Towards the Digital Institution

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South African Digitisation Initiative Conference 27 Feb – 1 Mar 2013
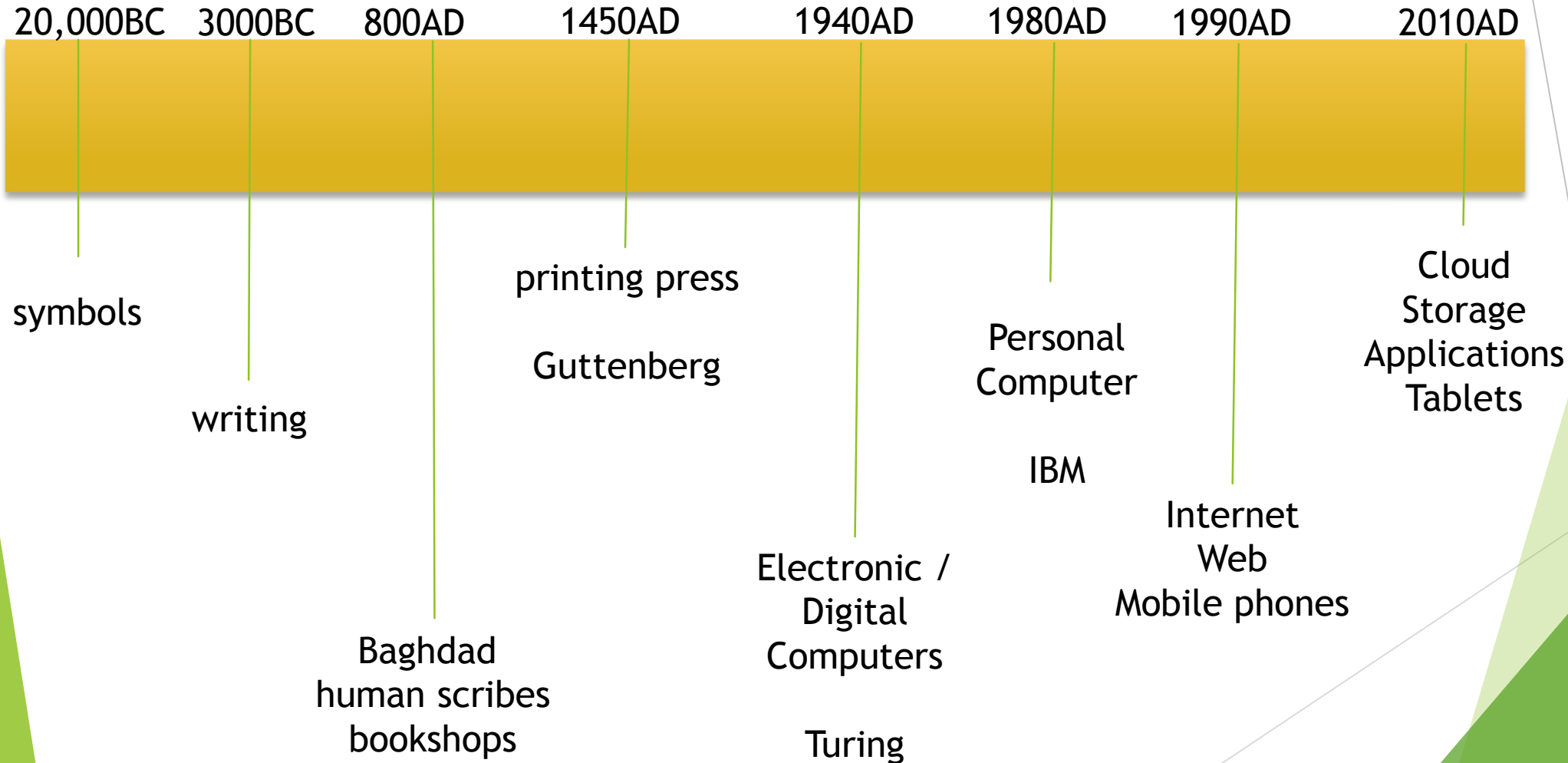
University of the Witwatersrand

Initial Summary

- Digitisation is about **the ENTIRE PROCESS OF TRANSITION** from physical to digital institutions

  - It is *not only about capturing and storing* of reproductions

- This is a **fundamental responsibility of our generation** …. and to pass this onto future custodians

- This requires a 20-500 year envisioning horizon

- This transition impacts on user experience, collection management, and governance structures

- The critical skills to ensure success are multi-faceted

- I present the context of this transition, and highlight some key examples and actions we are making to ensure success

- This includes a mention of some of our products and services

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Positioning ourselves into the history of recorded information

20,000BC	3000BC	800AD	1450AD	1940AD	1980AD	1990AD	2010AD

symbols

writing

Baghdad
human scribes
bookshops

printing press

Guttenberg

Electronic /
Digital
Computers

Turing

Personal
Computer

IBM

Internet
Web
Mobile phones

Cloud
Storage
Applications
Tablets

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Predictions/scenarios of the future of recorded information (RL 2009/10)

2012-2015

2030-2060

2200-2500

Information Society gains momentum

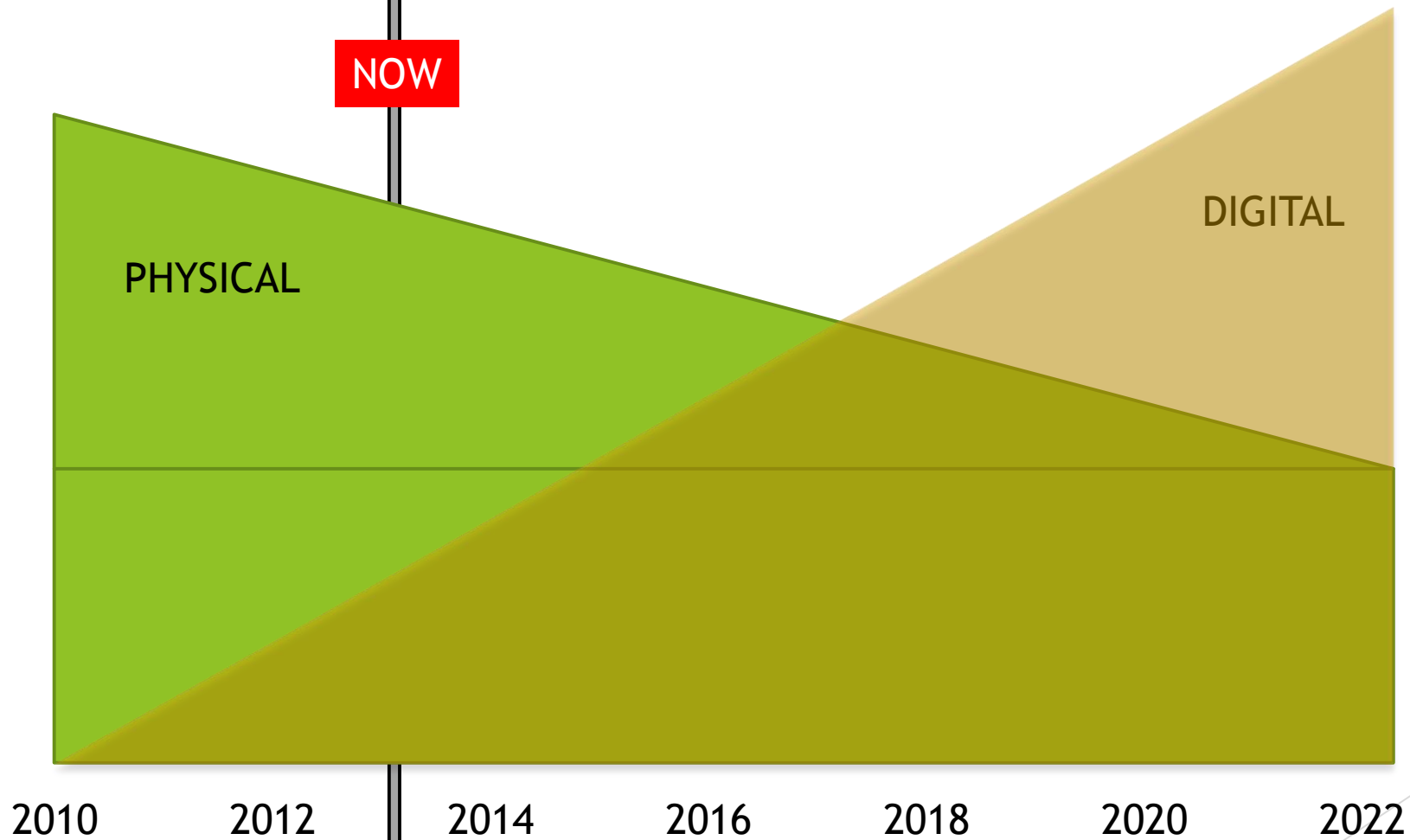***The birth of the "digital institution"***

- All new records born-digital
- **Internet of Things** as largest producer of data
- *Information Society universal*
- All pre-existing physical records digitised
- Time-capsule storage systems
- XML is still the most important base language

- **Intelligent agents** gather and preserve information
- Repositories protected against every possible form of human or natural disaster.
- The inherent capability to **reboot humanity's knowledge at any time in the future** and from anywhere.
- Holographic/quantum storage systems

Layton, R. (2009) Framing the Discourse on Digitisation Policy: A proposed analytical framework. SASA Conference, UNISA.

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Transition from Physical to Digital
A sample 10-year vision

NOW

PHYSICAL

DIGITAL

Q: What is the nature of the Digital Institution?

2010   2012   2014   2016   2018   2020   2022

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The Nature of this Transition

- TIMING
  - Did not occur in previous generations - will not occur in future generations
  - IT IS **OUR GENERATION'S RESPONSIBILITY** TO GET THIS RIGHT
  - Should be completed within 20 years
- CREATING THE DIGITAL INSTTUTION
  - Every physical institution will have a digital counterpart which encompasses the entire institutional operation
  - **Required a total re-engineering of the institution** – not only capturing of digital images and the creation of repositories
- WHAT TO BE DONE
  - Capacity development: transformation of the skills base, capacity development
  - Digitisation must become a CORE skill of the memory institutions – should not be outsourced except for specialist work
- WHAT IS THE SCOPE?...

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Scope of Digital Heritage

Tangible

OBJECTS
Museums

SITES
Archaeological
Geological
Palaeontological
Built Environment
Marine

Intangible

Oral History

Indigenous Knowledge

Living Heritage

Documentary

Libraries & Archives

Born-Digital

Administrative Records

Knowledge

Scientific

Engineering

Health

Data Sets

Research

WITHIN THE DIGITAL WORLD, ALL HERITAGE OBJECTS START TO LOOK THE SAME

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Draft National Policy on Digitisation : 2011

Policy

27 core statements

Strategy
Repository
Contracts
Access
Preservation
Metadata

Mechanisms
Implementation recommendations

Digital Heritage
Body of Knowledge
(DHBOK)
Best-practice framework to create the
Digital Institution in line with policy
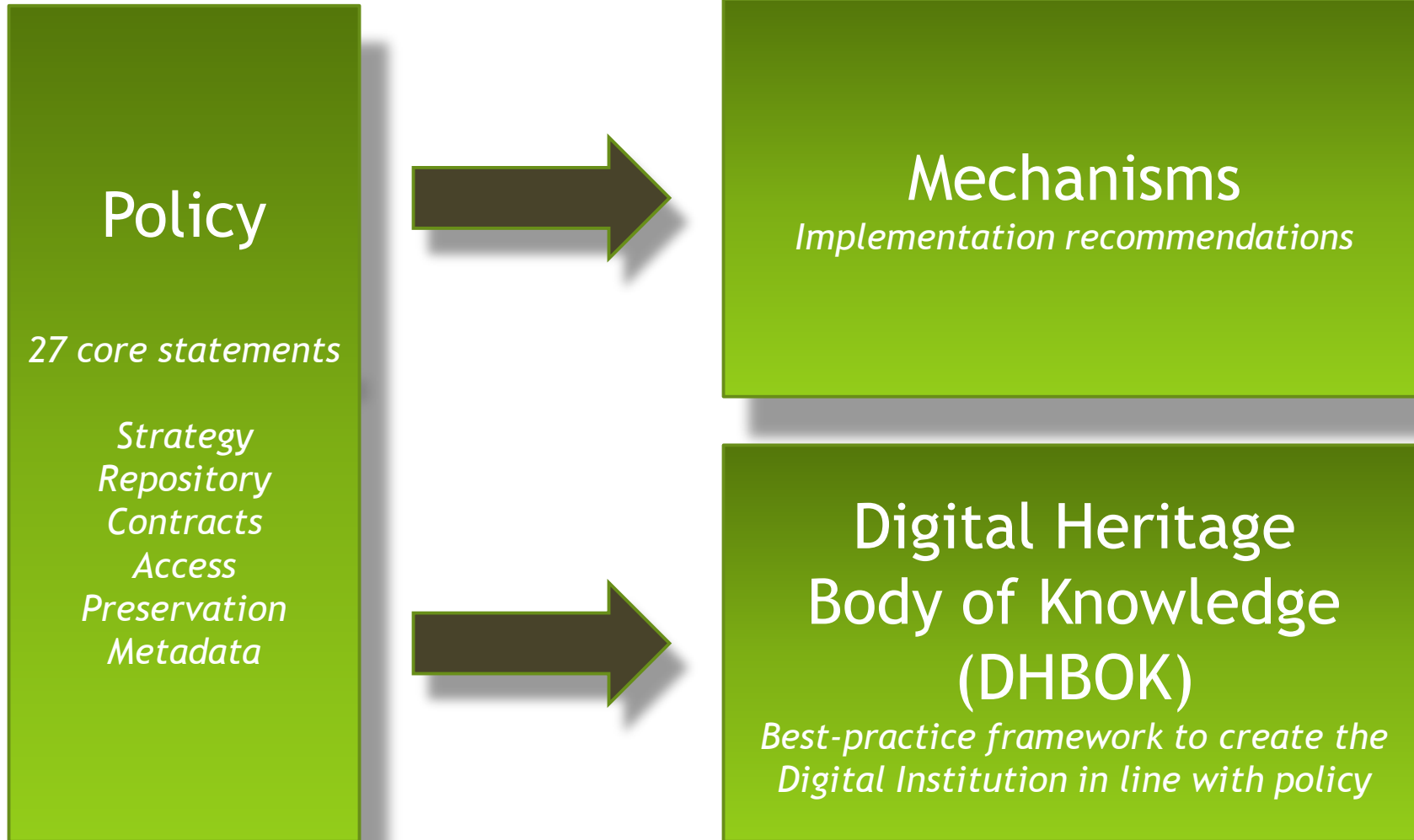
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Created by Roger Layton Associates for the Department of Arts & Culture (2009-11)
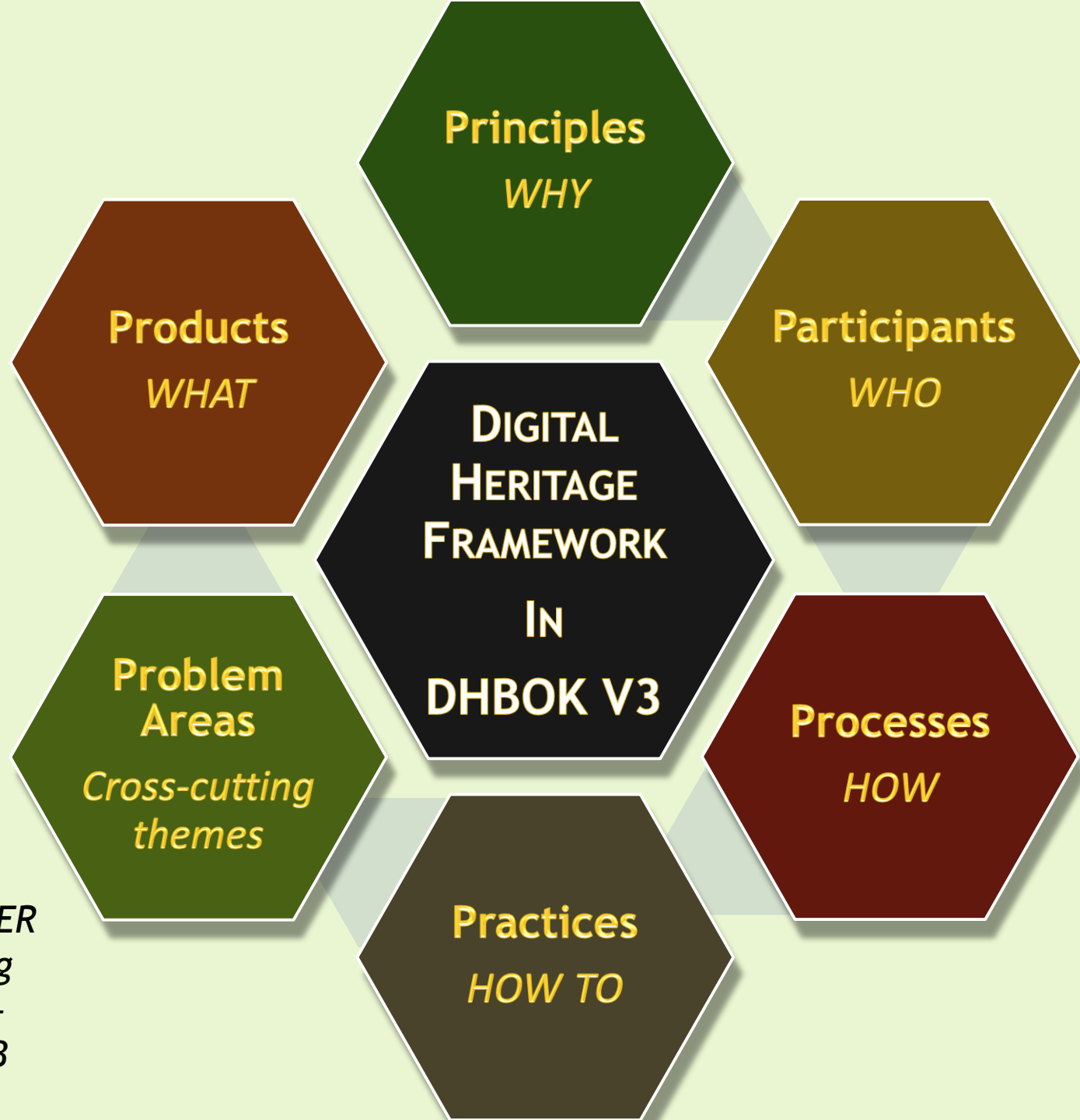
Participants, Processes, Products

participants	processes	products / practices
Custodian	Scoping	**Audit**, Status Quo, Digital vision, Gap analysis
	Strategising	**Digitisation strategy** : Programmes/Projects/Plans
	Planning	**Project plans** : Deliverables, Resources, Schedules
Producer	Preparing	**Project start**: facilities, resources, in-process
	Capturing	**Digital objects**: reproductions, administrative records, born digital
	Describing	**Metadata** : context, creation, preservation, …
Repository	Loading	**Digital masters**, digital provenance, Identification/naming
	Storing	**Digital repositories** : long-term preservation, reformatting
Consumer	Accessing	Search requests / results / **user interfaces**
	Using	User content, fair use, licensing, **repackaged products**

This model created by Roger Layton as the basis for the analytical framework for the National Policy on Digitisation and was later incorporated into the DHBOK

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The three areas for transitioning to the Digital Institution

scholars
visitors
tourists

friends
community

staff

senior management

board

owners

3 : Users and their Experience

2 : Collection Management

1 : Governance

web site
mobile/tablet/glasses access
mobile visit support systems

physical exhibitions
virtual exhibition

SPECTRUM procedures
ICA standard
inventorising, documenting
databases

digitising /
repositories

Constitution
Forward plan
Policies
Digitisaton strategy

Three areas adapted from the UK Museum Accreditation Scheme, Arts Council, 2011

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1 : Transitioning of Governance

- Review and revision of all governance structures and document to meet the needs of the future digital institution

- Statement of Purpose: why museum exists and who is it for?

  - **User base can expand by factor of 10, 100, 1000 as a digital institution**

- Constitution : including composition of board

  - Should **include a 15-year-old to advise on the view of the youth** – perhaps a top local Grade 10/11 history student

  - Clarify the purposes / objects in the light of the digital age

- Management Arrangements:

  - Managers/staff must be fully conversant with all modern digital technologies – if not then train them or replace them

  - **Must** have a comprehensive *DIGITISATION STRATEGY*

  - Premises for holdings must include where **digital holdings are stored** (cloud, servers, …)since these represent the primary items being protected by the institution

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1 : Transitioning of Governance: Case Study

- ▶ WINTERTON MUSEUM, KwaZulu-Natal

  - ▶ Collections include local history, battlefields, Africana collections, San rock art

  - ▶ Board: Part-time local member of the historical society, mostly older (> 50)

  - ▶ Web Site : none

  - ▶ Digitisation projects : none

- ▶ INITIAL INTERVENTIONS

  - ▶ ETHER is offering a complete end-to-end support

  - ▶ 1 : **To help to develop a representative board who have the right balance of viewpoints and the right mix of skills**

  - ▶ 2 : Building up web site and a mobile web site (to be accessible by tourists and rural communities) (NOT Governance – this is change in User Experience)

  - ▶ 3 : Creating a **digitisation strategy** using our standard approach and template

  - ▶ 4 : Building up a complete electronic inventory using ETHER Base

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2 : Transitioning of Collections Management

- Collection Development Policy : acquisitions and disposals
  - To include **born-digital collections, and digital provenance records**
- Collection Information Policy / Plan
  - Creating **database inventories** using standardised elements and structures
  - Plan for documentation backlogs
  - Using SPECTRUM and related standard for implementation of procedures
- Collection Care Policy / Plan
  - To include digital care / preservation / reformatting
- Digitisation of the Collections
  - **Programmes and projects to build up the digital collections**
  - Address the full set of the Ten Process of Digitisation / Framework

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2 : Transitioning of Collections Management Case Studies

- INANDA SEMINARY, KWAZULU-NATAL
  - 50 years of archival history of the school
  - Another 100 years held by another custodian
  - Building up complete inventories as prelude to digitisation
  - Using our ETHER Base collection management system / digital repository
  - Creating Digitisaton Strategy – implementation of Ten Processes model
- KHULUMANI SUPPORT GROUP, JOHANNESBURG / EASTERN CAPE
  - 50,000 members with many having recorded oral histories
  - **Creating a "shared history" using digitisation** – high-level of connectivity between the records (*presented at NHC Conference on Liberation Archives, October 2012, East London*).
  - Using the digital records to create structures which are not possible using physical archives alone

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3 : Transitioning of the User Experience

- KNOW YOUR USERS
  - Current : mostly physical access
  - Future : what new users can be gained if there is good digital access
- CREATING THE DIGITAL DOOR TO THE INSTITUTION
  - **Digital access before, during and after physical visits**
  - Also digital only visits
  - Support for mobile users and tablet computers
  - A welcoming, accessible digital environment to complement a welcoming, accessible physical environment
- Digital communication with users using modern tools
- **Digital access to stimulate and support learning, research and discovery**

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Boschendal Manor House

Back   Home

Stellenbosch

ANNO 1685

WELCOME TO BOSCHENDAL

About Us

Journey back to the time of the Huguenots with a visit to the Boschendal Manor House Museum. Dating back to 1812 the historic Cape Vernacular Manor House is one of the only period re-stored residences offering a glimpse into the lives of the second Huguenot family that made Boschendal a dynasty and one of the most important farms of their time.

History

It is thought that the farm house was a humble dwelling until Jacque's son Jean initiated the Manor House. As the father to twenty two children it was probably a labour born of necessity began with the outhouses including the hen houses, the cellars and the wagon house and the slave quarters that accommodated his thirty one slaves.

During its restoration in 1973 painted friezes were discovered on the walls and recent scrapings have exposed details of even more layers. These paintings might have been the work of itinerant artists or resident slaves two hundred years ago.

The Manor House was a declared a national monument and opened to the public in 1976. The presence of preceding generations is palpable in this fascinating home.

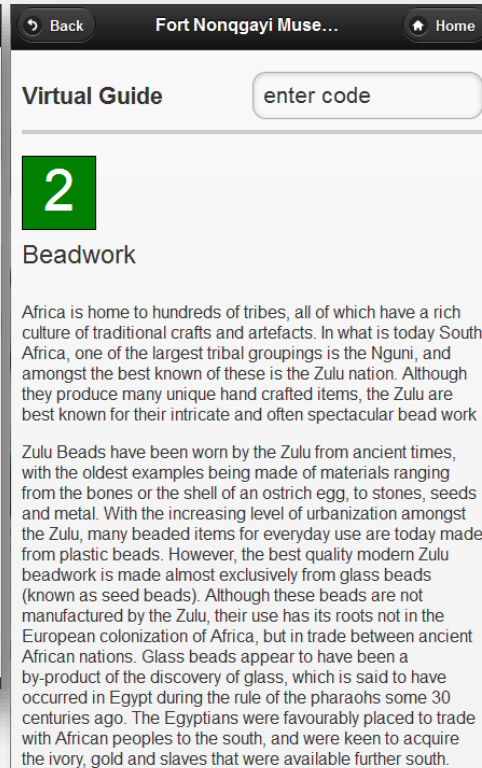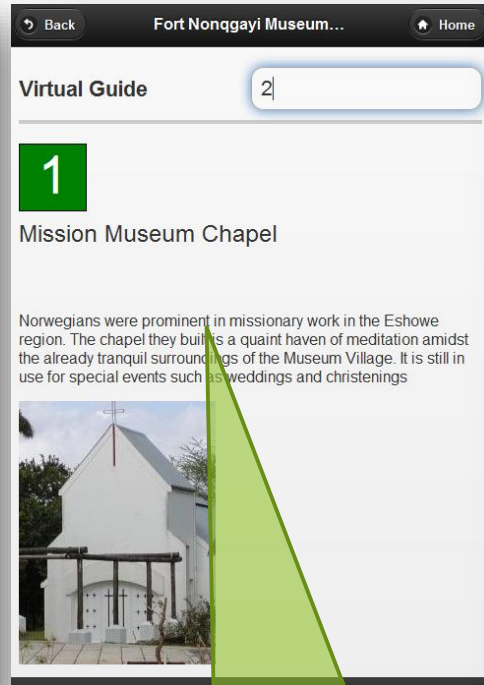**Contact Details**

Website: www.boschendalwines.co.za
Open: 09:30-17:00 daily
Cost: R15 per person (self guided tour)
Guided tours available on request: R20.00pp for guided tours
Tel: **021.870.4279**

Link to Phone
One click call

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3 : Case Study/2: ETHER Virtual Guide Complement the Physical Visit

Alternative to Audio Guide/
Can use QR Codes

Eshowe

Fort Nonqgayi Museum Village

Fort Nonqgayi
MUSEUM VILLAGE

To follow the exhibits in the museum village, click on the Virtual Guide below and enter the code of the exhibit

Virtual Guide ○

The Fort Nonqgayi Museum Village is located on the grounds of the Fort Nonqgayi itself, and includes

Virtual Guide `2`

1

Mission Museum Chapel

Norwegians were prominent in missionary work in the Eshowe region. The chapel they built is a quaint haven of meditation amidst the already tranquil surroundings of the Museum Village. It is still in use for special events such as weddings and christenings

Virtual Guide `enter code`

2

Beadwork

Africa is home to hundreds of tribes, all of which have a rich culture of traditional crafts and artefacts. In what is today South Africa, one of the largest tribal groupings is the Nguni, and amongst the best known of these is the Zulu nation. Although they produce many unique hand crafted items, the Zulu are best known for their intricate and often spectacular bead work

Zulu Beads have been worn by the Zulu from ancient times, with the oldest examples being made of materials ranging from the bones or the shell of an ostrich egg, to stones, seeds and metal. With the increasing level of urbanization amongst the Zulu, many beaded items for everyday use are today made from plastic beads. However, the best quality modern Zulu beadwork is made almost exclusively from glass beads (known as seed beads). Although these beads are not manufactured by the Zulu, their use has its roots not in the European colonization of Africa, but in trade between ancient African nations. Glass beads appear to have been a by-product of the discovery of glass, which is said to have occurred in Egypt during the rule of the pharaohs some 30 centuries ago. The Egyptians were favourably placed to trade with African peoples to the south, and were keen to acquire the ivory, gold and slaves that were available further south.

Virtual Guide `enter code`

7

King Cetswayo

King Cetswayo, ruler of the Zulu Nation 1873 to 1883. Cetswayo refused to bow to the demands of the British, and lead the Zulu nation against the British during the Anglo-Zulu War.
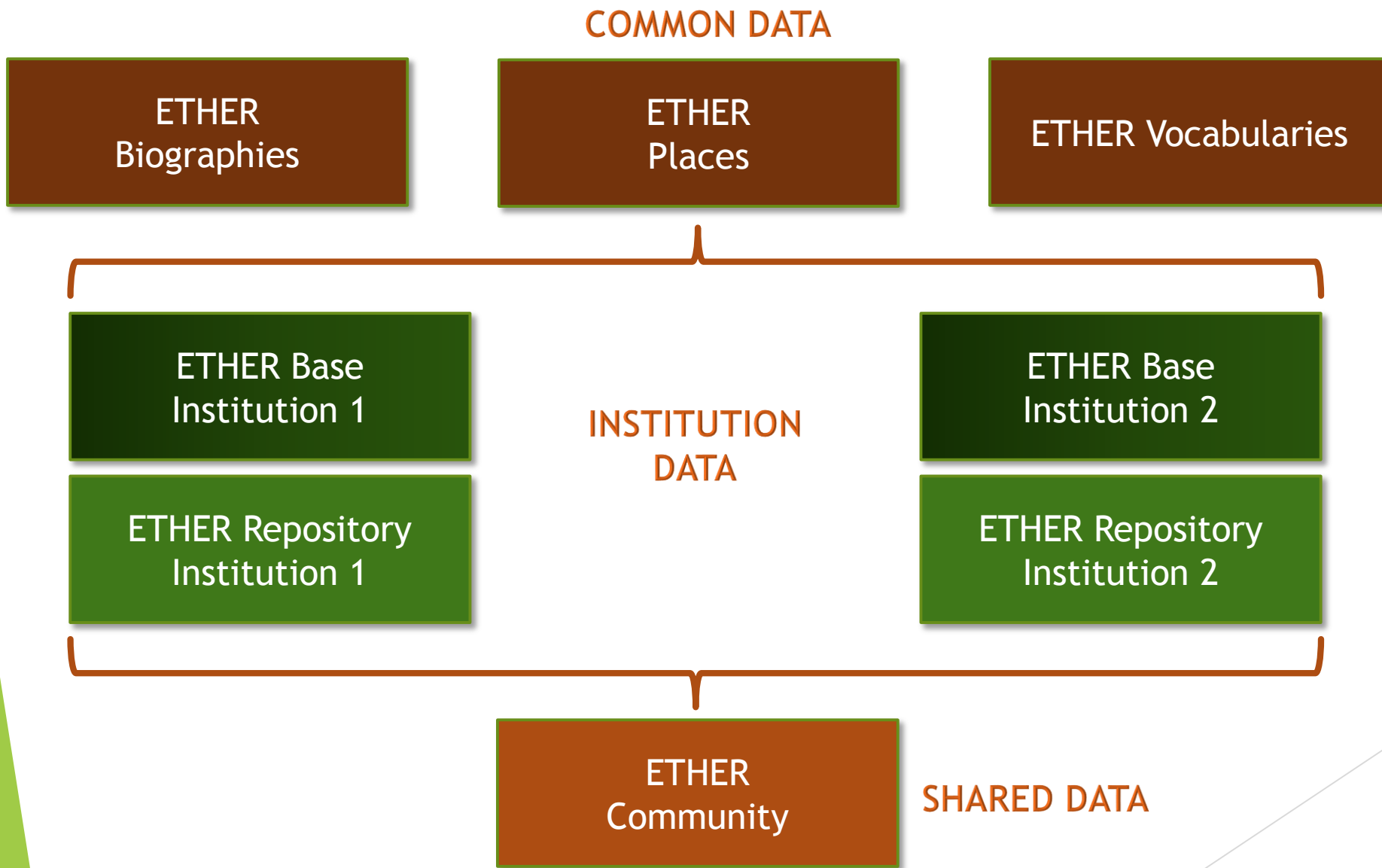
Access to unlimited depth and breadth of content

Remember information for access AFTER the visit

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Our Integrated Approach to Digital Data
To support the transition to the Digital Institution

COMMON DATA

| ETHER Biographies | ETHER Places | ETHER Vocabularies |

ETHER Base Institution 1

ETHER Base Institution 2

INSTITUTION DATA

ETHER Repository Institution 1

ETHER Repository Institution 2

ETHER Community

SHARED DATA

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4 : Creating a Digital Community Case Study

▶ The ETHER Community Model : To support sharing of information between institutions

  ▶ National Registry of Collections

  ▶ Register of Disposals : to provide access by other interested museums

  ▶ Inter-Collection Loans

  ▶ Registry of Stolen / Lost Items

  ▶ Request for Identification / Documentation / Help

  ▶ Creating Special Interest Groups

  ▶ Under development at present (due mid-2013)

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Final Summary

- Three key elements required within the transition to the Digital Institution
    - Governance
    - Collection Management
    - User Experience
- Consideration for the full scope of the Digital Heritage Body of Knowledge within the institution
    - Principles / Participates / Processes / Practices / Products / Problem Areas
- Data management and user interface elements
    - Essential to have digital inventories and documentation systems prior to implementing the digitisation processes
- Improved user experiences
    - Will make the institution more relevant to an increasing number of users

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