The past decade has witnessed a rush to create digital content in the not-for-profit sector, as organisations from a wide range of communities — from cultural heritage, to health care, to education and scholarship — have come to embrace the internet as a means to publish, collect, distribute and preserve the fruits of their work. Despite the great value of the content being entrusted to a digital format, the business models that will ensure long-term access to and preservation of this material are still unclear.

In this context, understanding how successful sustainability plans are developed is especially important. The Ithaka Case Studies in Sustainability project closely examined the business models of 12 digital projects, resulting in a set of 12 detailed case studies. The summary report *Sustaining Digital Resources: An On-the-Ground View of Projects Today*, published in July 2009, serves as a guide to the cases and outlines the key factors that can help project leaders in developing robust plans for financial sustainability.

With the support of the UK Joint Information Systems Committee (JISC), the US National Endowment for the Humanities and the US National Science Foundation, Ithaka selected a range of projects to illustrate the various business models being employed today. Building on the Ithaka report *Sustainability and Revenue Models for Online Academic Resources* (2008), which examined key mindsets needed to run a digital project, as well as detailed descriptions of the success drivers and challenges of several revenue models, this new work focuses on how project leaders today are implementing these models, including advertising income, author fees, content licensing, corporate sponsorship, endowment, memberships, subscriptions, premium services and more. How did project leaders define their organisational mission and their sustainability goals? What steps did they take to build business models that generated revenue and controlled costs, while also serving users? What contributed to the success of different models, and what challenges were encountered?

**Key Findings**

*Sustaining Digital Resources: An On-the-Ground View of Projects Today* highlights several findings that emerged from the case study work regarding how sustainability planning manifests itself in different projects and organisations:
Sustaining Digital Resources: An On-the-Ground View of Projects Today

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While the report advances a definition of sustainability, there is no clear consensus, even among the 12 projects and organisations studied, of what sustainability is or how to achieve it. In the report, the authors offer this definition of sustainability: ‘Sustainability is the ability to generate or gain access to the resources — financial or otherwise — needed to protect and increase the value of the content or service for those who use it. A sustainable project covers its operating costs through a combination of revenue sources and cost-management strategies and continues to enhance its value based on the needs of the user community.’ Still, there appears to be great variation among projects in terms of the mix of revenue generating and cost-reducing measures, the depth of reliance on a host institution, and the interpretation of just what it means to develop a resource that responds to user needs.

Tension between wanting to share content widely while also needing to generate funds to support the resource was present in all of the cases studied. Many (though not all) of the projects that charge for access to their content also manage to incorporate elements of Open Access (OA) into their models – by making a subsection of the content freely available to everyone, for example. In those cases, careful business planning is required to ensure that these OA elements do not cannibalise the revenue-generating strategies that help ensure a project’s future.

Projects are experimenting with a wide range of creative strategies to earn revenue, though this is just one of multiple strategies they use to cover operating costs. From subscription, to licensing out content, to offering premium services on free content, we observed many creative business models at work. Many combine earned revenue strategies with other sources of support, including grants and support from host institutions. Virtually none of the not-for-profit projects or organisations we profiled earned enough revenue to operate independently of these supplemental sources of funding.

Cost control strategies were at least as important as revenue models in the sustainability plans of the organisations we profiled. Of particular interest were the partnerships that many projects established to allow them to benefit from the skills and scale of others by outsourcing or sharing responsibility for functions that the projects were not well-positioned to perform.

The role of in-kind contributions from the host institution was often significant. Many projects receive a great number of in-kind contributions from their host institutions, ranging from rent and utilities, to IT support, to the unplanned-for contributions of staff time. We found that in many cases, neither project nor host institution is fully aware of the value of these ‘hidden costs’, which could lead to inefficiencies at scale.

Factors influencing sustainability

In seeking to implement their sustainability goal — whether to generate part or all of their costs of operation — certain key factors appeared to be instrumental in achieving these goals. The report outlines five major steps that projects with the most robust sustainability plans were carrying out. These include:

Dedicated and entrepreneurial leadership. While not all leaders of not-for-profit digital resources may have 100% of their time to devote to them, a certain passion and tireless attention to setting and achieving goals is critical to success. A willingness to experiment in this fast-moving digital space and knowing when it is necessary to look outside the organisation to find the requisite expertise for specialised tasks are also important.

A clear value proposition. While many not-for-profit digital resources can claim to be of excellent quality and of general importance to their field, those with the greatest impact are the ones whose leaders have a deep understanding and respect for the value their resource contributes to those who use it.
Minimising direct costs. By securing contributions from a host institution, outsourcing work through external partnerships and working with volunteers, digital resources manage to significantly reduce their direct operating expenses. While the host contributions in particular play a large role, they are rarely explicitly quantified. This fuzzy accounting clearly serves the projects well in the near term, but can raise questions about the reliability of the contributions in difficult economic times.

Developing diverse sources of revenue. Even with generous contributions from a host institution, and other successful cost-minimising measures, leaders of digital projects often turn to revenue generation as a means to fund ongoing operations as well as upgrades needed to keep the resource vital to its users. As revenue models online continue to morph and change, experimentation can help projects determine the best fit for their resource, that leverages the value of the resource, while remaining true to its mission.

Clear accountability and metrics for success. While all of the above is important, without clearly established goals and the means to assess progress toward those goals, sustainability may be difficult to achieve. And not all measures of success need be financial; we observed many digital resource projects with mission-related goals. By establishing these targets, reaching them and communicating this to stakeholders, leaders of digital projects are better able to secure the support they require.

While each project will need to determine the best combination of revenue sources and cost-management measures based on its mission, history and environment, it seems clear that projects that focus on the value of their content to end-users and the strength of their financial model are best-positioned for long-term health.

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Each of these 12 case studies is based on interviews with key project stakeholders and analysis of supporting documentation and illustrates the strategic choices project leaders make when balancing mission and revenue goals in support of long-term sustainability. Each case also includes financial data, an examination of cost-control and revenue-generating strategies, and an analysis of the steps a project has taken to understand and meet the needs of its core groups of users. The case studies do not attempt to predict whether a particular project or initiative will succeed over the long term, but instead highlight the strengths and risk factors associated with different sustainability models, in order to help other project leaders identify areas of opportunity or caution to consider in their own work.

Case study subjects were selected from a pool of over 90 candidates to represent a range of revenue models, governance structures and geographic diversity. The digital projects and organisations profiled include, in alphabetical order:

BOPCRIS Digitisation Centre, Hartley Library, University of Southampton (UK)
A university library-based digitisation centre experimenting with public-private licensing partnerships to help it plan for the long-term preservation of digitised content.

Centre for Computing in the Humanities (CCH), King’s College London (UK)
A degree-granting academic department supporting research projects in the digital humanities that diversifies its government and institutional funding through outside research grants and consulting fees.

DigiZeitschriften, Göttingen State and University Library (Germany)
An archive of German-language scholarly journals supported by a library partnership model and institutional subscriptions.
**eBird, Cornell Lab of Ornithology**, Cornell University (USA)
A web-based database that captures millions of amateur bird-watcher observations each year for use by researchers, pursues a range of entrepreneurial activities and demonstrates a keen understanding of its users.

**Electronic Enlightenment (EE), Bodleian Library, University of Oxford** (UK)
A collection of 18th-century correspondence that transitioned from a grant-funded project at a foundation to a subscription-based product embedded in a university library and partnered with a university press for distribution.

**Hindawi Publishing Corporation** (Egypt)
A for-profit publishing company that provides an example of rapid innovation and quick response to market demand to deliver Open Access content via an author-pays model.

**Inamédiapro and ina.fr, L’Institut national de l’audiovisuel** (France)
Divisions within the National Audiovisual Institute that demonstrate revenue generation through rights licensing (Inamédiapro) and finding an appropriate balance between Open Access and a range of innovative revenue-generating models on the public website www.ina.fr.

**Licensed Internet Associates Programme, The National Archives** (UK)
An initiative within The National Archives (TNA) that has worked with commercial partners to digitise over 80 million pages of archival documents and make them available online in just four years.

**Math and Science Middle School Pathways Portal, National Science Digital Library** (USA)
A programme funded by the National Science Foundation to improve discoverability of resources for middle-school maths and science teachers, now considering possible ways to transition from government grant funding when its support ends in 2011.

**Stanford Encyclopedia of Philosophy** (SEP), Stanford University (USA)
An online Open Access encyclopedia with user-contributed content that has developed a community of advocates to build an endowment, supplemented by contributions from its host institution.

**Thesaurus Linguae Graecae** (TLG), University of California, Irvine (USA)
A digitised collection of ancient Greek texts, whose project leaders have developed – over the course of 40 years – a hybrid economic model consisting of subscriptions, university funding and an endowment.

**V&A Images, Victoria and Albert Museum** (UK)
A department of the Victoria and Albert Museum’s commercial trading company that licenses photographs of objects in the museum’s collection for commercial, educational and personal use.

We hope that through learning about the benefits and challenges of a variety of sustainability approaches, project leaders and other stakeholders will become better able to assess the health of their own projects, to use the tools and strategies available to them to maximise their project’s value to the community, and to capitalise on all the options available for their support. While the case studies pay special attention to the role of the project leader and other on-the-ground staff directly responsible for determining and implementing sustainability strategies, this work may also serve as a rich foundation for further discussion among funders, policy makers, institutional leaders, and others in our community concerned with ensuring long-term access to and preservation of the valuable digital content being created by projects today.