Developing Community-Based Sustainability Models for Open Access Repositories: Business Planning Methodology for arXiv

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outline

- characterize arXiv.org
- explain the business planning process
- report on the current status of the sustainability initiative
- share reactions to our planning efforts
- expand on what sustainability entails
- describe future steps
• established in 1991 by Paul Ginsparg as a pre-print archive

• has been hosted at Cornell since 2001

• includes 630,000 articles

• usage data from 2009:
  – 60,000 new submissions
  – 30,000,000 downloads
arXiv submissions by subject 1991-2009

- high-energy physics: 27.9%
- mathematics: 16.4%
- astronomy and astrophysics: 18.2%
- condensed matter: 18.6%
- other physics: 14.9%
- computer science: 2.6%
- statistics: 0.5%
- biology: 0.7%
- finance: 0.1%
only 0.5 – 0.7% use from Cornell
2010 annual budget = $380K plus in-kind contributions
sustainability is the ability to secure resources needed to protect and enhance the value of a service based on the needs of the user community

• cover operation costs through a combination of revenue sources and cost-management strategies

• enhance value based on the needs of the user community

Source: Sustainability and Revenue Models for Online Academic Resources. An Ithaka Report. 2008
Sustainability Planning Process
2009-2010

• Considered various income models for open access and explored the pros and cons of emerging practices

• Surveyed the key stakeholders’ positions and opinions on the future of arXiv

• Expanded our understanding of operations, services, policies, technologies, practices associated with arXiv
Sustainability Planning
INTERIM MODEL

• Developed a 3-year collaborative support model requesting **voluntary** contributions from libraries and research institutes

  – Target the top 200 based on downloads from institutional domain names

  – Annual contribution tiers per institution:  
    $4,000   $3,200   $2,300

  – Since January 2010, **secured $302,000 from 85 institutions**, representing 10 countries

    • in progress: MOU with TIB and HGF of Germany
Annual budget = ~ $380,000 plus in-kind contributions

Per unit costs:
- $7 per submission
- 1.4 cents per download
issues raised by libraries & research centers

• How will you address the free rider problem?
• Why not charge scholars per submission?
• What are the benefits for my institution?
• How will you structure a governance model?
• Are you opening a floodgate?
• What are the other potential sources of revenue?
• What is your long-term plan?
• When is arXiv going to replace the formal journals?
issues raised by users

• Will there be charge for using arXiv?
• Will contribution model be mandatory?
• Might this sustainability initiative harm the open access cause?
• Did you try other ways of raising money?
  – “surely agency X will support arXiv”
• What is your long-term plan?
• Isn’t arXiv the most important thing Cornell University Library does?
Looking Ahead

• Work with the international sustainability advisory group in long-term planning
• Hold discussions with a group of publishers and societies
• Identify funding sources from agencies and foundations
• Review arXiv architecture & services
• Consider a user study
as we address the sustainability of open access resources, we need to factor in a range of issues.
...and factor in various stakeholders’ perspectives
we gratefully acknowledge the support of the following institutions for calendar year 2010 (as of September 2010)

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Villanova University
thank you!

more information available at:

http://arxiv.org/help/support