Sustaining Digital Resources

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Kate Wittenberg
Matthew Loy
ITHAKA S+R

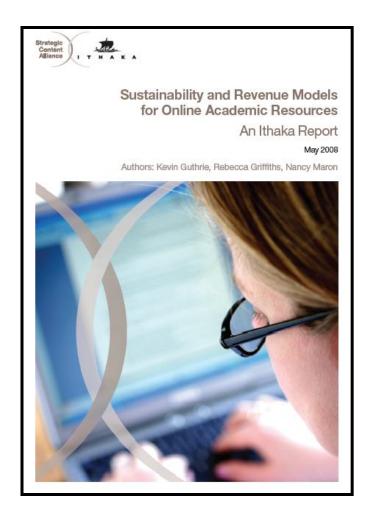
Ithaka S+R: An Overview

- Mission: to help the scholarly community take full advantage of advances in information technology
- We are pursing that mission by
 - assisting organizations and projects with market research and strategic planning to help them innovate and build sustainable digital resources
 - conducting research and analysis on the impact of digital media on the research and learning communities
 - helping the academy to build new models for university-based publishing and digital resource development

The Sustainability Problem

- Many digital library projects return to funding agencies for additional grants to support core operations once a project is up and running
- Funding agencies are seeking ways to encourage projects to become sustainable after the grant funding period
- Project leaders are seeking ways to support the resources they have developed, beyond grant funding
- Since fall 2007, with the support of JISC, NEH, and NSF, Ithaka S+R has been involved in an ongoing project with the goal of understanding the key factors in developing sustainable digital resources

Sustainability and Revenue Models (2008)





Sustainability and Revenue Models Report (2008) Recommendations

- Project leaders should not assume ongoing grant support
- Sustainability plans should include strategies for future growth, as well as maintenance of the resource
- Digital resources can create value through their positive impact on users
- Projects should consider benefits of scale through partnerships
- In an increasingly competitive environment, strategic planning is critical
- Needs and expectations of users are constantly increasing
- Project leaders must be fully accountable for their projects
- There is a need for continual creativity, risk-taking, and innovation

From Theory to Practice

- 2008 report on sustainability outlined the mindsets and theoretical strategic shifts needed for digital resources to thrive.
- Feedback from project leaders, funding agencies, libraries, and other stakeholders indicated a need for on-the-ground examples of the strategies that projects employ.
- With support from JISC, NEH, and NSF, Ithaka undertook a second round of research and analysis. Case studies examined 12 projects engaged in creating and sustaining digital resources.
- We explored the evolution of their strategy, the decision-making process, and their cost-containment and revenue-generating models. Sustaining Digital Resources: An On-the-Ground View of Projects Today (2009) is the result of that inquiry.

Case study subjects

We chose cases that represented a range of projects spanning:

- Different countries: 6 from UK, 3 from Europe and Middle East, 4 from US
- Disciplines: Science and Humanities
- Different types of institutional bases: libraries, archives, museums, academic departments at universities, government-sponsored initiatives, k-12 educational resources
- Different types of revenue models: subscription, endowment, membership, author pays, licensing, institutional subsidy, government support, public/private partnerships, non-profit partnerships.

NSDL Middle School Portal Math and Science Pathway

- Part of the larger NSDL digital resource funded by NSF
- Identifies digital resources for teaching and learning, including community-based web 2.0 tools (integrating current events into instruction through a blog).
- Sustainability through usergenerated content and community participation by middle school educators and partnerships with organizations that support middle school community.





Findings from the Case Studies

- Sustainability strategies must include **financial stability of the whole resource**, as well as the ongoing value of the content.
- Sustainability is a **dynamic process**, **requiring continual investment in a resource** to keep up with user needs and the competitive environment.
- Project leaders must be willing to adapt and alter their business models as conditions around them change.
- Most projects we studied rely on some part of their costs being contributed by a host institution.
- Sustainability models often include **creative cost management** strategies as well as effective revenue strategies.
- **Collaborating with partners** outside of the organization can help to amplify the impact of a project's content, and can result in significant cost savings.



What are some challenges we observed?

- There is no consensus on which is the right sustainability model. This is a very difficult problem to solve and experimentation is necessary in order to learn what succeeds.
- Reliance on a single revenue source can put projects at risk. Hybrid business models and a portfolio of sustainability strategies is most effective.
- Hidden cost contributions can obscure the real costs of operating a digital resource. Leaders must have a clear understanding of total project costs.
- Making the switch from a "research project" to an "operational resource" is one of the most difficult but important challenges.

What contributes to success?

- **Understanding users**: their habits, needs, and preferences, and how these characteristics differ among disciplines.
- Defining the value of a digital resource to its user community.
- Leadership with vision, dedication, creativity, authority, and accountability for the project's outcomes.
- Willingness to make difficult decisions and changes in the project's plan and staff when necessary for its success.
- **Ability to create partnerships** to share costs, gain skills and experience, and build on existing infrastructure.
- **Skill in demonstrating the value of the resource** to its host institution, partners, or collaborators.
- Expertise in selecting, editing, and contextualizing content for a particular audience.
- Ability to lead a hybrid, collaborative organization.

Next steps: Business Planning for NSDL Pathways

- SMILE
- CLEAN
- Eco-Ed Digital Library