DATA SERVICE FOR COMPLEX 3D DATA IN THE ARTS AND HUMANITIES

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Tour de table

Introduction

- AHRC scoping research project to specify a data service within the *national infrastructure for digital innovation and curation for arts and humanities (iDAH)*.
- Focus on **large-scale, multi-part and complex visual/spatial datasets.**
- February 2022 – July 2022

Collaborations

+University of Brighton

+King’s College London, (KCL)/ King’s Digital Lab

+University College London

+University of the West of England

+Duke University, US

+Cambridge Digital Humanities

+Duncan of Jordanstone College of Art & Design (DJCAD), University of Dundee

+Historic Environment Scotland

+IIIF-3D Community Group

+Mnemoscene

+The British Library

+The National Archives

+The University of Edinburgh

+Victoria and Albert Museum

3D Data in the Arts and Humanities

- Include primary data and digital resources created in the course of research on:
  - cultural collections and archives within the GLAM sector, including their interpretation and preservation, as well as,
  - other creative research practices within disciplines such as the visual arts, design, media, and performance.

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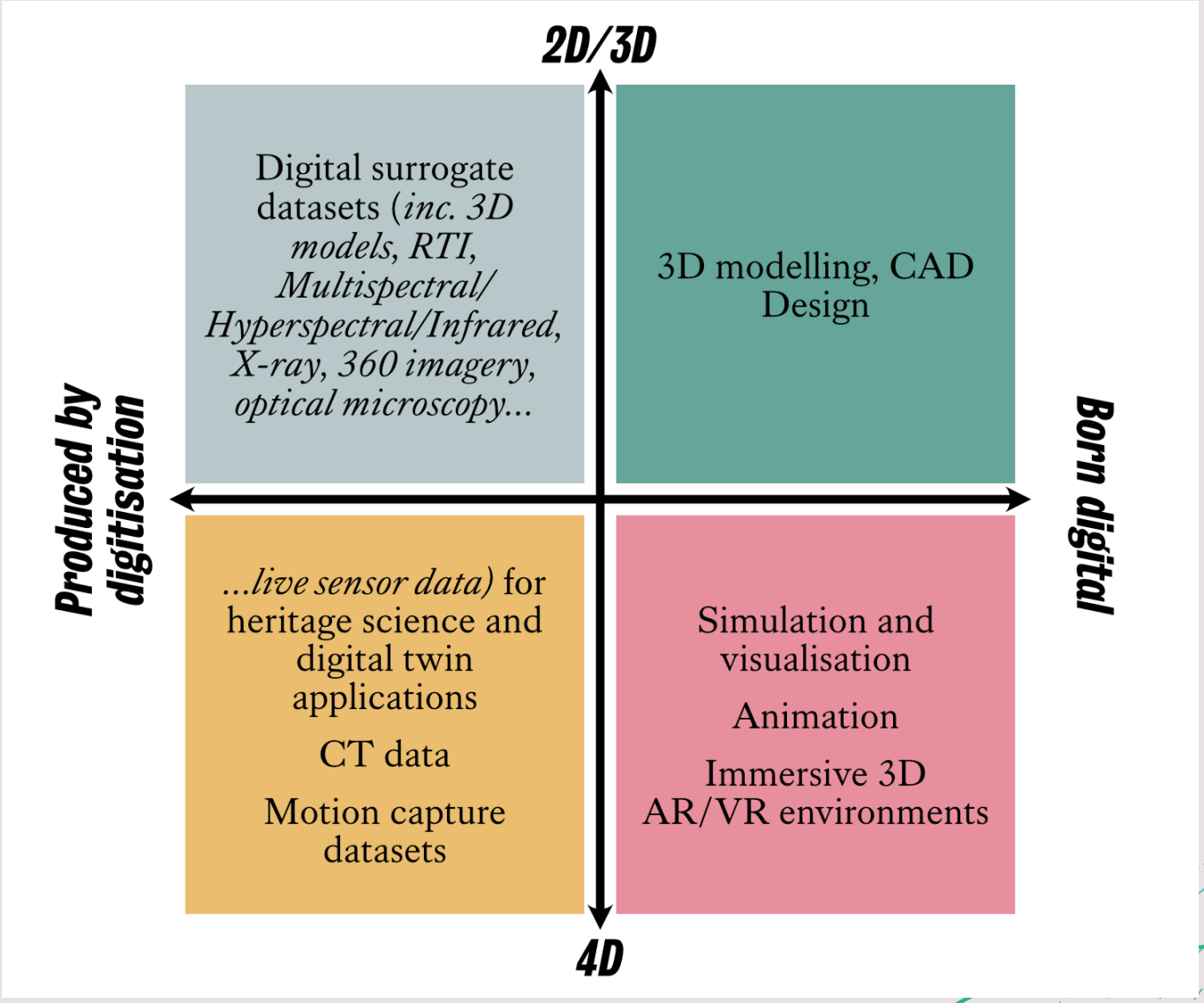
3D Data in the Arts and Humanities

- Large multi-part, and multi-format datasets.
- They describe the creation process, as in:
  - the various steps involved in the digitisation of an artefact into a 3D model, or
  - the project files for an immersive environment or a simulation.
- We refer to this content as ***complex multidimensional data***.

Complex multidimensional data



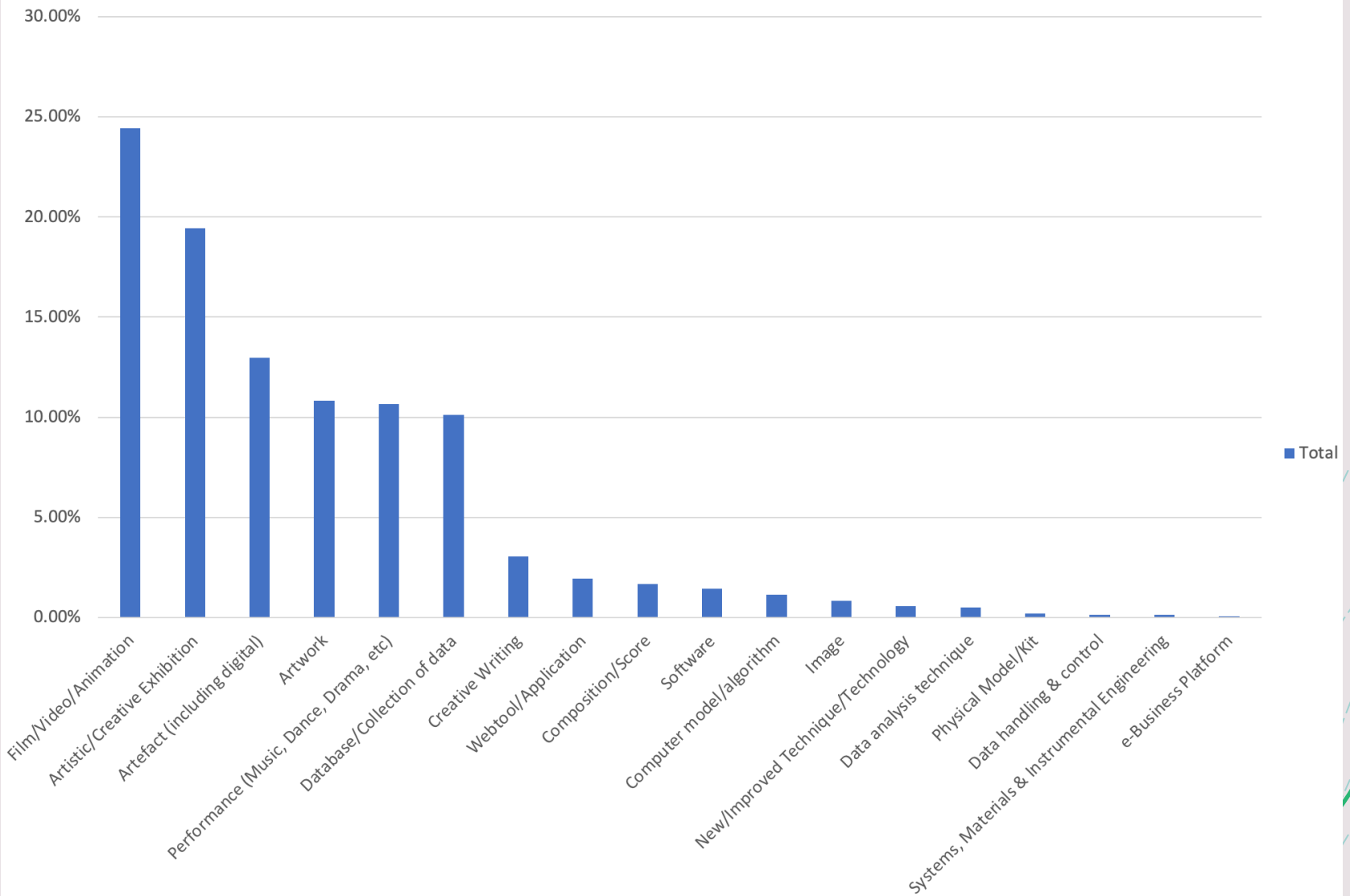
Needs

1. Lack of services to support Arts and Humanities (A&H) researchers using complex 3D data, inc. **3D, spatio-temporal, imaging outputs, and analytical data for research**.
2. Data remains inaccessible, not reusable for further research, and remains underexploited as a resource.

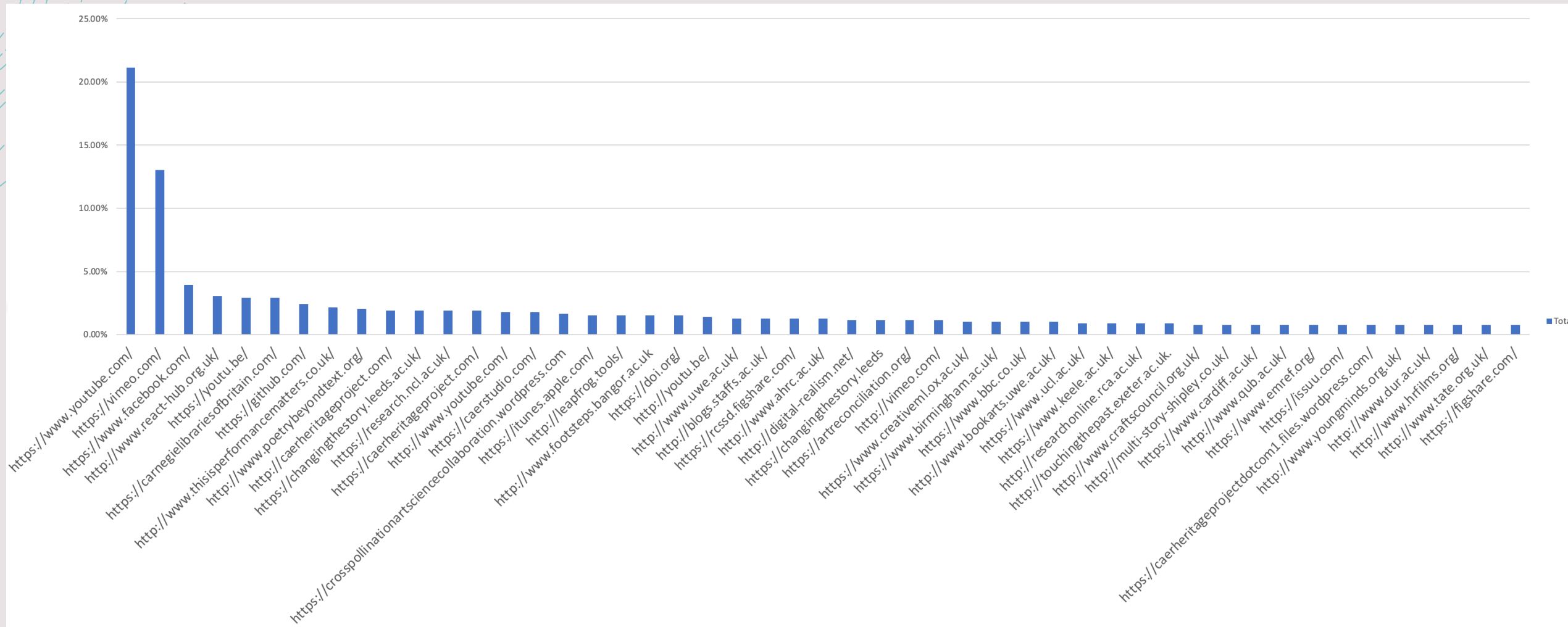
Survey related projects

- Our initial research harvested ~10,000 AHRC funded projects' on **UKRI gateway.**
- Looked for relevant keywords, in project description, impact and outputs, including 3D, RTI, imaging, digital twin, VR/AR immersive, 360, etc.
- Classified their outputs by types.

Types of outputs



Websites for accessible outputs



Project journey

Needs

Activities

1. Workshops with stakeholders

2. User survey

3. Prototype testing

4. Design and develop business plan and specification

Outputs

By Summer 22:

- User requirements are established.
- Prototype is deployed and tested.
- Business plan and full specification is available.

Short-term outcomes

Scoping user needs

Developing a specification to guide implementation

Long-term outcomes

Supporting the community

Creating and maintaining a data repository for complex 3D data

Core specifications for 3D data service

1. Make data compliant with the **FAIR principles** (Findable, Accessible, Interoperable and Re-usable).
2. Support open-data and **open-science practices**.
3. Provide **extended access** to the data (e.g. API interfaces).
4. Enable the data's long-term **preservation**.
5. **Support users** to produce, use and manage the data.

Core specifications for 3D data service

6. Enable new modalities for **publication and dissemination**.
7. Underpin new financial **sustainability models**.
8. Guarantee the **financial sustainability** of the data service.
9. **Innovate** in the development and provision of such data service.
10. **Integrate** with other data service to provide a unified infrastructure.

Online user survey

- To be launched in a couple of weeks.
- The aim is to discover requirements from current and future users, in aspects such as:
  - Nature of the data
  - Size of data
  - Storage/Access
  - Copyright

Workshop: gathering requirements

- Looking at other national/European infrastructures.
  - Overview of Morphosource which is the system we will test during the project.
- Overview of various UK arts and humanities projects in relevant areas.
- Round tables for gathering feedback.

Thanks!
Questions

Twitter: #glam3d #idah #3dDH
Website: https://blogs.brighton.ac.uk/3ddataservice