



Referencing Digital Heritage

Take a step back and think about the immersive digital protocol process, in terms of developing a set of universally recognised standards for digitising the past.

We already have a standard for virtual archaeology set out in the Seville Principles (International Principles of Virtual Archaeology), but we need better guidelines that are universally accepted and will guide future research and projects.

[International Principles of Virtual Archaeology](#)

Definitions:

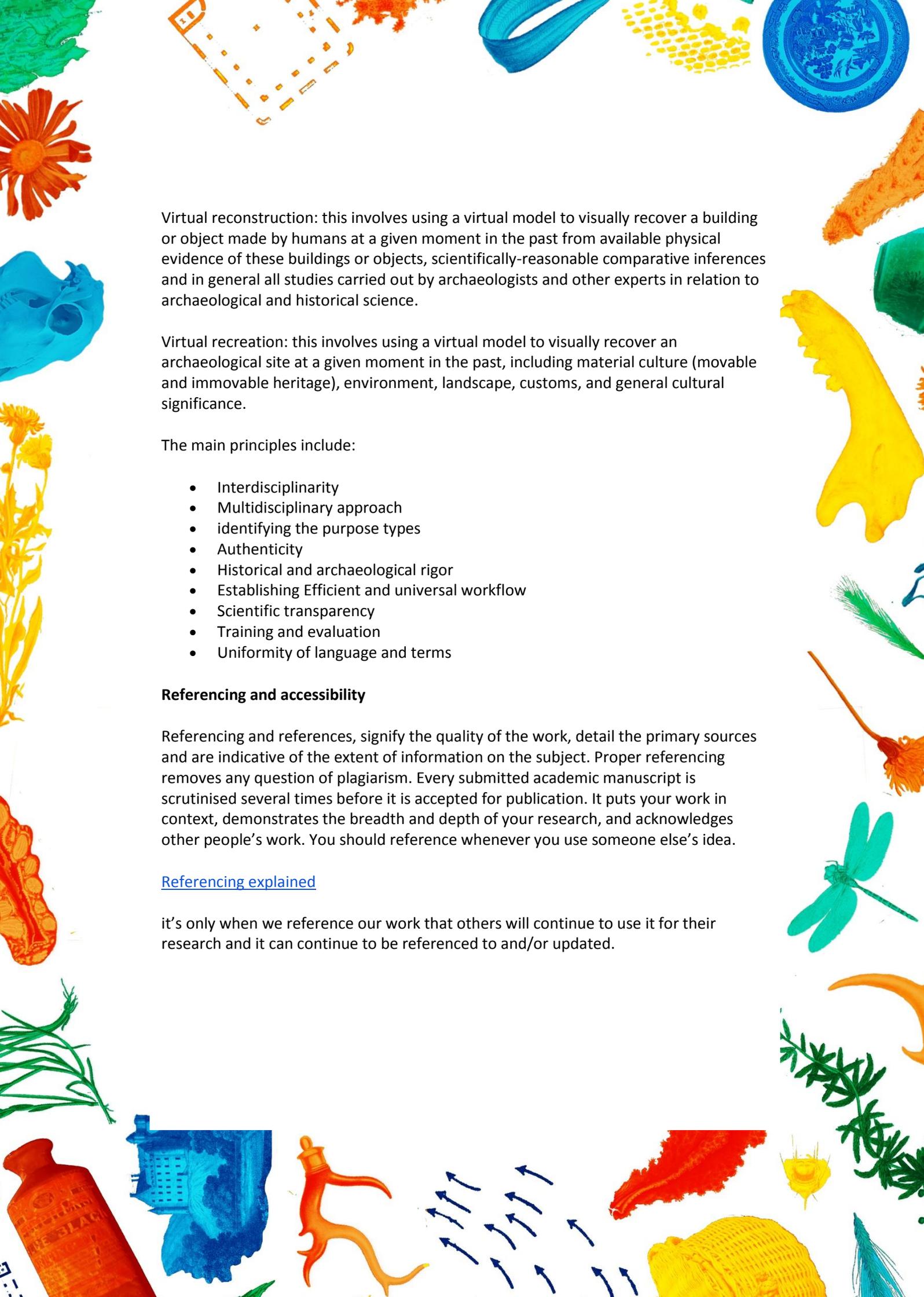
Virtual archaeology: the scientific discipline that seeks to research and develop ways of using computer-based visualisation for the comprehensive management of archaeological heritage.

Archaeological heritage: the set of tangible assets, both movable and immovable, irrespective of whether they have been extracted or not and whether they are on the surface or underground, on land or in water, which together with their context, which will also be considered a part of archaeological heritage, serve as a historical source of knowledge on the history of humankind. The distinguishing feature of these elements, which were or have been abandoned by the cultures that produced them, is that they may be studied, recovered or located using archaeological methodology as the primary method of research, using mainly excavation and surveying or prospection techniques, without compromising the possibility of using other complementary methods for knowledge.

Comprehensive management: this includes inventories, surveys, excavation work, documentation, research, maintenance, conservation, preservation, restoration, interpretation, presentation, access and public use of the material remains of the past.

Virtual restoration: this involves using a virtual model to reorder available material remains in order to visually recreate something that existed in the past. Thus, virtual restoration includes virtual anastylosis.

Virtual anastylosis: this involves restructuring existing but dismembered parts in a virtual model.



Virtual reconstruction: this involves using a virtual model to visually recover a building or object made by humans at a given moment in the past from available physical evidence of these buildings or objects, scientifically-reasonable comparative inferences and in general all studies carried out by archaeologists and other experts in relation to archaeological and historical science.

Virtual recreation: this involves using a virtual model to visually recover an archaeological site at a given moment in the past, including material culture (movable and immovable heritage), environment, landscape, customs, and general cultural significance.

The main principles include:

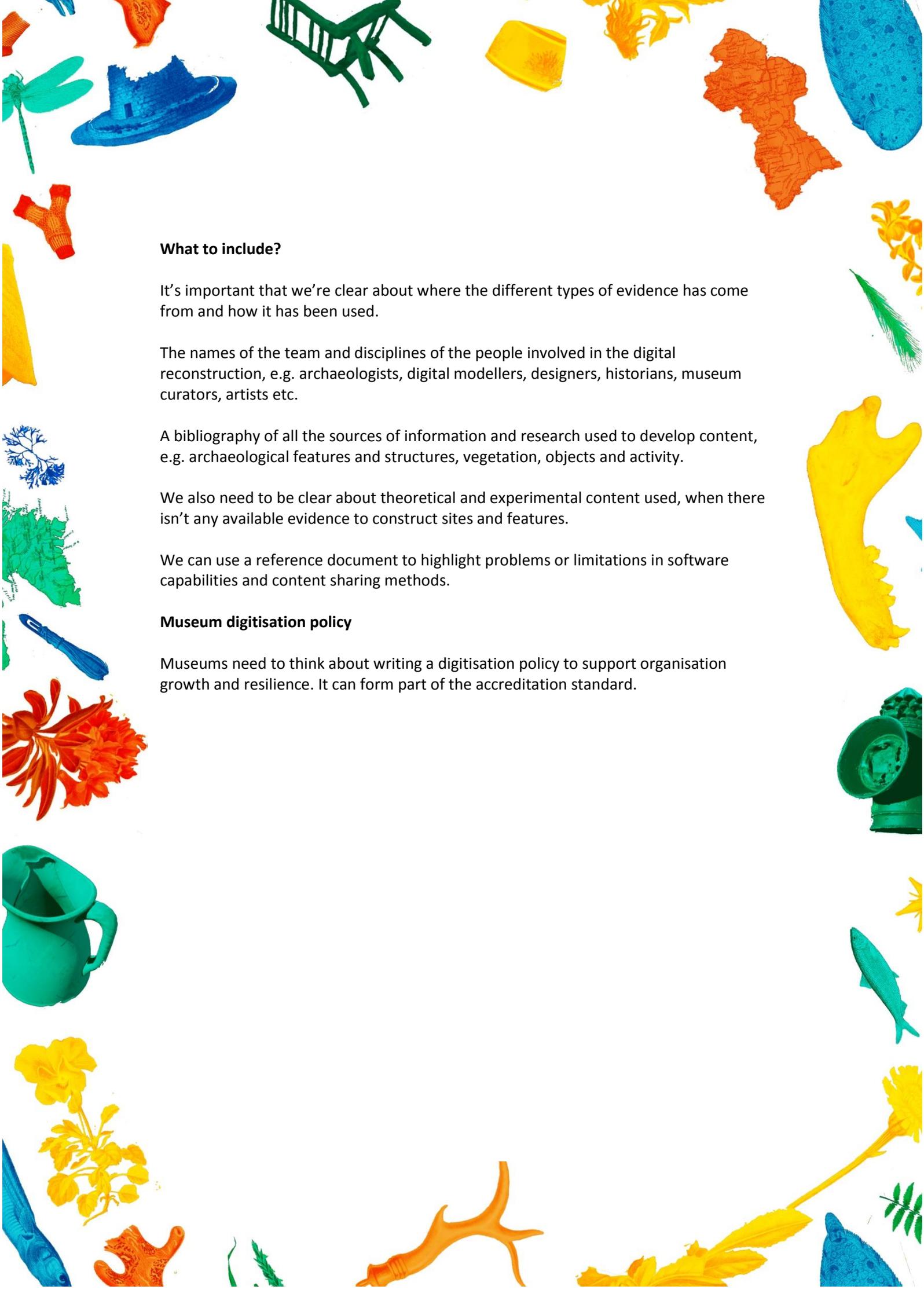
- Interdisciplinarity
- Multidisciplinary approach
- identifying the purpose types
- Authenticity
- Historical and archaeological rigor
- Establishing Efficient and universal workflow
- Scientific transparency
- Training and evaluation
- Uniformity of language and terms

Referencing and accessibility

Referencing and references, signify the quality of the work, detail the primary sources and are indicative of the extent of information on the subject. Proper referencing removes any question of plagiarism. Every submitted academic manuscript is scrutinised several times before it is accepted for publication. It puts your work in context, demonstrates the breadth and depth of your research, and acknowledges other people's work. You should reference whenever you use someone else's idea.

[Referencing explained](#)

it's only when we reference our work that others will continue to use it for their research and it can continue to be referenced to and/or updated.



What to include?

It's important that we're clear about where the different types of evidence has come from and how it has been used.

The names of the team and disciplines of the people involved in the digital reconstruction, e.g. archaeologists, digital modellers, designers, historians, museum curators, artists etc.

A bibliography of all the sources of information and research used to develop content, e.g. archaeological features and structures, vegetation, objects and activity.

We also need to be clear about theoretical and experimental content used, when there isn't any available evidence to construct sites and features.

We can use a reference document to highlight problems or limitations in software capabilities and content sharing methods.

Museum digitisation policy

Museums need to think about writing a digitisation policy to support organisation growth and resilience. It can form part of the accreditation standard.