TOWARDS A NATIONAL COLLECTION

UKRI Arts and Humanities Research Council

FINAL REPORT
FOUNDATION PROJECTS

Preserving and Sharing Born Digital and Hybrid Objects Across the National Collection

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V&A | Birkbeck, University of London | BFI

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Executive Summary

As part of a set of foundational research projects under the theme 'Towards a National Collection: Opening UK Heritage to the World', the Preserving and Sharing Born-digital and Hybrid Objects project contributes to the creation of a unified national heritage collection that includes born-digital cultural heritage. The project was led by an interdisciplinary team of academic and collections-based researchers from the Victoria and Albert Museum (V&A), British Film Institute (BFI), and Birkbeck, University of London.

Contemporary culture is increasingly digital. From websites, applications and social media, to digital film, to digital artworks and design tools, creative practitioners in a range of fields are increasingly working with digital or hybrid physical-digital skills. However, this prevalence of digital culture poses a significant challenge to collecting organisations which are responsible for acquiring, preserving and making culture available to the public, now and in the future. In considering how to make our national collections accessible to the world, we must consider born-digital and hybrid material as an increasingly important part of those collections, otherwise we risk failing to preserve the vast majority of our contemporary culture for future generations and entirely omitting this important part of our culture from initiatives to make that culture accessible as widely and as meaningfully as possible.

This project addressed the challenges of born-digital (those created in a digital form) and hybrid collections by bringing together expertise in a range of different digital cultural types - from digital art, videogames, architecture, and complex digital design. It focused on three specific and shared challenges: collections management - the policies, governance, systems and standards needed to support digital collections; digital preservation and conservation - the skills, software and hardware needed to preserve it for the future; and meaningful access and experience - the development of modes of access that do not merely represent digital culture as static, but 'live' as we experience it.

Following a period of desk-based research and literature review, a series of four objects within the collections of the V&A and BFI (including one ‘speculative object’) were selected for a set of case studies in order to interrogate the nature of born-digital and hybrid objects within collections. These were then brought into a series of workshops with multiple national and international museum and heritage sector and key industry professionals. Key expert interviews were also conducted to further generate insight. From this research, a Project Report[1] was produced in January 2022 which aimed to further the ability to preserve and make accessible born-digital cultural heritage, summarizing findings alongside the case studies. A set of ten recommendations for the museum and heritage bodies were created, which proposes a research and policy agenda to address immediate gaps within the sector. Through this report a Decision Model was subsequently generated which created a new community-level proposal for born-digital and hybrid object assessment. New cataloguing standards were then proposed as a result of this research through the creation of a second Data Model, an elaboration and expansion of existing cataloguing standards that exist such as the Linked Art profile of CIDOC CRM which accounts for born-digital and hybrid objects and proposes a model for their interoperability.

Collectively this research and these outputs aim lay foundations for future major research initiatives needed to take this forward on a sector-wide scale, ensuring that born-digital and hybrid objects are adequately considered within the scope of national collections.

[1] Arrigoni, Gabriella, Kane, Natalie, McConnachie, Stephen, McKim, Joel, 2022. Preserving and sharing born-digital and hybrid objects from and across the National Collection (January 2022). https://doi.org/10.5281/zenodo.7097279

Abstract

Contemporary culture is increasingly digital. However, this prevalence of digital culture poses a significant challenge to collecting organisations which are responsible for acquiring, preserving and making culture available to the public, now and in the future. In considering how to make our national collections accessible, we must consider born-digital and hybrid material as an increasingly important and uniquely challenging part of those collections.

This project focused on three challenges:

1. collections management - the policies, governance, systems and standards needed to support born-digital collections;
2. digital preservation and conservation - the skills, software and hardware needed to preserve them for the future;
3. meaningful access and experience - the development of modes of access that do not merely represent digital culture as static, but facilitate 'live' engagement with it, evocative of the complex and multivalent experiences it entails.

The project brought together an interdisciplinary team of academic and collections-based researchers and museum professionals from the Victoria and Albert Museum (V&A), British Film Institute (BFI), and Birkbeck, University of London, along with museum and heritage sector and industry expertise. By harnessing the collective skills, knowledge and challenges of individuals and institutions involved with different types of born-digital and hybrid cultural heritage, the project called for a move towards a greater understanding of the needs, challenges and affordances of born-digital and hybrids objects and their place within collections by setting the direction for further research. It also, provided recommendations for the sector that embrace experimental collecting and proposed new models of stewardship, suggested new models for acquisition and provided potential contributions to standards.

Aims and Objectives

- To review and assess current practices, concerns and challenges regarding the collecting of born-digital cultural heritage across museums and other collecting institutions.

- To organise a series of workshops between IROs, academics and heritage sector professionals that interrogate three key aspects of this challenge: collections management, digital conservation and preservation, and meaningful access and experience.

- To produce a report featuring a critical review of relevant literature and the analysis of research findings to outline in depth current practices and challenges regarding the collecting of born-digital cultural heritage.

- To produce a co-authored set of recommendations for the skills and resources required to develop digital preservation or conservation skills across the 'national collection'.

- To produce a co-authored set of recommendations on how to adapt governance and acquisition policies to support the management of digital objects.

- To develop two small-scale technical pilots: a data model based on linked open data to describe born-digital objects and related "digital preservation" conservation documentation, and a decision-making model to support collecting institutions during the acquisition of complex born-digital objects.

- To engage in knowledge-sharing across the cultural and industrial sectors, helping to build digital literacy and understanding.

- To lay the foundations for and propose a future discovery project to take these recommendations and pilots forward on a larger scale, in order to increase access to born-digital and hybrid culture within and across the National Collection.

Partnership Structure

Principal Investigator (V&A)

Co-Investigator (Birkbeck, University of London)

Co-Investigator (BFI)

Technical Co-Investigator (V&A)

Staffing Structure

Principal Investigator - Natalie Kane (V&A)

Provided overall project leadership, directed research, co-ordinated activities, managed the budget and line-managed the Research Fellow.

Co-Investigator - Joel McKim (Birkbeck, University of London)

Led on the delivery of literature review and case studies.

Co-Investigator - Stephen McConnachie (BFI)

Led on the development and creation of the Decision Model, recruitment and management of Digital Developer and facilitated collaboration with digital conservation community.

Technical Co-Investigator - Richard Palmer (V&A)

Led on the creation of the second data model, attended and consulted on work pertaining to cataloguing standards and information models.

Research Fellow – Gabriella Arrigoni (V&A)

Delivered Case Studies and Final Project Report, co-ordinated and co-ran workshops, conducted expert interviews, delivered blog posts and talks on project outputs.

Digital Developer & Preservation Specialist - Tom Ensom (Freelance)

Produced Decision Tree Model and presented work on project outcomes.

Events and consultations

Research Activity

Interviews with ten museum professionals and researchers for case studies.	February - March 2021
Three online workshops with experts from the museum sector, collecting institutions and academia:	
Collections Management	8 June 2021 (13 participants including four members of the research team. The other participants came from museums, libraries, archives and research institutions, where they hold leading roles in collection management or collection services)
Preservation and conservation	18 June 2021 (12 participants including three members of the research team. The other participants were media conservators, curators and researchers in the field of digital media preservation)
Access, experience and meaning	22 June 2021 (13 participants including three members of the research team, curators, designers, educators and an Intellectual Property Rights (IPR) expert)
Consultations with six curators, conservators and collection management professionals on the Decision-Making Model (see Project Outputs).	February - March 2022
Consultation with Linked Art Consortium for Data Model (see Project Outputs).	February – March 2022

*See Appendix for a full list of participants and affiliations.

Public Events and Dissemination

ICAM Conference - International Confederation of Architectural Museums (paper presentation by Gabi Arrigoni and Corinna Gardner 'Born-digital collections and design records: invisibility and infrastructural objects')	8 September 2021 (online hosted by Het Nieuwe Instituut, Rotterdam)
Guest lecture by Gabi Arrigoni 'Collezionare la cultura digitale: sfide e opportunità per ripensare conservazione e fruizione pubblica'	25 October 2021 (Collegio Ghislieri - Università di Pavia)

Preserving and Sharing Born Digital and Hybrid Objects. (symposium and launch of the research report and case studies)	20 January 2022 (online hosted by the V&A - ca.100 attendees and 188 registrations) The symposium featured interventions from project team members: Joel McKim, Gabi Arrigoni, Stephen McConnachie, Tom Ensom and Natalie Kane; it also included responses from V&A curator Corinna Gardner and professor and curator Annet Dekker. The topics covered included: the legal challenges of collecting born-digital object, the digital dark age, and emergent understandings of the complect objecthood of born-digital artifacts).
Transformation Digital Art 2022 (panel presentation by Natalie Kane – Instagram and workshop led by Gabi Arrigoni on one of the project's case studies).	17 March 2022 (online hosted by LIMA, Amsterdam).
ISEA 2022 27th International Symposium on Electronic Art (short paper presentation by Gabi Arrigoni 'Complex acquisitions: understanding the infrastructural properties of born-digital objects in museum collections')	10-16 June 2022 (Barcelona)
IIPC Web Archiving Conference – Presenting on Born Digital and Hybrid Object Decision Model (Natalie Kane and Stephen McConnachie)	23-25 May 2022. Online.

Research approach

The methodology has combined desk-based research and a focused engagement with specific acquisition, leveraging specialist knowledge held within museums, archives and academic institutions in the UK and abroad. In fact, the project findings have resulted from the analysis of a qualitative dataset based on interviews and workshops with key stakeholders, and on the development of four case studies.

A preliminary review of relevant literature and previous initiatives looking at the preservation of time-based media, digital art and videogames (Objective 1) offered the basis to identify gaps, themes and open questions to inform the subsequent stages of the project. The project team focused on a broad range of digital and hybrid object types, including: social media; consumer electronics; smartphone-based applications; immersive and imaging technologies (Virtual Reality, Augmented Reality, Computer Graphics, and Visual Effects) architecture; 3D data (such as 3D models; animations and virtual environment).

A set of qualitative, semi-structured interviews extrapolated concerns and perspectives from ten professionals, including: five museum practitioners (one media conservator, a curator, one collection specialist, a digital archivist and a chief experience officer); an Intellectual Property Law expert; a scholar versed in technological cultures in design and architecture; an expert in open technologies and maker cultures; a scholar and practitioner with expertise in digital creativity and the commercial sector; and an expert in imaging technologies. Questions were customised to the role and expertise of the interviewee, but with an overall focus on: the process of institutional adaptation to collecting born-digital objects; key preservation challenges and opportunities; approaches to online and offline access; ethical issues; the sustainability of collecting the born-digital and the value of collaborative approaches to stewardship; cultures of preservation within specific industry sectors; the role of amateur communities; the assessment of authenticity and integrity of the object; skills and infrastructures required for caring for the born-digital; notions of authorship and ownership.

The core research activities included three online workshops (Objectives 2 & 7) dedicated respectively to Collection Management, Preservation and Access. Leading professionals with relevant expertise for each of these three key areas of collecting were selected as participants (see Appendix). The Collection Management workshop aimed at discussing collection policies and policy innovation, documentation, information systems and institutional readiness to collect the born-digital. The Preservation workshop explored the decision-making process to collect and preserve complex digital objects and touched on the topics of sustainability and the role of the curator. Participants to the Access workshop engaged in activities speculating on the experience and literacy of the audience across different timescales and on actions to be taken to ensure the long-term access and contextualisation of three born-digital objects. The workshop also addressed the challenges for museums willing to collaborate with the big tech industry.

An essential component of the research was the development of four case studies (detailed in Project Report[2], January 2022), focused on different types of born-digital objects. The case studies allowed the team to observe and analyse challenges in depth, complementing the interviews with more focused data. The case studies were also key elements during the workshops, catalysing the participants' investigation and

[2] Arrigoni, Gabriella, Kane, Natalie, McConnachie, Stephen, McKim, Joel, 2022. Preserving and sharing born-digital and hybrid objects from and across the National Collection (January 2022). https://doi.org/10.5281/zenodo.7097279

prompting debate on a range of real-life problems. The four objects include: geist.xyz, a procedurally generated film by design studio ZEITGUISED; In the Eyes of the Animal, a Virtual Reality experience by collective Marshmallow Laser Feast; Y-Stop, a community-generated piece of information design including an app and printed materials; and the popular social media platform Instagram (Objective 3).

Further, an augmentation of the Linked Art Data Model (a standards-based way to describe cultural heritage, with model based on international standards such as CIDOC CRM) has been trialed across the case studies, to identify gaps and problematise the use of the model in relation to complex born-digital objects. The four case studies and the analysis of the workshops have informed the development of a Decision-Making Model (Objective 6), which presents a visual representation of multiple trajectories of the main considerations faced by collecting institutions when acquiring born-digital objects.

Research Results

Collection policies and practices to safeguard and transmit our born-digital heritage to future generations are at an early stage of development globally, with a few institutions paving the way with adjusting policies, investigating resources and infrastructural needs and developing pilot initiatives. Current knowledge is patchy, especially for some types of born-digital objects, such as digital product design, digital platforms and complex digital creative work made with proprietary software and 3D technologies. The awareness that safeguarding the born-digital before it is too late is an urgent matter is shared across the sector, and it demands incremental changes at the level of professional practice and policy.
The research demonstrated the importance of interdisciplinary expertise and of the potential of exploring collaborative approaches to preservation, across institutions or involving relevant communities. Significantly, it highlighted the importance of experimental and research-led collecting practice to understand requirements, build capacity and redefine expectations for both institutions and creators. In fact, a common theme that mapped across the analysis of all case studies (see Project Report) suggests that long-term preservation might not always be guaranteed, but salvaging or storing part of the object is nevertheless a valuable intervention, given the fragility and high rate of loss surrounding digital culture.

One of the key findings which was consistent across all four case studies concerned the need to develop new understandings of the collected object, often addressed as an assemblage or an ecosystem because of the mutable and composite nature of the born-digital (Objective 8). For instance, a clear distinction between core and auxiliary objects is perceived as increasingly problematic, and the reliance of born-digital artefacts on networks and infrastructures need specific attention. In this scenario, a contextual approach to collecting, including contextual, process-related material and documentation of user-experience, has the potential to guarantee not only more accurate and flexible preservation strategies but also resources for developing balanced narratives and innovative access opportunities.

The research results indicate several areas requiring further investigation, such as those associated with distributed forms of authorship and ownership; the legal and Intellectual Property systems associated with digital production; and institutional collecting responsibilities for emergent technologies which, because of their newness, tend to fall outside existing collection policies.

Project Outputs

Project Report. Co-authored by the project team, this project report provides an extensive account of the research methodology, literature review, the key research activities and findings. The latter are further developed into a set of recommendations (Objective 4 & 5) below aimed at museum, heritage, and preservation professionals, as well as scholars interested in born-digital materials. The outputs of this report have influenced collecting policy within the Design and Digital section of the Art, Architecture, Photography and Design department at the V&A, where further research into digital collecting will continue to be developed.

https://doi.org/10.5281/zenodo.7097279

Case Studies (See Project Report). The four case studies investigate different object types through an analysis of their preservation challenges, their fit within the collecting institution and its readiness in relation to existing policy, infrastructure, practices and resources. The case studies include a Virtual Reality piece (In the Eyes of the Animal), a procedurally-generated digital film (geist.xyz), a piece of information design featuring a mobile app (Y-Stop) and a social media platform (Instagram).

Decision-Making Model. This output builds on the case studies to offer a structured representation of the main decision-making processes that an organisation may go through when assessing an acquisition of such an object, categorised into high level areas. It attempts to create a traversable system that could be used by collections professionals in their work - policy makers, managers, collections management or digital preservation practitioners, conservators. The report discusses the premises and the methodology adopted to develop the tool, it discusses its limitations and responds to the critical feedback of a small group of museum professionals. The output includes six models addressing a particular area of the acquisition process: technical constraints; digital data; software; web content; Intellectual Property Rights; data protection; and collection policy compliance. This model is currently being trialled on selected new born-digital acquisitions within the V&A, as an experimental model for assessment.

https://doi.org/10.5281/zenodo.7097490

Born Digital Born Slippery Report and Data Model. This output responds to the Project Report and the case studies by further exploring cataloguing challenges. More specifically, it addressed the extent to which existing cataloguing standards support complex born-digital and hybrid objects. The data model features the graphic representation of different forms of cataloguing for each one of the case study objects.

https://doi.org/10.5281/zenodo.7100632

Webinar: Preserving and sharing born-digital objects: end of project symposium

A webinar for the release of the Project Report, with contributions from PI Natalie Kane, Co-Is Joel McKim and Research Fellow Gabi Arrigoni, and an initial introduction of the Decision Tree model from Co-I Stephen McConnachie and Tom Ensom. Invited contributions from Senior Curator (V&A) Corinna Gardner and a keynote from Dr Annet Dekker as a response to the project outputs.

https://www.vam.ac.uk/blog/projects/preserving-and-sharing-born-digital-objects-end-of-project-symposium

Blog posts:

Born-digital objects and the not so digital challenges for museum collections – Gabi Arrigoni:

Short blog post for a general audience introducing the project and the complexity of born digital and hybrid objects within heritage institutions. Introduces the issues around digital heritage and future proofing, and the importance of interpretation and narrative in understanding the role of digital objects and their constituent parts.

https://www.vam.ac.uk/blog/projects/born-digital-objects-and-the-not-so-digital-challenges-for-museum-collections

Big tech heritage: collecting impossible objects – Gabi Arrigoni:

Short blog post on the specific challenges around 'big tech heritage', a specific theme that emerged from the wider project, which focuses on the legal and technical implications of acquiring objects with complicated industrial provenance i.e. from large companies such as Amazon or Google, and therefore require a reshaping of collecting policies and new curatorial frameworks.

https://www.vam.ac.uk/blog/projects/big-tech-heritage-collecting-impossible-objects

Pending outputs

Complex acquisitions: understanding the infrastructural properties of born-digital objects in museum collections. Short paper (forthcoming, 2022) Whilst born-digital collections continue to be developed in several museums internationally, this paper contributes to debates as to how we conceptualise born-digital objects. Many complex artifacts of digital culture, in fact, elude the behavior of traditional collected objects. Here, we concentrate on three examples to illustrate different degrees to which born-digital museum acquisitions can be understood as infrastructures. By examining an immersive reality piece, a procedurally generated film, and a digital platform, this paper addresses hybridity, fluid relationships across the main and auxiliary parts of an acquisition, and the lack of clear boundaries to define what the collected object is. It concludes that developing deeper understandings of the infrastructural properties of born-digital museum acquisitions could support changes in institutional practice and thinking to better accommodate this emergent area of collecting.

Experimentation and collecting practice: balancing flexible policies and accountability in developing born-digital museum collections. Journal article in preparation co-authored by Gabi Arrigoni and Joel McKim. The article engages with current approaches to collecting born-digital objects in museums of art and design and is based on the analysis of two case studies concerned with the acquisitions of a mobile app and a Virtual Reality artwork. The authors point to their non-standard preservation requirements and their unconventional objecthood, to advocate for the value of adopting an experimental attitude to collecting. The case studies also invite us to reconsider experimentation within the context of sensitive dialogic processes with creators and users who are unfamiliar with the conventions of museum collecting. Hence, the boundaries of experimentations are developed in relation to existing policies, organisational structures and practices, and defined by the stakes of multiple actors. The article contributes to the scholarship by offering a set of recommendations to support museum professionals in more confidently engaging with born-digital collections, and by suggesting the role of born-digital objects to rethink the values and meaning of collecting.

Is there a Big Tech Heritage? Mapping preservation challenges for corporate digital platforms. Journal article in preparation [TBC – Arrigoni/McKim/Kane] Digital platforms are a core component of contemporary

economies, social, civic and political life. If the museum today is intended as a space for dialogue and reflection, the question arises of whether debates on platforms should also find space within the cultural arena of the museum. This article reviews relevant work that intersects the musealisation of computational and online systems and accounts of the expanded objecthood - or lack thereof - of complex born-digital artifacts. This foregrounds some of the challenges that are subsequently refocused and redefined in reference to the specificities of digital platforms through the analysis of the case study of Instagram. Through the case-study, re-scaling, encapsulating and capturing snapshots of Instagram are discussed as possible strategies to collect the platform. The question of documenting the original context and infrastructure and to recontextualise platforms within the museum system, is also posed as a critical step in the collecting process. A further contribution of this article concerns the emphasis placed on the role of corporate and business logics in generating the most challenging barriers to collecting and preserving digital platforms.

Recommendations for the programme

The central aim of the 'Towards a National Collection' programme is to create a 'a unified national collection of the UK's museums, libraries, galleries and archives to maintain global leadership in digital humanities and arts research' and therefore in order to fully realise the potential of our contemporary collections it is important to address the urgent challenges of born-digital collections alongside the needs of digitized collections and those maintained by institutions of memory in order to attain a truly unified collection. We recommend that these issues are faced at the first point of the process, as though they are often built on the same infrastructure, there is increased risk in treating digital collections as a separate workstream to be 'dealt with later' in terms of resource planning and digital preservation management. Specific conservation concerns must be built in earlier with greater provision and understanding of risk management and object care, and this can be done through a greater understanding of digital objects through further research projects.

Through our recommendations in our Project Report, we call for further commissioning of research by funding bodies such as the AHRC into theoretical and practical understandings of the way born-digital objects rely on multi-part systems, networks and infrastructures, and the implications for documentation, information management and sustainability. This is ever-present in objects like mobile apps, platform, video-game and software design, and digital design in which new relationships to designers and the technologies they use must be negotiated and presented in order to represent digital material within collections. This also includes the continuation of development into consistent standards for documentation created from this broadened analysis.

We would also encourage greater investment from funding bodies such as the AHRC in training programmes that increase confidence in digital collecting, either with targeted collaborations with organisations such as the Digital Preservation Coalition, or through structured programmes within research projects that aim to support the expanded role of curatorial work to account for a shift towards digital preservation.

The opportunities for scholarship around the nature of the digital object is rich, and therefore we would encourage engagement with this where appropriate. We would recommend funding for research that specifically addresses the born-digital collection in complement to the digitised collection, understanding the potential heritage at risk should this work not be addressed. It is vital that the consideration of born digital collections and their specific collections needs are built into funded projects from the outset.

In future, we would like to see calls for research projects whereby key outputs include providing recommendations or lobbying to DCMS for changes in policy that allow for an increase of industrial heritage preservation, or 'big tech heritage' preservation. As demonstrated in our Project Report there are significant barriers to access, display, and preservation due to legal and corporate restrictions which as a result means the risk of much of this material being lost. There is an urgent need to address the potential for industry (and designers using certain platforms as part of their design process) to cooperate with heritage institutions. This could be approached through an adaptation to the legal deposit model in the UK to include such material or account for such industries through further experimental models seen in collections such as the National Film and Sound Archive Australia's recent acquisition of video games (2020), or ACMI's recent video games acquisitions and media preservation research. However, this does not address the challenges of acquiring heritage objects from many larger technology companies with traditionally obstructive models of access

such as Facebook or Google, as addressed within the Project Report, which is an opportunity for further investigative research.

In order to encourage these policy recommendations, we would recommend the incentivisation of collaboration through a sector wide steering group that would develop a working relationship with DCMS and industry in order to forge successful relationships with heritage. Individual connections and collaborations are time consuming and resource-heavy, however if a consortium is built that aims to create a set of relationships and agreements that works across the sector and across institutional partnerships, then funding bodies can direct funding calls accordingly, policy can be more effective, and industry standards and processes that are applied can be more efficient. In tandem, in order to encourage confidence within the sector, we would recommend a Subject Specialist Network (SSN) in Born Digital and Hybrid Objects that could be formed as a result of this research, supported with funding, which aims to engage collections by expanding their collecting remit to accommodate such objects and enable curators, conservators and digital preservation managers across national collections with the opportunity for knowledge exchange as well as to support research and collaboration. This will also provide a strong advocacy role in increasing digital heritage within the sector.

Appendix

Participants List

List of Interviewees

- Daniel Cardoso Llach (Carnegie Mellon University)
- Seb Chan (ACMI)
- Candice Cranmer (ACMI)
- Paul Galloway (MoMA)
- Leigh Gialanella (Smithsonian Museum of American History)
- Mick Grierson (University of the Arts London)
- Alex Leitch (University of Maryland)
- Niklas Nylund (Finnish Museum of Videogames)
- Alan Warburton (artist and researcher)
- Paula Westenberger (Brunel University)
- Anonymous artist

List of Workshop Participants

- Collection Management Workshop Ian Cooke (British Library)
- Marion Crick (independent consultant, former Victoria and Albert Museum)
- Zoë Hollingworth (Victoria and Albert Museum)
- Natalie Kane (Victoria and Albert Museum)
- Jack Kirby (Science Museum)
- Jenny Mitcham (Digital Preservation Coalition)
- Stephen McConnachie (British Film Institute)
- Joel McKim (Birkbeck University)
- Richard Palmer (Victoria and Albert Museum)
- Arran Rees (Loughborough University)
- Caylin Smith (Cambridge University Library)
- Elizabeth Thurlow (University of the Arts London)
- Sophie Walker (British Film Institute)

Preservation Workshop

- Michael Day (British Library)
- Tom Ensom (Tate)
- Patricia Falcão (Tate)
- Corinna Gardner (Victoria and Albert Museum)
- Martina Haidvogl (Bern University)
- Natalie Kane (Victoria and Albert Museum)
- Stephen McConnachie (British Film Institute)
- Joel McKim (Birkbeck University)

- Lozana Rossenova (designer and researcher)
- Bhavesh Shah (Victoria and Albert Museum)
- Jon Uriarte (The Photographers' Gallery)
- Gaby Wijers (LIMA)

Access Workshop

- Marc Barto (Victoria and Albert Museum)
- Gaetano Dimita (Queen Mary University)
- Petrina Foti (Loughborough University)
- Corinna Gardner (Victoria and Albert Museum)
- Gabriella Giannachi (Exeter University)
- Andrea Lipps (Cooper Hewitt Smithsonian Design Museum)
- Natalie Kane (Victoria and Albert Museum)
- Stephen McConnachie (British Film Institute)
- Callum McKean (British Library)
- Joel McKim (Birkbeck University)
- Florence Okoye (designer)
- Kati Price (Victoria and Albert Museum)
- Giulia Carla Rossi (British Library)

Consultants for feedback for Decision Data Model

- Rachel Boon (Science Museum)
- Ian Cooke (British Library)
- Corinna Gardner (V&A)
- Jenny Mitcham (Digital Preservation Coalition)
- Caylin Smith (Cambridge University Libraries)
- Arran Rees (Loughborough University)