Storing and disseminating the data for maximum impact

Burial Grounds of England
Waterloo St John, London
13 June 2017

Julian Richards
with Gareth Beale, Jo Gilham,
Katie Green & Nicole Smith

Outline

- Challenges:
  - Storing data – which data and how?
  - Finding data & joining up fragmented and diverse data sets
- Opportunities:
  - Digital dissemination
  - Open data
  - Citizen Science – community-driven research
- Introducing *DEBS: Discovering England's Burial Spaces*

Information Entropy
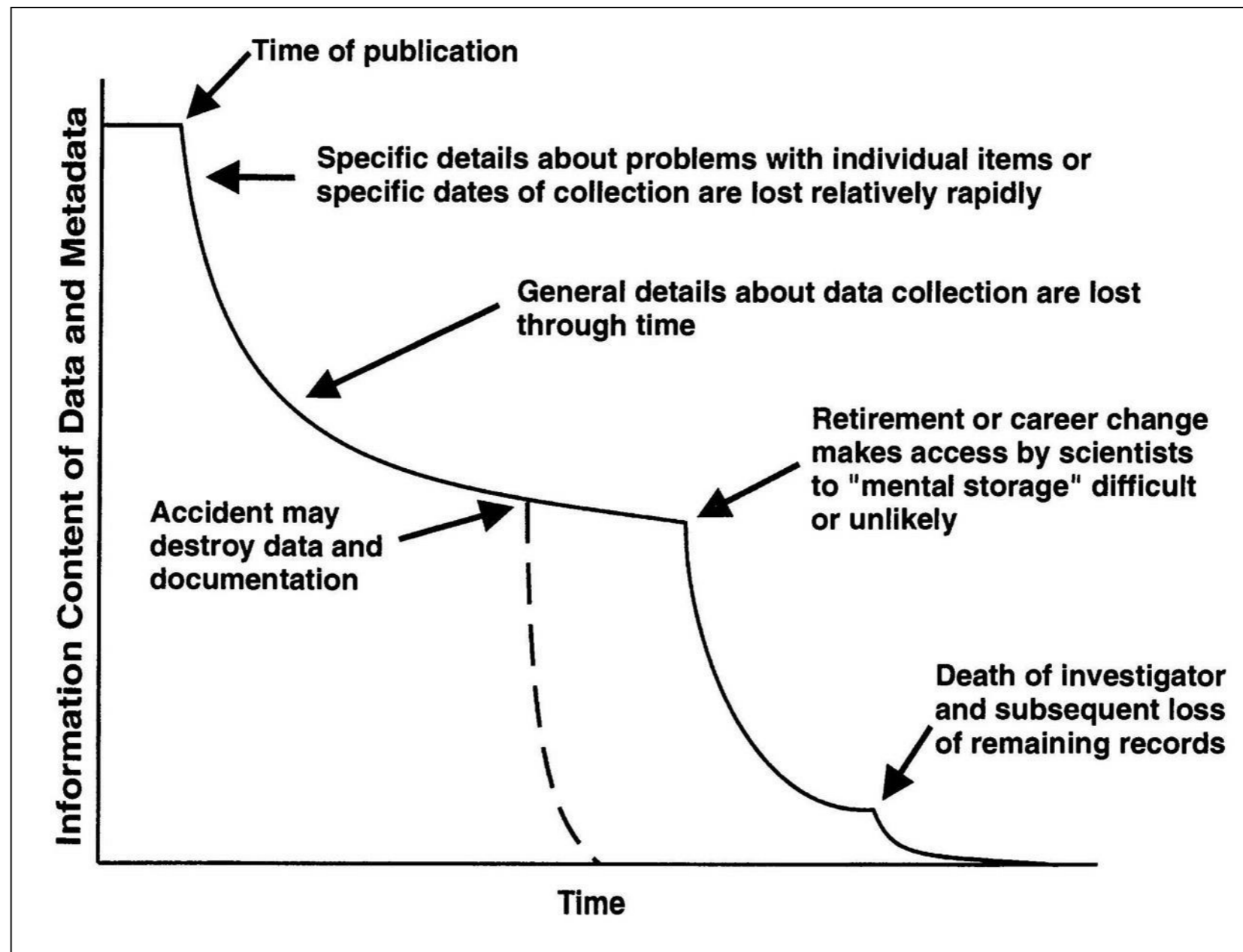
Michener, W.K., Brunt, J.W., Helly, J.J., Kirchner, T.B. and Stafford, S.G. 1997. Nongeospatial Metadata for the Ecological Sciences. Ecological Applications. 7: 330-342.
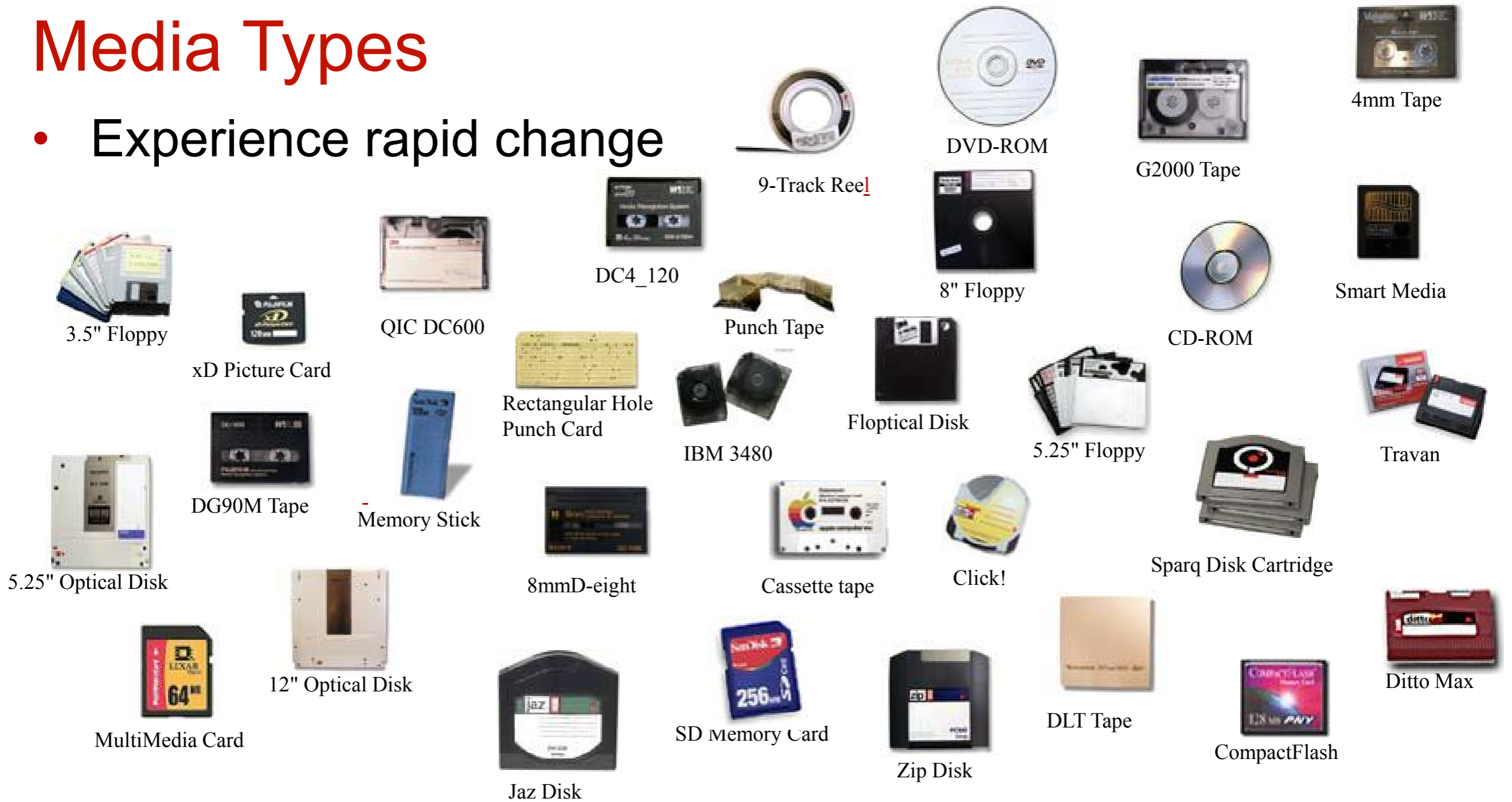
- Digital data are fragile
- They are still archived as objects rather than computerised information
- Digital data standards
- Big Data – 3D point clouds
- What are significant properties?
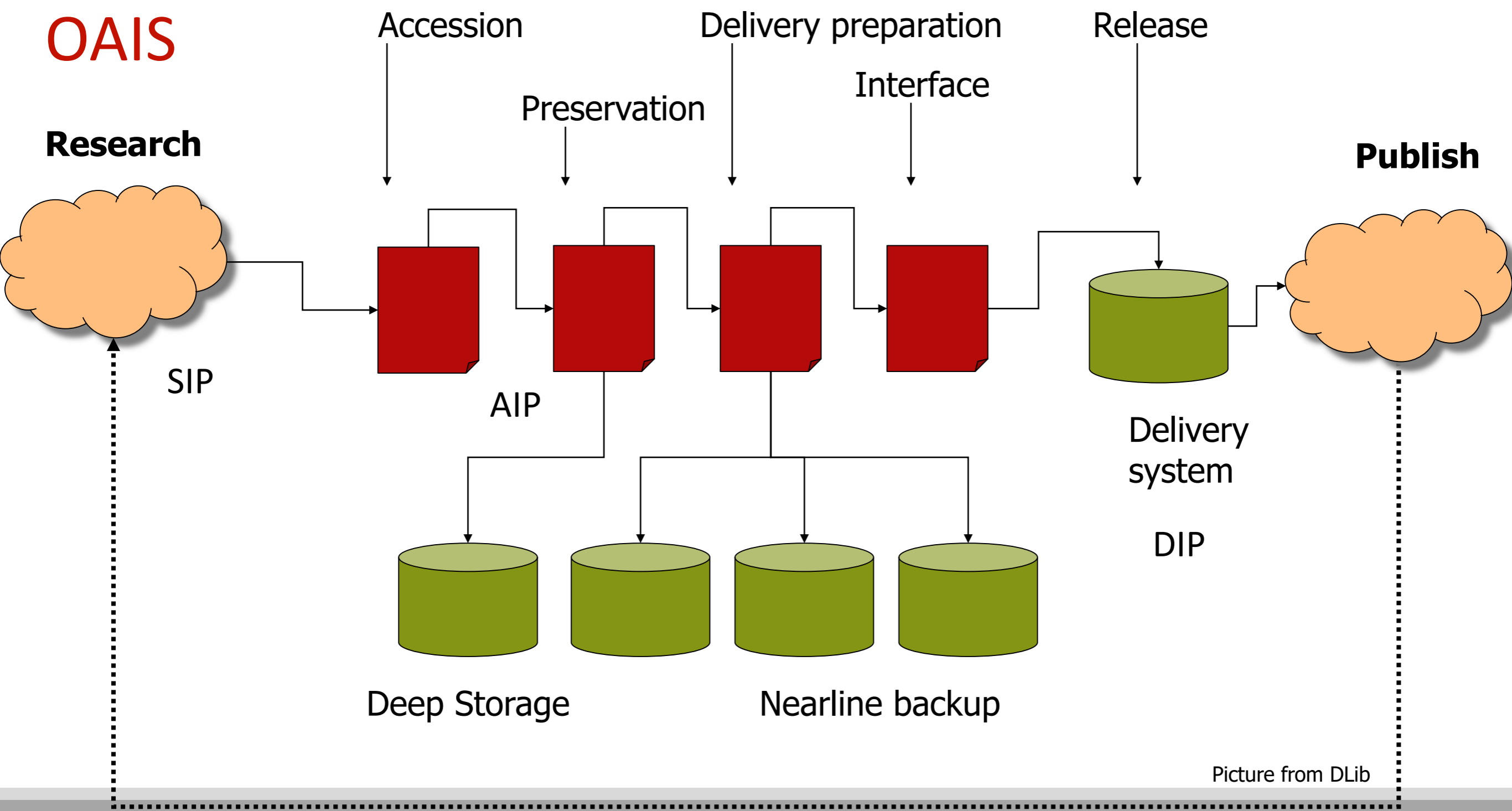- Data licensing – Creative Commons framework

Media Types

- ## Experience rapid change

9-Track Reel

DVD-ROM

G2000 Tape

4mm Tape

DC4_120

8" Floppy

CD-ROM

Smart Media

3.5" Floppy

QIC DC600

Punch Tape

xD Picture Card

Rectangular Hole Punch Card

Floptical Disk

5.25" Floppy

Travan

DG90M Tape

IBM 3480

Memory Stick

5.25" Optical Disk

8mmD-eight

Cassette tape

Click!

Sparq Disk Cartridge

12" Optical Disk

MultiMedia Card

Jaz Disk

SD Memory Card

Zip Disk

DLT Tape

Ditto Max

CompactFlash

Picture from DLib

Archaeology Data Service / Digital Antiquity
Guides to Good Practice

This new and revised series of Guides to Good Practice have been produced as the result of a two-year collaborative project between the UK Archaeology Data Service↗ and Digital Antiquity↗ in the US. The project has encompassed important revisions of the existing six ADS *Guides* as well as the development of entirely new documents covering areas such as marine survey, laser scanning, close-range photogrammetry, digital audio and digital video. The project has involved previous Guides authors revising existing content alongside new authors, from both Europe and the US, also contributing to the development of the guides into new themes and areas.

The project has been undertaken in collaboration with the Digital Antiquity initiative, a US-based project with the aim of enhancing the preservation of and access to digital records of archaeological investigations. A major aim of the Guides is to provide the basis for archaeological project workflows that will create digital datasets that can be archived and shared effectively by Digital Antiquity's tDAR↗ archive and repository in the US and by the Archaeology Data Service in the UK. The development of the *Guides* involves close collaboration with teams in the US at both the University of Arkansas and Arizona State University.

Other ADS projects have also fed into the revision and development of the Guides. ADS involvement in the European VENUS project↗ has formed the basis of a guide focussed on marine survey. In addition, the incorporation of findings from the ADS Big Data↗ project, together with the revision of the existing guide on aerial photography and remote sensing data, has seen a significant contribution to the guides from English Heritage funded projects.

Previous versions of the ADS/AHDS Guides to Good Practice have been archived and are still available on the old Guides to Good Practice↗ page.

View the full new Guides to Good Practice **Table of Contents**

Two new hard copy Guides to Good Practice, "Caring for Digital Data in Archaeology"↗ and "Geophysical Data in Archaeology"↗ are also now available to purchase from Oxbow Books.

My gravestones database here, on floppy disc

What is OASIS/HERALD?

OASIS is a data collection form for historic environment investigations – above and below ground

HERALD is the project to redevelop OASIS

OASIS

Online AccesS to the Index of archaeological investigationS

© Clive Ruggles

Main Menu

- ○ HOME
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- ○ HERALD
- ○ DOCUMENT ARCHIVE
- ○ PUBLICATIONS
- ○ TECHNICAL INFORMATION
- ○ CONTACTS
- ○ FAQ

Current page: PARTNERS

Last visited:
Main

Page Contributors: *Catherine Hardman, Peter McKeague, Keith May, OASIS*

OASIS

Partners

The OASIS project brings together a number of strategic partners: the Archaeology Data Service, Historic England, Historic Environment Scotland and the Royal Commission on the Ancient and Historical Monuments of Wales under the umbrella of the University of York.

ads ARCHAEOLOGY DATA SERVICE Archaeology Data Service↗	The Archaeology Data Service supports research, learning and teaching with freely available, high quality and dependable digital resources. It does this by preserving digital data in the long term, and by promoting and disseminating a broad range of data in archaeology. The ADS promotes good practice in the use of digital data in archaeology, it provides technical advice to the research community, and supports the deployment of digital technologies.
Historic England Historic England↗	Historic England is the Government's statutory adviser on the historic environment. Officially known as the Historic Buildings and Monuments Commission for England, we are an executive Non-Departmental Public Body sponsored by the Department for Culture, Media and Sport.
HISTORIC ENVIRONMENT SCOTLAND | ÀRAINNEACHD EACHDRAIDHEIL ALBA Historic Environment Scotland↗	Historic Environment Scotland is the lead public body set up to investigate, care for and promote Scotland's historic environment.
100 CBHC RCAHMW 1908-2008 RCAMHW↗	The Royal Commission is the investigation body and national archive for the historic environment of Wales. It has the lead role in ensuring that Wales's archaeological, built and maritime heritage is authoritatively recorded, and seeks to promote the understanding and appreciation of this heritage nationally and internationally.
ASSOCIATION OF LOCAL GOVERNMENT ARCHAEOLOGICAL OFFICERS ALGAO↗	The Association of Local Government Archaeological Officers (ALGAO) was originally formed in 1996 (through merger of the Association of County Archaeological Officers and Council of District Archaeological Officers) to represent all archaeologists working for local authorities and national parks.
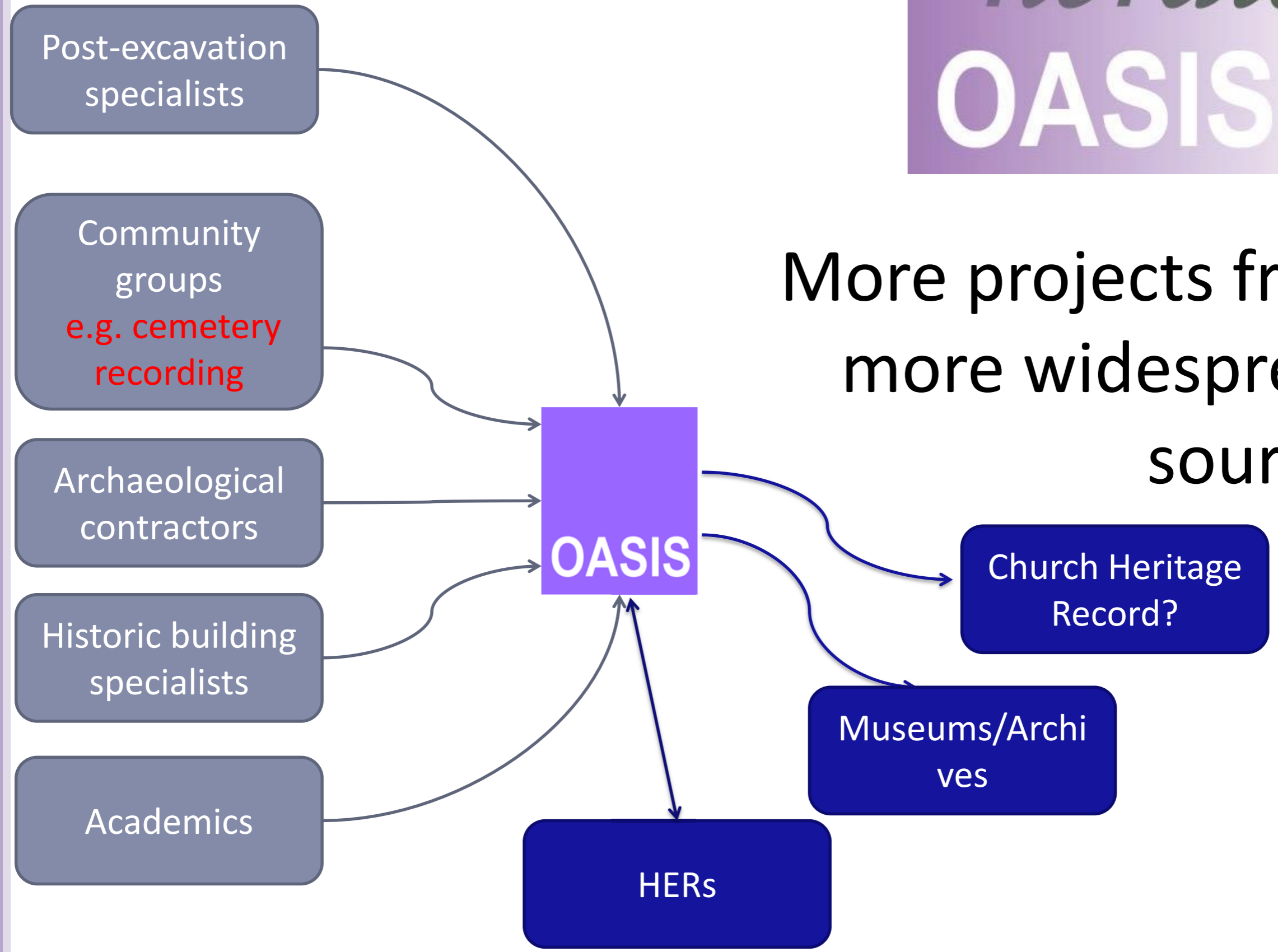
Levels of OASIS data collection

Historic England
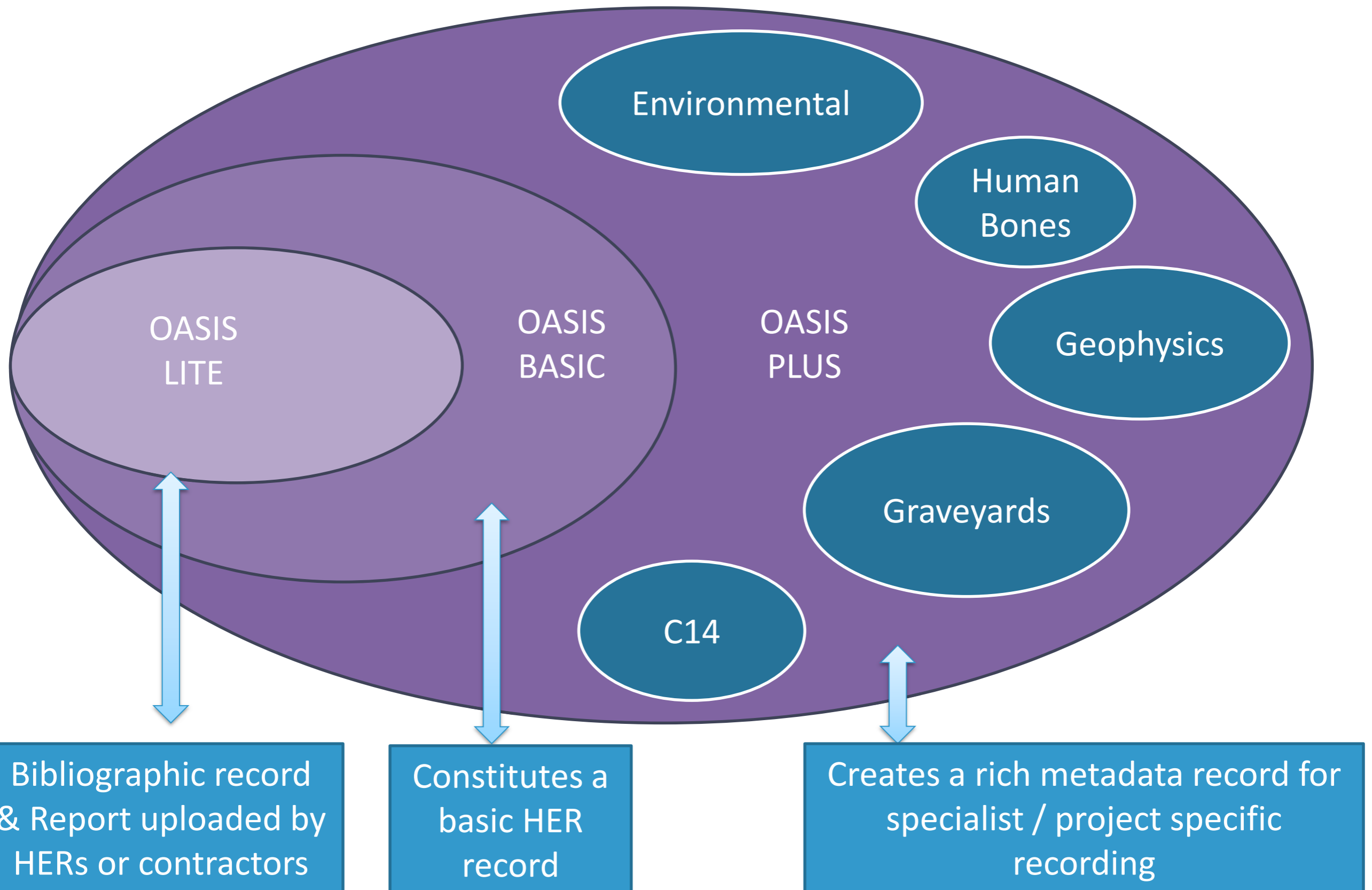
HIAS: Heritage Information Access Strategy
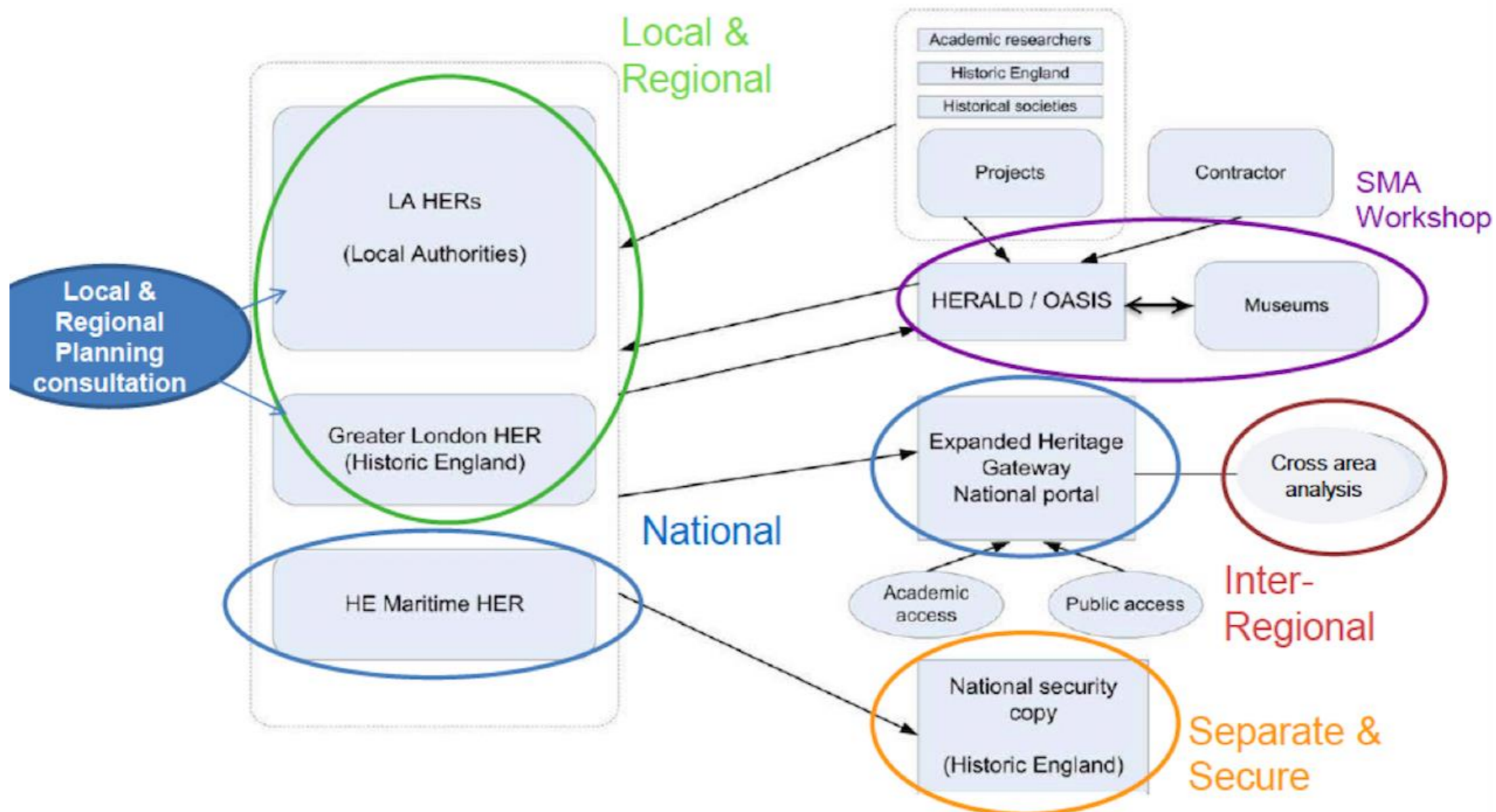
The Library of Unpublished Fieldwork Reports

- Currently 42000+ reports in the library.

- They are linked to by HERs and libraries

- Every report has a DOI

- Available via ADS Library

http://archaeologydataservice.ac.uk

HOME   ARCHSEARCH   ARCHIVES   DEPOSIT   LEARNING   ADVICE   RESEARCH   ABOUT US   BLOG

BROWSER BASIC

WHAT Non Intrusive Event ⊗   KEYWORD graveyard ⊗   RESET QUERY

ADVANCED MAP

KEYWORD

[graveyard]   **SEARCH**

21 Total results.

⏮ ◀ 1 2 3 ▶ ⏭

▼ WHAT
  ▼ ○ Event **21**
    ▶ ○ Intrusive Event **3**
    ▶ ◉ Non Intrusive Event **21**
  ▶ ○ Evidence **1**
  ▶ ○ Monument Types **20**
  ▶ ○ Object Types **4**

▼ WHERE
  ▶ ○ England **20**
  ▶ ○ Scotland **1**

▼ WHEN
  ▶ ○ Later Prehistoric **1**
  ○ Roman **3**
  ○ Early Medieval **1**
  ▶ ○ Medieval **5**
  ▶ ○ Post Medieval **8**
  ▶ ○ Modern **3**

▼ RESOURCE
  ○ Historic England NRHE Excavation Index **16**
  ○ Yorkshire Dales National Park HER **4**

Resources

ACCORD with the Ardnamurchan Community Archaeology Group
ACCORD with the Ardnamurchan Community Archaeology Group
ACCORD was an AHRC funded research project that took place from October 2013 to March 2015 and was a collaboration between the Digital Design Studio at the Glasgow School of Art, the University of Manchester, the Royal Commission on the Ancient and Historical Monuments of Scotland and Archaeology Scotland. In the summer of 2014 the ACCORD project worked together with communities across Scotland to co-design and co-produce 3-Dimensional digital models of heritage places and monuments. We explored how forms of community-based social value associated with sites and places can be addressed and transformed through engagement with 3D digital technologies. The ...

ALL SAINTS CHURCH WILLIAN
Historic England NRHE Excavation Index for England
Radar survey carried out in advance of proposed graveyard extension works. Information from OASIS Online Form.
HERTFORDSHIRE

BETHEL CHAPEL ROBINSON ROAD
Historic England NRHE Excavation Index for England
Project No: 1112. Archaeological interpretative survey of the post-medieval chapel and graveyard in advance of proposed works.
WEST SUSSEX

BURGHBYSANDS GRAVEYARD
Historic England NRHE Excavation Index for England
Geophysical survey took place to the north & east of the graveyard & confirmed the position of the northern defences & much extra-mural activity.
CUMBRIA

ACCORD with the Kirkcudbright History Society
ACCORD project, 2017

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Usage Statistics

ACCORD: Archaeology Community Co-production of Research Data

Data copyright © Kirkcudbright History Society, ACCORD project unless otherwise stated

Primary contact

Dr Stuart Jeffrey
Research Fellow
Glasgow School of Art
Digital Design Studio
The Hub
Pacific Quay
Glasgow
G51 1EA
Scotland
Tel: +44 (0) 141 566 1465

Send e-mail enquiry

Resource identifiers

ADS Collection: 2153
DOI: https://doi.org/10.5284/1042730

Introduction

ACCORD was an AHRC funded research project that took place from October 2013 to March 2015 and was a collaboration between the Digital Design Studio at the Glasgow School of Art, the University of Manchester, the Royal Commission on the Ancient and Historical Monuments of Scotland and Archaeology Scotland. In the summer of 2014 the ACCORD project worked together with communities across Scotland to co-design and co-produce 3-Dimensional digital models of heritage places and monuments. We explored how forms of community-based social value associated with sites and places can be addressed and transformed through engagement with 3D digital technologies. The project worked together with 10 community groups across Scotland that have ongoing relationships to heritage places.

George Wishart of the Kirkcudbright History Society taking photographs of the tablestone grave dedicated to Samuel Herries, 1713 to 1793, Kirkcudbright Kirkyard. Photograph taken by Helen Bowick (Kirkcudbright History Society).

Full project details including references to methodology are available from the main ACCORD programme pages.

This archive contains the outputs from the eighth co-production project. The ACCORD team worked with The Kirkcudbright History Society on the 4th and 5th of October 2014. Together in the Kirkcudbright Kirkyard we modelled and recorded the inscriptions of two grave monuments using photogrammetry and the technique of Reflectance Transformation Imaging (RTI).The three grave monuments included one dedicated to the traveller Billy Marshall who died in 1792; an 18th Century gravestone with one face completely occupied by raised lettering; and an ornate tablestone grave dedicated to Samuel Herries who died in 1793. For more information on this technology please see the ACCORD project overview page.

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Digital Design Studio
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Glasgow
G51 1EA
Scotland
Tel: +44 (0) 141 566 1465

Send e-mail enquiry

Downloads

Documents | Production Images | Photogrammetry | RTI | Additional Files

Documentation (all files)

Kirkcudbright Metadata	XLSX	60 Kb

RTI Files

Please select an RTI file from the table below.

	SamuelHerries
	RobertMclellan

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Downloads - Kirkcud RTI SamuelHerries
Select another RTI file

RTI files
(Using multi-volume ZIP files)

Kirkcud RTI SamuelHerries	ZIP 001	100 Mb
	ZIP 002	29 Mb

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Overview

The ACCORD team worked with The Kirkcudbright History Society on the 4th and 5th of October 2014. The project was based in Kircudbright Kirkyard, Dumfriesshire. Together in the Kirkcudbright Kirkyard we modelled three grave monuments using photogrammetry (two are archived here with the ADS) and recorded the inscriptions on two of these using the technique of Reflectance Transformation Imaging (RTI) (both of which are archived with the ADS). The three grave monuments included one dedicated to the traveller Billy Marshall who died in 1792; an 18th Century gravestone with one face completely occupied by raised lettering; and an ornate tablestone grave dedicated to Samuel Herries who died in 1793.

Five members of the Kirkcudbright History Society (one of whom is also a member of the local camera club) and a member of the Wigtownshire Antiquarians, took part in this ACCORD project. The Kirkcudbright History Society was primarily set-up in 2001 as a lecture society, meeting monthly from October to March, and run entirely by a volunteer committee. It is one of the youngest societies in Dumfries and Galloway. It currently has around 80 members. The aims of the society are to encourage and conduct research into local history topics, arrange and organise lectures on local history themes, organise outings to places of interest, publish or assist in the publication of notes, papers, transcripts and web pages (relating to local history), liaise with holders of source material, and arrange local history exhibitions. They have their own website at http://www.kirkcudbrighthistorysociety.org.uk/.

List of Participants in the ACCORD project:

- Jennifer Roberts (Kirkcudbright History Society)
- William Gardner (Kirkcudbright History Society)
- John Pickin (Kirkcudbright History Society)
- David F. Devereux (Kirkcudbright History Society)
- Helen Bowick (Kirkcudbright History Society)
- George Wishart (Kirkcudbright History Society and Camera Club)
- Stuart Jeffrey (Digital Design Studio, Glasgow School of Art)
- Mhairi Maxwell (Digital Design Studio, Glasgow School of Art)
- Clara Molina-Sanchez (Digital Design Studio, Glasgow School of Art)

Description of Data-Capture Process:

For photogrammetry, in all cases, data collection consisted of digital images captured with varying cameras. Before any images were taken, the camera and lens settings were set to automatic, with no flash and images captured at JPG fine quality (metadata for each image is provided in the accompanying excel spreadsheet). A total of 193 digital images were captured in order to create a photogrammetric model of the headstone dedicated to traveller Billy Marshall (1672-1792), and 108 of the headstone dedicated to Robert McLellan (1711).

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ACCORD with the Kirkcudbright History Society

Data CC-By-SA by OpenStreetMap

Location	World region	British Isles and Ireland
	British Isles country	Scotland
	District	Dumfries and Galloway
	Place	Kirkcudbright
	TGN	World, Europe, United Kingdom, Scotland, Dumfries and Galloway, Kirkcudbright [1050827]
Grid reference	Latitude Longitude	54.8377174531 -4.0388648152
Grid reference	Latitude longitude bounding box	54.847757385 -4.0627098083 -4.0318107605 54.8285789918
Subject	Event Type (England)	PHOTOGRAMMETRIC SURVEY
	Library of Congress Subject Headings	Archaeology
	Monument Type (Scotland)	BURIAL GROUND
Period	MIDAS	Medieval

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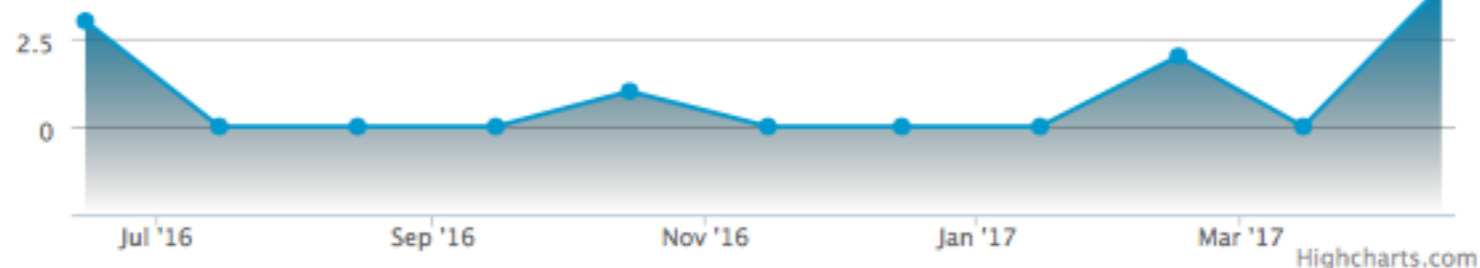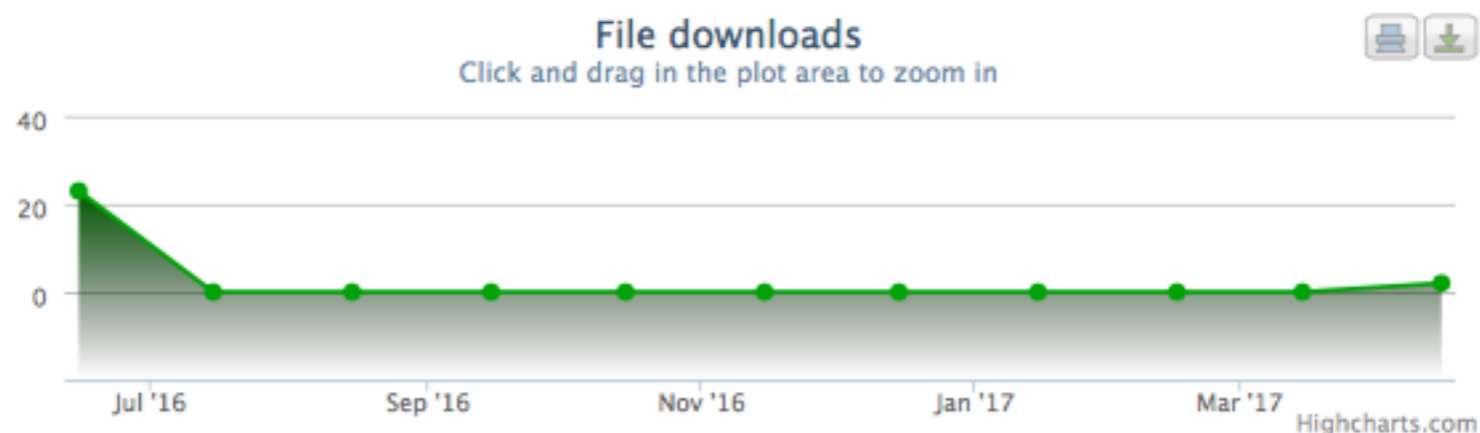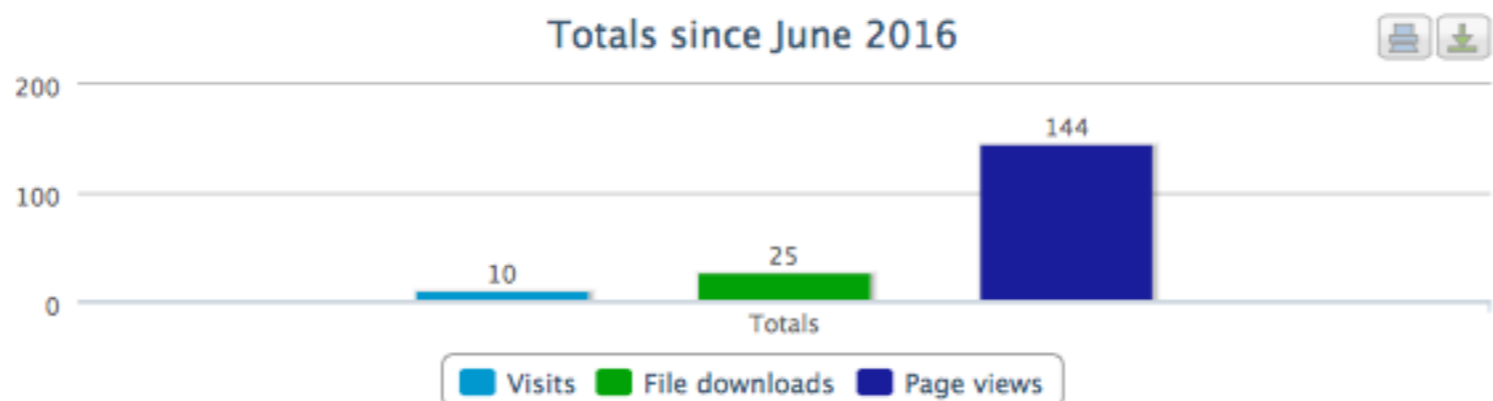Scotland
Tel: +44 (0) 141 566 1465

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If a visitor comes to the website for the first time, or if they visit a page (or download a file) more than 30 minutes after their last page view, this will be recorded as a new visit. A unique visitor making multiple visits per day will register as several visits.

File downloads
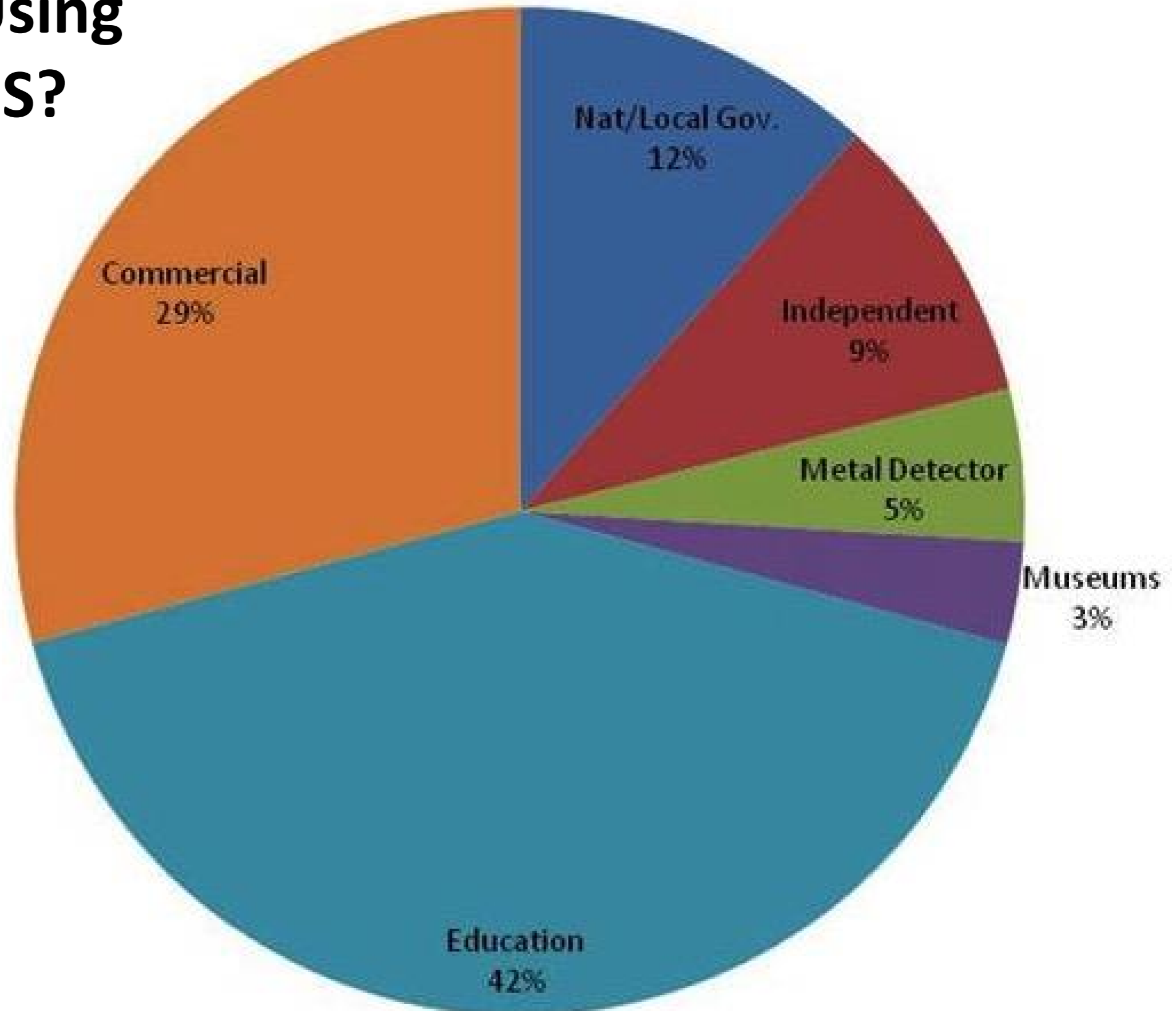Click and drag in the plot area to zoom in

A download is a click on a link to something other than a web page, file extensions include: csv, doc, docx, gif, jar, jpg, jpeg, mp3, mp4, mov, odb, odt, pdf, png, ppt, pptx, txt, wav, wma, wmv, wpd, xls, xlsx, xml, zip but this is not an exhaustive list.

Page views within the archive
Click and drag in the plot area to zoom in
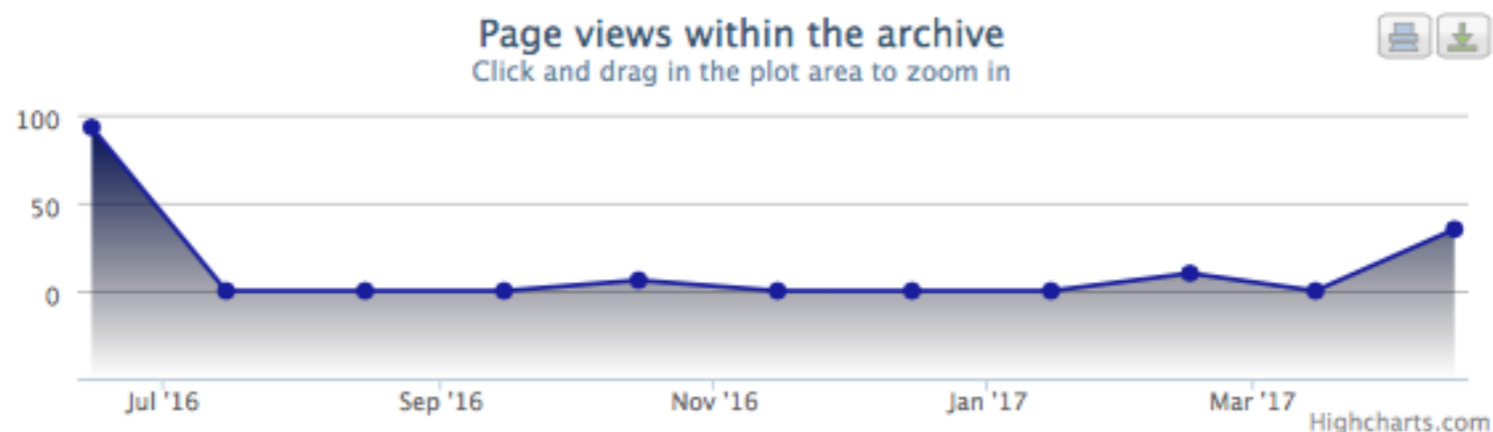
Pages viewed is the number of HTML pages or scripts that visitors have looked at. A "page" is a hit that is not an image, JavaScript or CSS file and which was not loaded by a search engine robot.

Totals since June 2016

Visits File downloads Page views

Who is Using the ADS?

Nat/Local Gov. 12%
Independent 9%
Metal Detector 5%
Museums 3%
Education 42%
Commercial 29%

ADS: % respondents

- 84% - ADS has had an impact on data sharing

- 79% - reduced time required for data access and processing

- 51% - New intellectual opportunities

- 56% - Permitted new types of research

- 94% - Data very or quite important for their research

research information network

JISC

Data centres: their use, value and impact

A Research Information Network report	September 2011

Figure 16: Impact on culture of data sharing, by data centre

	ADS	BADC	CDS	ESDS	NGDC
To a large extent	84%	69%	72%	54%	68%
To a small extent	16%	29%	27%	40%	30%
Not at all	0%	2%	1%	7%	3%
N=	61	601	164	244	37

Source: Technopolis ranking based on survey of data centre users, January 2010

7533: Discovering England's Burial Spaces (DEBS)

Project Name: Discovering England's Burial Spaces (DEBS): Enabling new forms of community engagement through digital experience

- OASIS+ Graveyard recording module
- Mobile grave memorial recording application
  - Digital Supplement to CBA Practical Handbook
- Pilot case studies - community engagement
- Burial Space Research database
- Legacy digitisation project

- Interchange of data with Church Heritage record?
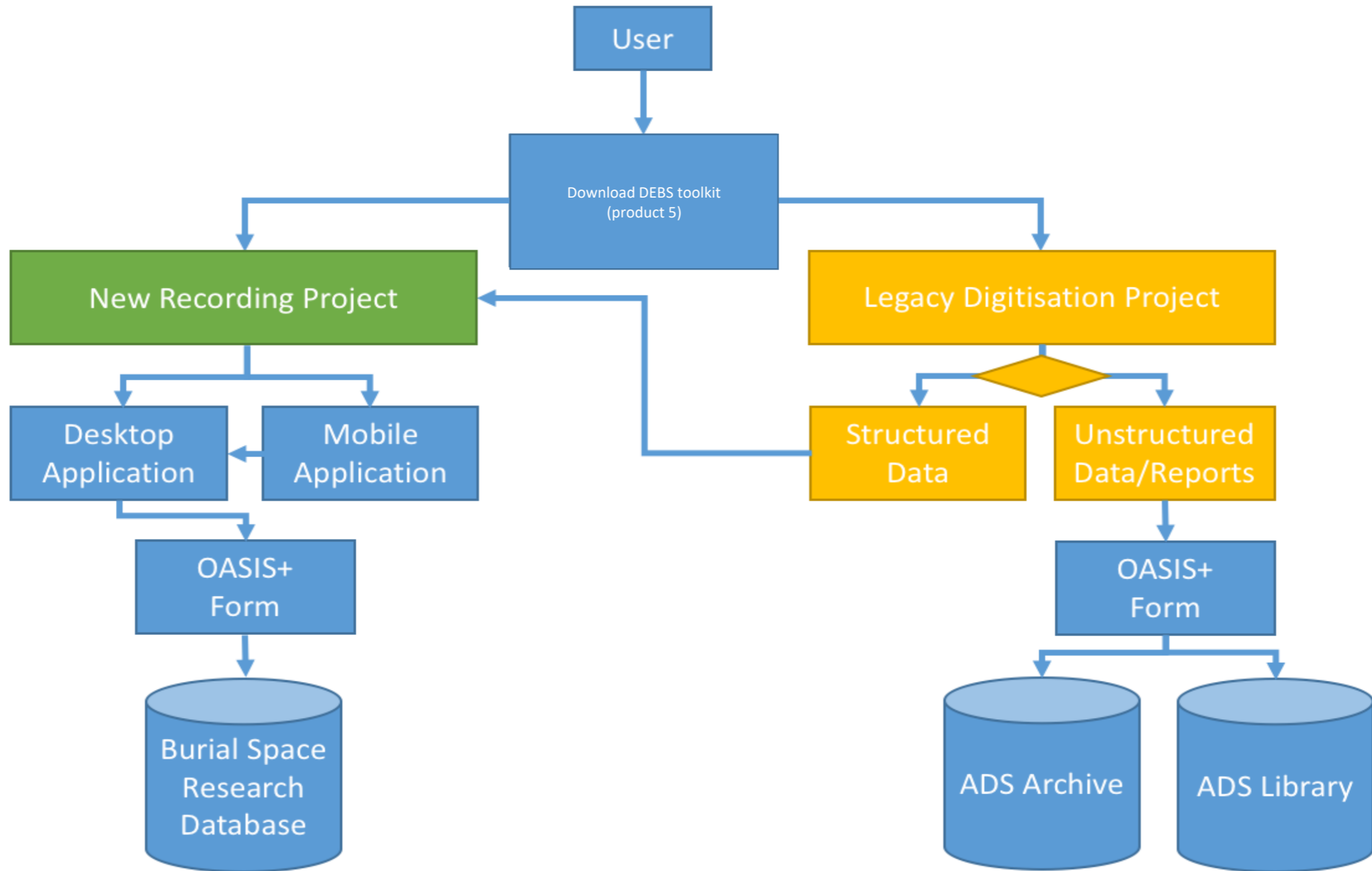
Thank-you for listening

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@ADS_Update

Follow us on Facebook:

http://www.facebook.com/archaeology.data.service

E-mail: julian.richards@york.ac.uk
Website: http://archaeologydataservice.ac.uk/