td>
<td>TARGET</td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td>CURRENT</td>
<td>TARGET</td>
<td></td>
</tr>
<tr>
<td>Collection Management</td>
<td>CURRENT</td>
<td>TARGET</td>
<td></td>
</tr>
<tr>
<td>Equipment / Facilities</td>
<td></td>
<td></td>
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<tr>
<td>Skills</td>
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<td></td>
<td></td>
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<tr>
<td>Repository</td>
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<tr>
<td>Access…</td>
<td></td>
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</tbody>
</table>
MECHANISM 7
INSTITUTIONAL TRANSFORMATION PROGRAMME

Providing assistance to all institutions for how to transform from physical collections, to
digital repositories.

Improving Institutional Readiness.

Deciding – develop, share, or buy capacity
❖ What capacity to develop
❖ When to develop shared-services
❖ When to use centres of excellence / outsourcers

Develop a strategy - from AS-IS to TO-BE
SPECIFIC INSTITUTIONAL CAPACITIES

- COLLECTION MANAGEMENT: processes for best practice
- INVENTORYING / CATALOGUING: what is where
- REPOSITORY MANAGEMENT – DIGITAL PRESERVATION
- DIGITAL CAPTURE / BORN-DIGITAL
- MEDIA-SPECIFIC KNOWLEDGE: newspapers, photographs, museum objects, audio-visual, old data formats
- FORMAT-SPECIFIC KNOWLEDGE: text, sound, still image, moving image…
- METADATA: specific standards
- DATABASE / PROGRAMMING / DIGITAL INFRASTRUCTURE
Little doubt that AI will continue to expand its sphere of operation. AI will continue to outpace humans in many areas.

Multiple application areas in digitisation / digital heritage / digital preservation
- auto-ingestors
- auto-documentors
- auto-format migrators
- auto-organisers
- search – already well-developed through AI search engines / semantic searching / bot interfaces
- support for users with disabilities / an agenda of inclusion
A NEW APPROACH TO CAPACITY DEVELOPMENT

❖ Distributing capacity: National centres of excellence / major regional institutions / community institutions.

❖ Equipment and capacity available as shared resources.

❖ Commonly agreed curricula for courses.

❖ Future-proofing the jobs in digital heritage.

❖ First steps for every institution:
  • apply the institutional capacity scorecard
  • assess the AS-IS and envision the TO-BE positions
  • quantify the GAPS – use these to develop institution-specific strategy
  • implement capacity development programme in each institution based on strategy
**CALL TO ACTION — NATIONAL PRIORITIES**

<table>
<thead>
<tr>
<th>Institution for Digital Heritage</th>
<th>Revive, formalise, extend, and promote SADI.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills Framework for Digital Heritage</td>
<td>Assess current and future needs, clarify jobs and skills standards, develop curriculum frameworks.</td>
</tr>
<tr>
<td>Institutional Capacity Scorecard</td>
<td></td>
</tr>
<tr>
<td>Digitisation Capacity Audit</td>
<td>Covering all sectors, institutions, and</td>
</tr>
<tr>
<td>Body of Knowledge</td>
<td>Shared knowledge base: standards, experience, case studies, risks, technologies</td>
</tr>
<tr>
<td>National Digital Repositories</td>
<td>Set the standards for compliance. Establish one or more. Interlink these for backup.</td>
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</table>
HOW WE CAN HELP

CAPACITY: training in many areas of digitisation

PLAN: Strategy development / governance of institutions / collections management / systems

CREATE: capacity development for facilities / equipment / skills, quality management / project management

STORE: repository development / trusted digital repositories

USE: online access to collections / exhibition / research / education

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