

# Executive Summary

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Although the most visible signs of our embrace of digital media belong to the world of commercial entertainment and the iPads, e-readers and smartphones we use to consume it, the shift taking place in scholarly communications is proving to be no less transformative. It is not only data sets and scholarly articles that are being created, but dynamic digital resources — websites, digital collections, databases of crowdsourced or born digital content — and they pose opportunities and challenges that are all their own. Aside from the riskiest of experiments in digital innovation, it has become clear that a great deal of the content that libraries and scholars are creating today is expected to endure.

However, whose responsibility it is to look after this content is still unclear. In the United Kingdom, the current political and educational context offers urgent and specific reasons for institutions of higher education to support the outputs of its faculty: declines in government spending and national mandates for open access of scholarly outputs have encouraged this conversation. Meanwhile, the potential for use and re-use of this content has never been greater. While the hot issues around big data sets and peer-reviewed research articles often take centre stage, this study focuses on those digital content resources that require some form of support and management even after they are built. How are institutions supporting and maximising the value of the digital content their faculty and staff create?

This study, conducted by Ithaka S+R, with funding from the Jisc-led Strategic Content Alliance, grew from the findings of earlier studies showing that both funders and project leaders alike rely very heavily on their host institutions to support and sustain digital content, beyond the end of the grant. While the primary focus of this study is the lush, if unruly, terrain of higher education institutions, academia is not the only sector enjoying an era of digital growth. As museums and public-facing libraries seek to expand their reach beyond their physical spaces, digital activities have become a core part of their strategy. And so, as well as an assessment of the university environment as a “host” for digital content, this study includes a more exploratory look at how cultural heritage institutions think about and plan for sustaining and enhancing the value of their digital collections. The cultural sector offers very different models and allows us to draw initial conclusions around these useful models for others to replicate, experiment with and develop further.

This current study is the first phase of a three-part examination of this topic. Phase two, funded by the Canadian Heritage Information Network (CHIN), a Special Operating Agency of the Department of Canadian Heritage, will include a closer look at the cultural heritage sector and a detailed case study of the Museum of Anthropology at the University of British Columbia. Phase three, funded by the National Endowment for the Humanities (NEH), will examine the models in place specifically to support the digital humanities in institutions of higher education in the United States and include case studies of two American campuses. [Further information on these next phases can be found at [www.sr.ithaka.org](http://www.sr.ithaka.org)]

## Methodology

Over the course of ten months, the Ithaka S+R research team interviewed 84 individuals in two phases of work. The first involved a landscape review, interviewing 40 practitioners in the higher education and cultural heritage sectors throughout the United Kingdom, including those who directly manage projects as well as those in administrative and other advisory roles.

In a second phase, in consultation with Jisc/SCA, we selected three institutions to examine closely in an effort to understand the digital content the institutions support, their processes for creating and supporting that content and, more generally, the role that digital content plays in the strategy of their institutions. We interviewed over 40 individuals from the following institutions:

**UCL (University College London):** A major research university with active Library and Museums & Collections units and a Centre for Digital Humanities. This complex campus with a highly regarded research reputation and burgeoning digital content landscape allowed us to examine the challenges of academic project leaders in a decentralised university setting.

**Imperial War Museums:** A major museum with five physical locations that recently underwent a significant reorganisation to centralise its digital management processes. This allowed us to explore the process by which an eminent and complex organisation centralised its digital strategy to create a sustainable infrastructure.

**National Library of Wales:** A national library with a collections focus on Welsh heritage and a clearly articulated mission to expand its impact through the use of digital media. This allowed us to explore the effort of a major cultural organisation to raise its national and international profile through its strategy of collection building and digitisation.

## Summary of findings

### Our examination of the higher education landscape revealed:

- **At UK higher education institutions, grant review processes do not often address issues of post-grant sustainability.** While guidelines have begun to emerge for data management plans, thinking about the ongoing life of projects that require development and growth is still in its early days. University administrators and those who review grant proposals rarely probe this topic at the review stage and most have only modest funds available to support ongoing activities, even for those projects that show real promise.
- **Many projects do draw some form of host support, but it is not budgeted or guaranteed.** Almost every project leader we spoke to could point to some benefit they derive from their host institution, whether in the form of server space or staff time. Yet few project leaders have firm plans in place for ongoing assistance or any assurance that this support will be ongoing.
- **There are potential partners on campus,** but project leaders tend not to seek them out early enough. Libraries and IT units are often available to guide project leaders, build or host content, but faculty do not always approach them at early stages, when critical decisions are being made.
- **Digital projects on campuses live everywhere! This extreme decentralisation adversely affects their discoverability.** They may be hosted by academic departments, the library, museums/collections, other support units, or elsewhere. While this is a mark of the admirable independence and creativity of scholars, it also poses challenges for discovery. There is often no single place for users to find digital projects and some projects can too easily slip from view.
- **Academic project leaders are vital to the success of their projects, but are often in a precarious position.** The few projects that benefit from deeper, ongoing support are strongly aligned with the core mission and identity of their host institutions and have very actively engaged project leaders. But project leaders report concerns about their own career advancement and rarely have succession plans in place.
- **Current funding styles do not support ongoing operation, but project leaders have not had great success generating other forms of financial support.** While funding bodies can issue requirements concerning access and deposit, other sources of funds have been hard to come by. Cost sharing is intended to build in institutional support, but this seems to work best when it is an integral part of the project's structure.
- **Campus-wide solutions are beginning to emerge, but even these tend to address just the basic "maintenance" issues of storage, preservation and access.** While institutional solutions have begun to crop up to provide digital outputs with places to live, they do not offer support for ongoing development, outreach, or audience development, even on campuses where "public engagement" is considered a core mission goal.

## Our exploration of the cultural heritage landscape suggested that:

- **Many museums and libraries are centralising processes in order to encourage sustainability.** These activities range from coordinating the grant proposal process to developing shared digital asset management systems and central catalogues in order to serve a mission-based focus on building and engaging with audiences. Yet, despite the greater structural centralisation that we observed at museums and libraries, specific choices concerning what to digitise are still frequently opportunity-driven.
- **For many museum and library projects, the focus is often on the creation of new content, with ongoing sustainability often defined as making good up-front choices about standard formats and structured metadata rather than ongoing efforts to enhance the content or update user interfaces.** Determining how to keep the front-end fresh and responsive to user needs may be an area for further examination as cultural institutions seek to demonstrate increased audience impact.
- **Some large institutions that benefit greatly from centralised structures have begun to see an advantage in returning some of the digital work to the content creators.** They expect that designated project managers or other “champions” of significant resources can allow a more targeted, user-centric approach to ongoing development.

## Recommendations

Based on the above findings, the study offers project leaders, funders and institutional administrators practical steps that could more accurately identify the needs of digital content projects from earlier stages and more effectively bring together the support that already exists. First, all would benefit from an early and honest appraisal of which projects are likely to require what type of support, post-launch:

- **Digital content, requiring just “maintenance”:** These may not require ongoing growth, but certainly do require a clear exit plan to ensure that the content will be smoothly deposited and integrated into some other site, database, or repository. The issue of ongoing investment does not disappear; it just becomes the concern of the larger platform on which this piece of content now lives.
- **Digital resources, requiring ongoing growth and investment:** These require early sustainability planning, including identifying institutional or other partners and careful consideration of the full range of costs and activities needed to keep the resource vibrant.

In addition, the following recommendations are intended to provide some food for thought for the different stakeholders involved in supporting digital content, whether on campus or in the cultural sector:

### Funders:

- **Challenge impact statements.** No one can predict the future, but funders are in a unique position to press grantees to demonstrate deep knowledge of and interest in further understanding the end users of their work. This does not mean listing *more* potential audiences (“scholars in all disciplines will find topic x very valuable”) but identifying specific audiences with an understanding of their size and the value they will find in the resource, a projection based on something more than guesswork and wishful thinking.

## Academic project leaders:

- **Be realistic in assessing the future needs of the resource you are creating at its outset and your personal interest in continuing to support it.** If the project is something intended to grow over an indefinite amount of time, it will need ongoing support and a plan for obtaining that. If, on the other hand, the intention is to complete the project and move on, the project leader must have solid plans in place to ensure it is suitable to be deposited in a collection, repository, or other platform once it is done.
- **Identify campus partners early on.** Working with partners on campus to build appropriate costs into a grant is an important first step. Start as early as possible to secure host support. Build in costs of preservation and storage, but also seek goodwill and partnership with colleagues whose support you will need later on.
- **Consider how central your project is to the overall mission of your institution.** If you are engaged in a mission-critical project, your chances of gaining central support are much greater than if your project has little to do with the focus of the whole.

## Institutional managers at universities and cultural institutions:

- **Consider to what extent current activities could be drawn together to create a deeper network of support,** both for “maintenance” projects and those with the potential to really grow.
- **Consider developing unified, coherent ways to help users find content once it is created and supporting efforts to reach out to users of the content.** These do not necessarily have to be complex undertakings; a good first step is to have an inventory of what and where all of the digital content holdings are. Common catalogues serve this function up to a point, but may require additional signposting in order for users to know just what holdings are contained within.
- **Determine where scale solutions really pay off** and where subject and resource experts are the best placed to advance and champion a project. For example, “back-end” functions, including storage and preservation, can be done in a way that creates common systems for an organisation, while still offering the potential of using the digital assets in different ways.
- **Continue to identify and support the ongoing development of the “front-end”,** including ongoing research into user needs, interface development, and content enhancement. For those projects that are intended to grow, scale solutions will only go so far. Content experts will still need to pay attention to the changing needs of users and determine what enhancements the digital resource will require.

We hope that this study provides a more transparent way for project leaders, funders and institutional leaders to assess the potential impact and needs of the content they create, and to develop effective ways to provide institutional solutions. As new uses for digital content continue to emerge, so will the tactics for supporting them. Whether these solutions take the form of centralised technical solutions such as storage and preservation, gathering and sharing guidance on funding models, or creating more powerful tactics to share the content with a wider audience within and beyond the institution, even starting these conversations and asking the questions may prove a valuable first step in bringing the richness of this digital content to the fore.