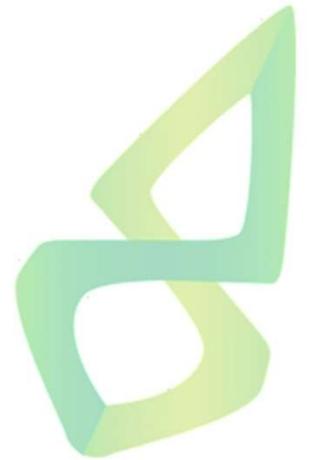




# Work Digital / Think Archive

Manda Forster  
DigVentures

ALGAO Meeting – 25 June 2019



# The starting point:

- Mendoza Review of Museums 2017
- Suggested that the sector develop guidance which:



*“relieves museums of the expectation that they should attempt to curate digital material from archaeological projects in favour of their deposition in a Trusted Digital Repository that will guarantee the preservation and accessibility of digital material”*

# The other starting point:

The process of excavation is destructive, and no archaeological interpretations are sustainable unless they can be backed up with the evidence of field record and post excavation analysis. Such records and analysis should be available for **re-examination** and **re-interpretation**

(Hedley Swain, Foreword to Brown 2011)



Historic  
England



**ClfA**

Chartered  
Institute for  
Archaeologists

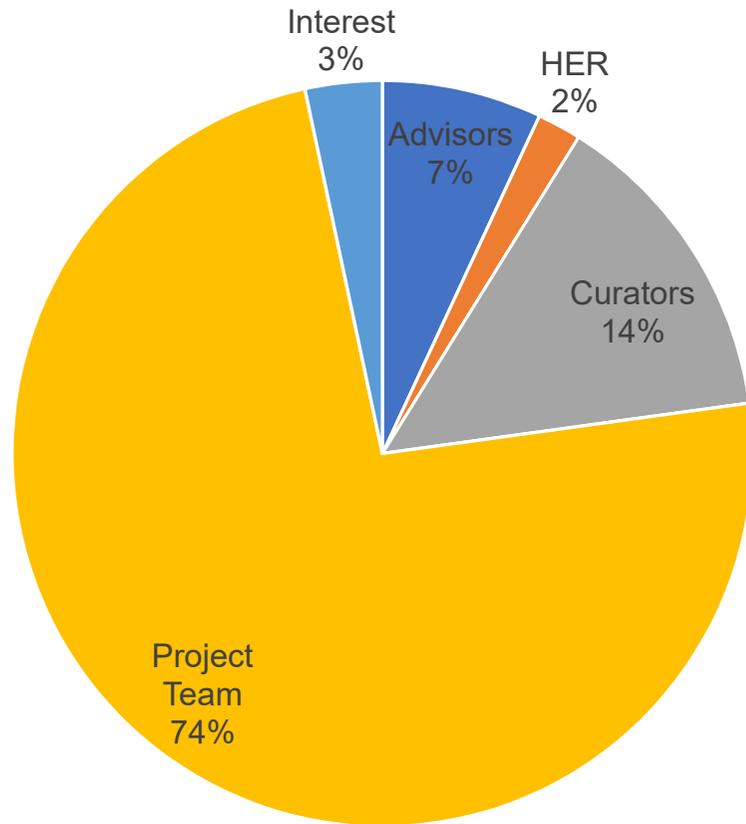
## Dig Digital project

- Historic England funded project delivered by DigVentures with ClfA
- to develop up-to-date guidance for everyone working with digital data in archaeological projects
- The guidance will be published as part of the [Archaeological Archives Forum's](#) ongoing series of practice guides for archives management aimed at practitioners.
- ClfA's Standards and Guidance will be updated to ensure consistency between practice guidance and regulation.

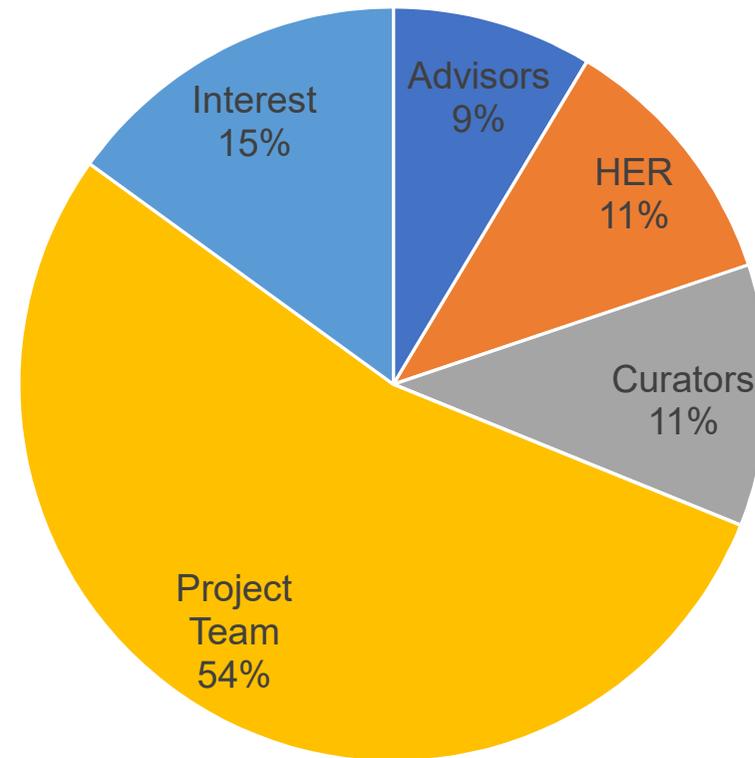
# The ambition of this (ongoing) project:

- understand how digital data is currently used and managed
- signpost how different digital data should be collected and stored
- highlight relevant technical guidance and relate that to industry standards
- provide step-by-step guidance for practitioners at all stages of an archaeological project
- explain how born digital data can form part of a sustainable archaeological archive

# Initial consultation – November 2018



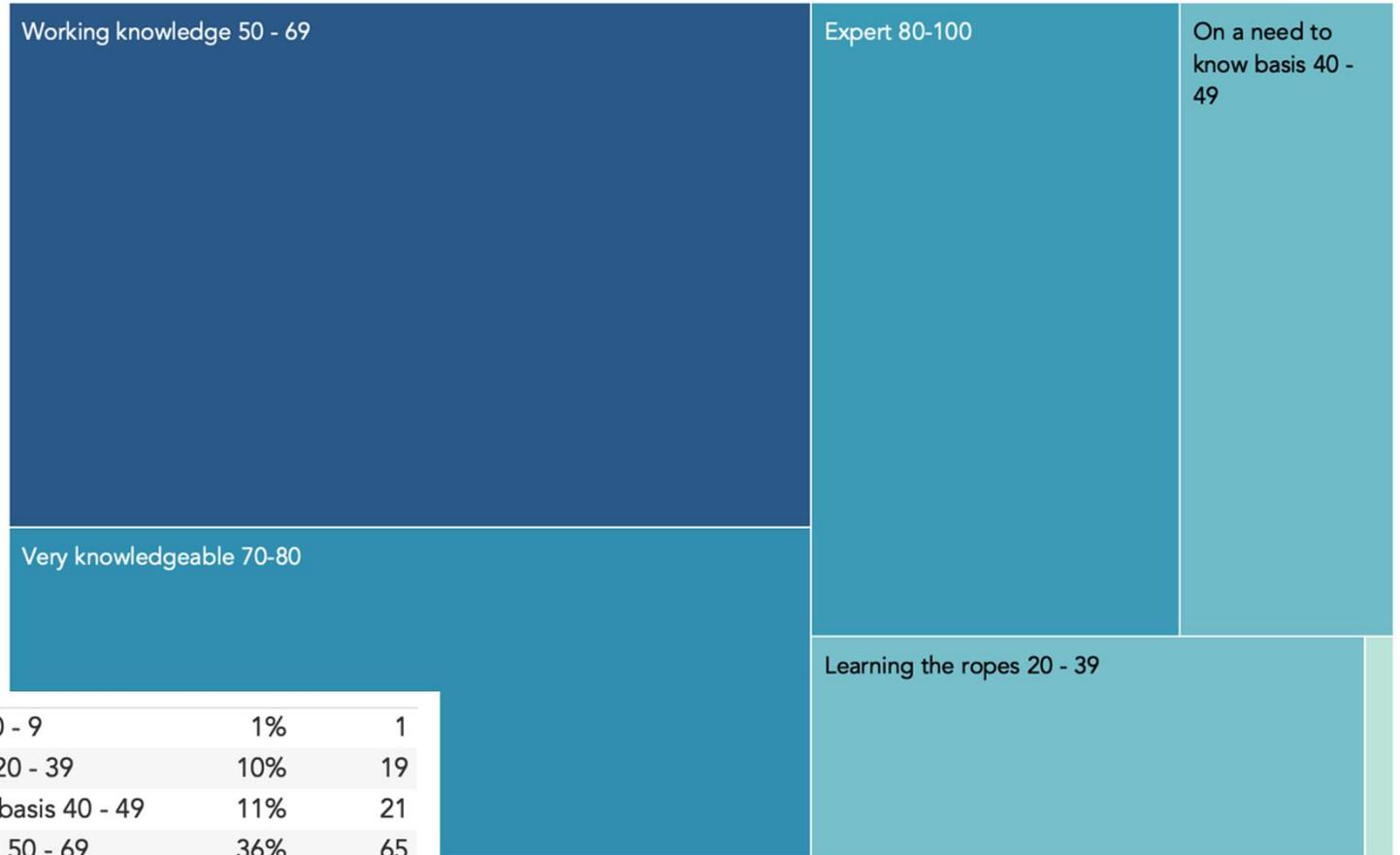
Beta Group members (185)



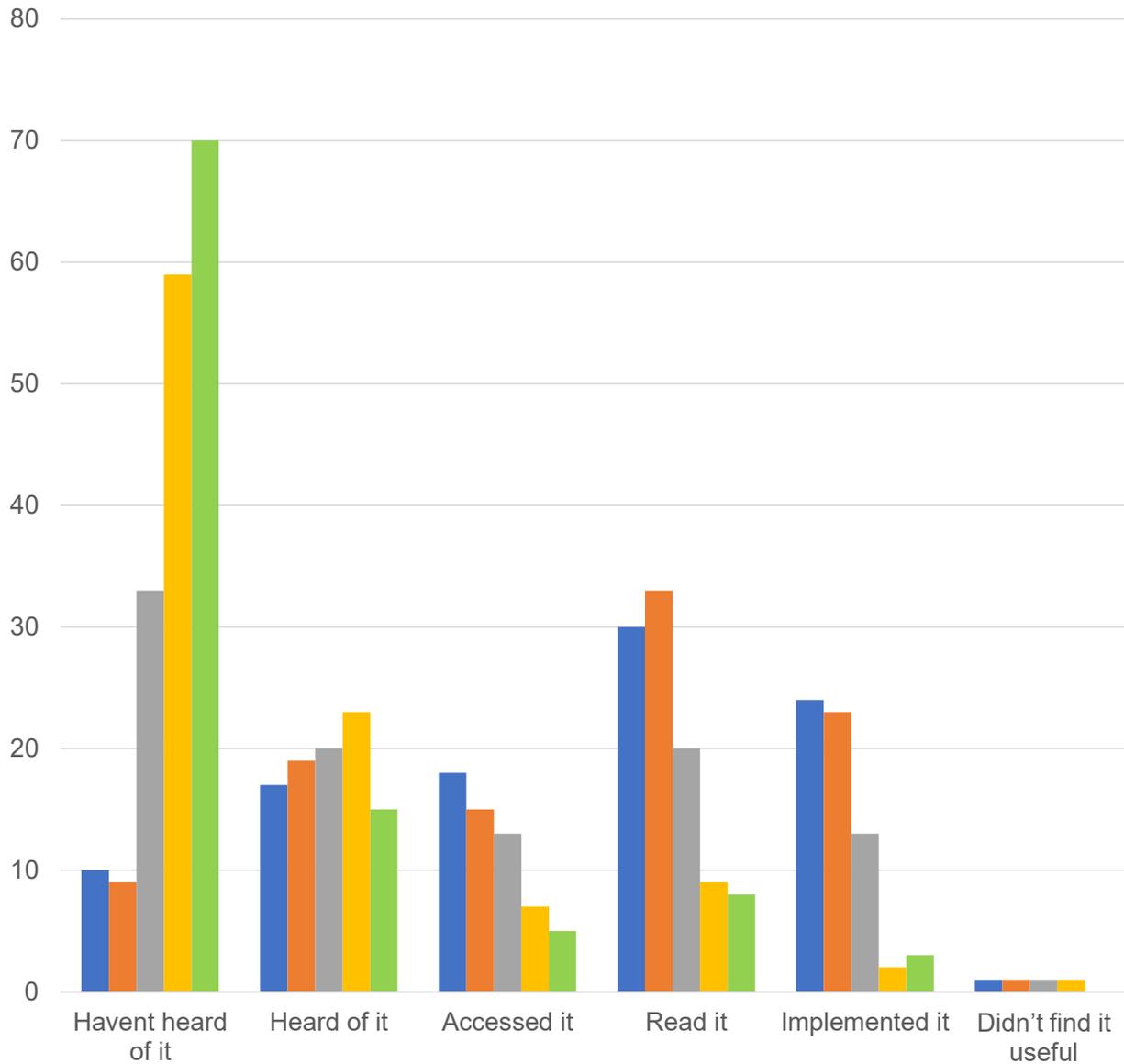
Starter for Ten survey (312)

Beta Group Participants (185) were asked to position themselves of a digital knowledge scale from Confused (0) to Expert (100)

## Beta Group Survey



Absolute beginner 0 - 9	1%	1
Learning the ropes 20 - 39	10%	19
On a need to know basis 40 - 49	11%	21
Working knowledge 50 - 69	36%	65
Very knowledgeable 70-80	22%	41
Expert 80-100	20%	36



## Where do you find stuff out?



Archaeological Archives: A guide to best practice



Archaeological Data Service / Guidelines for depositors



ADS & Digital Antiquity / Guides to Good Practice



Digital Preservation Coalition / Digital Preservation Handbook



Digital Curation Centre / Data Management Plan: Checklist

Starter For Ten survey – November 2018  
312 respondents (c155 Project team)

# Work Digital / Think Archive



## ClfA Standards

- ✓ Explains how digital maps onto current Standards
- ✓ Updates to some standards are planned

## Explanatory

- ✓ Provides the background
- ✓ Points to relevant data standards & information

## Practical guidance

- ✓ What steps need to be taken
- ✓ When, how, who should take them



Chartered  
Institute for  
Archaeologists

All archaeological projects that include the recovery or generation of data and/archaeological materials (finds) will result in a **stable, ordered, accessible archive**. All archaeologists are responsible for ensuring that the archive is created and compiled to **recognised standards**, using **consistent methods**, and is **not subject** to unnecessary **risk** of damage or loss. It is the responsibility of all curators of archaeological archives to ensure that archives are stored to recognised **standards for long-term preservation** and made accessible for consultation.

*Standard for the creation, compilation, transfer and deposition of archaeological archives 2014*

## But what does that mean for Digital?

*Recognition by everyone involved in the archaeological project that digital archives need to be*

*a. planned*

*b. actively managed*

*c. resourced*



Data Management Plan

- required as part of WSI / PD



Management Team

- ensure plan is resourced
- processes to support



Project Team

- able to deliver / maintain the plan



Museums

- requires Core Trust Seal



Trusted Digital Repository

- involved from the outset

# And what does that mean for planning?

*Embed requirement for the project team include DMPs*

*Maintain need for an iterative approach (DMP gets updated)*

*Understand the benchmarks for repositories*



## Data Management Plan

- required as part of WSI / PD



## Management Team

- ensure plan is resourced
- processes to support



## Project Team

- able to deliver / maintain the plan



## Museums

- requires Core Trust Seal



## Trusted Digital Repository

- involved from the outset



## When?

- Needs to allow for a stepladder approach...
- Guidance document circulated July/August 2019
- Online – Winter 2019
- Training and implementation – 18 month project?
- Case Studies – Spring 2020
- ClfA will be expecting full compliance from Registered Organisations by end of implementation - Winter 2020

Dig Digital <u>Self Assessment</u> Checklist		Action plan			
	Questions	Yes / No	What?	Who?	When?
1	Do you use OASIS to set up a project record set up for each project?				
2	Have you recently reviewed relevant data standards and updated organisational methodology?				
3	Do you use a consistent folder structure for the storage of digital project files?				
4	Do you manage version control of files and documents with consistently applied naming conventions?				
5	Do you have quality assurance processes in place for data collection and management?				
6	Do you collect metadata for digital files which meet the standards required by the identified digital repository?				
7	Do you have a process in place for collecting metadata relating to digital files throughout the project?				
8	Do you have a GDPR compliant Privacy Policy which considers the management of digital personal data?				
9	Do you maintain a security copy of your digital data?				
10	Do you normally contact the relevant data repository at the beginning of the project?				
11	Are you familiar with how digital data costs are calculated?				
12	Do you have a process for selection of data for long-term preservation?				
13	Do you have clear roles and responsibilities for project staff with regards to digital data?				
14	Do you have processes in place which record any data sharing restrictions for data?				
15	Do you ensure that all data relating to your project is collected and stored in an accessible place as part of the working project archive (eg including external specialist data, or specialist teams within an organisation)?				
16	Are digital processes included in organisational documents, an operation manual or data management policy?				

# What's in a digital archive?



- the knowledge base essential to facilitate reanalysis and reinterpretation in the light of new data, research questions, techniques and technology in the future.
- both born digital and digitised materials
- documentation of digital data
- digital aerial photograph interpretations
- excavation archive
- survey data
- GIS files, CAD files
- images
- spreadsheets
- text files
- databases
- metadata

# Selection is vital!

As with other elements of the archive, selection is important

Think FAIR principles:

- **Findable** – we know where they are
- **Accessible** – we can get to them
- **Interoperable** – we can use them
- **Reusable** – we can revisit the site and reinterpret

And linked to the significance, potential and size of the project

Project Stage	Digital project archive files		
	Function	Working project archive	Selected and converted for archaeological project archive
Start Up	Project Brief issued by local authority archaeologist	<a href="#">P2019001ProjectBriefV2-0.pdf</a>	Converted to PDF/A for long-term preservation <a href="#">P2019001ProjectBriefV2-0.pdf/a</a>
Initiation	Detailed Project Design or WSI written by Project Team	<p>Document drafts:  <a href="#">P2019001WSIdraftV1.0.docx</a>  <a href="#">P2019001WSIdraftV1.1.docx</a>  <a href="#">P2019001WSIdraftV1.2.docx</a></p> <p>Final document for circulation:  <a href="#">P2019001WSIfinalV2-0.docx</a></p> <p>Illustrations:  <a href="#">P2019001WSIfigure1V1.0.ai</a>  <a href="#">P2019001WSIfigure1V1.1.ai</a>  <a href="#">P2019001WSIfigure2V1.0.ai</a>  <a href="#">P2019001WSIfigure3V1.0.ai</a>  <a href="#">P2019001WSIfigure3V1.1.ai</a>  <a href="#">P2019001WSIfigure3V1.2.ai</a></p> <p>Final illustrations for document:  <a href="#">P2019001WSIfigure1V2-0.ai</a>  <a href="#">P2019001WSIfigure2V2-0.ai</a>  <a href="#">P2019001WSIfigure3V2-0.ai</a></p> <p><a href="#">P2019001WSIfigure1V2-0.pdf</a>  <a href="#">P2019001WSIfigure2V2-0.pdf</a>  <a href="#">P2019001WSIfigure3V2-0.pdf</a></p> <p>Combined PDF version, text and illustrations for circulation:  <a href="#">P2019001WSIV2-0.pdf</a></p> <p>Amended document text:  <a href="#">P2019001WSIfinalV2-1.docx</a></p> <p>Updated final PDF:  <a href="#">P2019001WSIV2-1.pdf</a></p>	<p>Final document for circulation:  <a href="#">P2019001WSIfinalV2-1.docx</a></p> <p>Final illustrations for document (converted to <a href="#">svg</a> files for greater interoperability):  <a href="#">P2019001WSIfigure1V2-0.svg</a>  <a href="#">P2019001WSIfigure2V2-0.svg</a>  <a href="#">P2019001WSIfigure3V2-0.svg</a></p> <p>Combined PDF version, text and illustrations saved as PDF/A for long-term preservation:  <a href="#">P2019001WSIV2-1.pdf/a</a></p>

# What's in a Data Management Plan



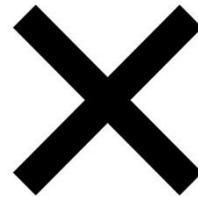
- what data will be created within a project
- which data standards or methods will be used
- how data will be managed through each project stage
- how data will be documented
- consideration of ethical and legal issues
- how the data will be stored, accessed and backed up
- data selection as part of the archive process
- the intended archive repository, costs of deposition and deposition process



# Data Management Plan

Section 1: Project Administration
<ul style="list-style-type: none"><li>• Key project details, unique identifiers and contacts</li></ul>
Section 2: Data Collection
<ul style="list-style-type: none"><li>• What data will you collect or create?</li><li>• How will the data be collected or created?</li></ul>
Section 3: Documentation and Metadata
<ul style="list-style-type: none"><li>• What documentation and metadata will accompany the data?</li></ul>
Section 4: Ethics and Legal Compliance
<ul style="list-style-type: none"><li>• How will you manage any ethical, copyright and Intellectual Property Rights (IPR) issues?</li></ul>
Section 5: Storage and Backup
<ul style="list-style-type: none"><li>• How will the data be stored, accessed and backed up during the research?</li></ul>
Section 6: Selection and Preservation
<ul style="list-style-type: none"><li>• Which should be retained, shared, and/or preserved?</li><li>• What is the long-term preservation plan for the dataset?</li><li>• Have you contacted the data repository?</li><li>• Have the costs of archiving been fully considered?</li></ul>
Section 7: Data Sharing and Accessibility
<ul style="list-style-type: none"><li>• How will you share the data and make it accessible?</li><li>• Are any restrictions on data sharing required?</li></ul>
Section 8: Responsibilities
<ul style="list-style-type: none"><li>• Who will be responsible for data management?</li></ul>

# Repositories for digital



# Trusted Digital Repository



- a data repository able to guarantee long-term preservation
- ensure that all data is preserved useable
- that requirement goes beyond the capacity of current museum-based repositories
- a Trusted Digital Repository is an accredited organisation
- You can find out here:

<https://www.coretrustseal.org/>

# And because archaeology are special...

- As well as preservation  
Archaeology also needs full access to aid **reinterpretation**
- Think **FAIR** principles
- Currently that means only ADS meets those requirements
- Soon to be joined by RCAHMW and HES



# Work Digital / Think Archive



Next steps:

- Guidance Document July/August 2019
- Implementation & Compliance 2019/2020

Thanks!



**CIfA**  
Chartered  
Institute for  
Archaeologists

