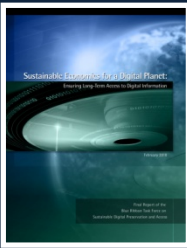


Economics and Digital Preservation:
Final Report of the Blue Ribbon Task Force
on Sustainable Digital Preservation and
Access

Fran Berman and Brian Lavoie
Task Force co-Chairs

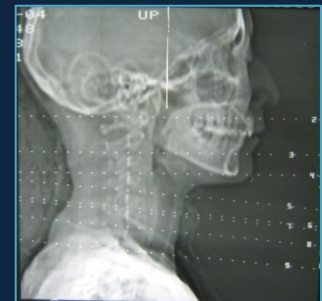
July 21, 2011

Challenge



“Dealing with the digital universe is not a technical problem alone ...” *“The Diverse & Exploding Digital Universe” IDC Whitepaper (2008)*

- Digital preservation is a **technical** problem:
... sustain digital signals over long term
- Digital preservation is an **economic** problem:
... sustain digital preservation activities over long term
- Solutions to **both** problems are the **necessary conditions** for successful digital preservation
- Even the most elegant technical solution is no solution at all if it is not economically sustainable



Blue Ribbon Task Force Charge



Assemble a representative group of experts with broad perspective and influence ...

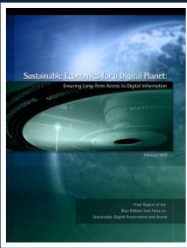
- Leaders with economics, computer science, and preservation expertise from academia, industry, government, the US, and the UK served on the Task Force

Organize and conduct an in-depth analysis of the problem space ...

- Task Force reports a comprehensive analysis of digital preservation *as an economic problem*, applied to today's key digital preservation scenarios

Identify key themes, issues and solution approaches. Disseminate findings & recommendations ...

- Outreach vehicles include 2 substantive reports, website/bibliography, a major symposium, national press, etc.



BRTF-SDPA Participants

Blue Ribbon Task Force:

- Paul Ayris, University College London
- Fran Berman, SDSC/UCSD and RPI
- Bob Chadduck, NARA Liaison
- Sayeed Choudhury, Johns Hopkins University
- Elizabeth Cohen, AMPAS/Stanford
- Paul Courant, University of Michigan
- Lee Dirks, Microsoft
- Amy Friedlander, CLIR
- Chris Greer, NITRD Liaison
- Vijay Gurbaxani, UC Irvine
- Anita Jones, University of Virginia
- Ann Kerr, Consultant
- Brian Lavoie, OCLC
- Cliff Lynch, CNI
- Dan Rubinfeld, UC Berkeley
- Chris Rusbridge, DCC
- Roger Schonfeld, Ithaka
- Abby Smith, Consultant
- Anne Van Camp, Smithsonian

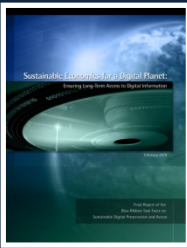
Sponsoring Agencies/Institutions:

- National Science Foundation
- Library of Congress
- Mellon Foundation
- National Archives and Records Administration
- CLIR
- NITRD
- JISC
- SDSC
- Member institutions

Specific Responsibilities

- Fran Berman / co-Chair
- Brian Lavoie / co-Chair
- Amy Friedlander / First Report Editor
- Abby Rumsey / Second Report Editor
- Susan Rathbun / Task Force Administration
- Jan Zverina / Communications

Systemic Challenges



- **“One-time” funding models are inadequate** to address persistent long-term access and preservation needs
- **Poor alignment between stakeholders** in the digital preservation and access world and their roles, responsibilities and support models
- There is a **lack of institutional, enterprise, and/or community incentives** to support the collaboration needed to enforce sustainable economic models
- There is **complacency that current practices are “good enough”** and / or the **problem is not urgent**. Both “carrots” (in the form of recognition that access to information is an investment in current and future success) and “sticks” (in the form of penalties for non-compliance, accounting of explicit opportunity costs, or costs of lost information) are needed
- Fear that digital access and **preservation is too big to take on**

Targets for Task Force Analysis



Research Data

Scholarly Discourse

Commercially- owned
Cultural Content

Collectively-produced
web content

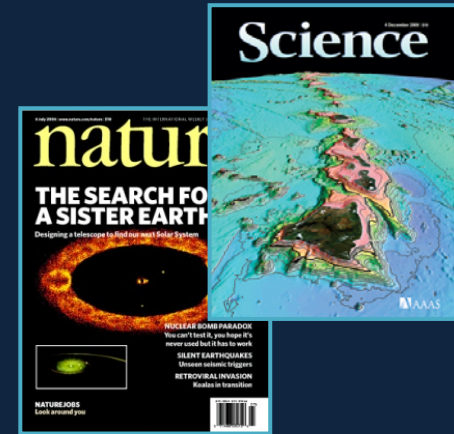
Stakeholders

- **Those who benefit** from use of a preserved asset
- **Those who select** what to preserve
- **Those who own** or have rights to an asset
- **Those who preserve** the asset
- **Those who pay**

The greater the alignment between key stakeholder groups, the better the prospects for sustainable preservation

There is no magic bullet

- Many economic models for digital information currently used, none of them are “free”



Subscription



Federal grants



Pay per service

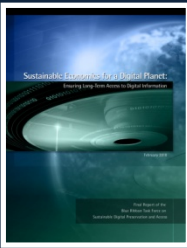


Advertisements



Donations, etc.

Summary Recommendations 1



- **CREATE SUSTAINABILITY-FRIENDLY POLICY**
 - Create preservation mandates as appropriate
- **INVEST IN / SEED PRESERVATION INFRASTRUCTURE**
 - Invest in building / seeding stewardship capacity and capability throughout the system.
 - Create financial incentives to encourage organizations to preserve digital materials on the public behalf.
 - Fund the modeling and prototyping of preservation infrastructure approaches
- **CREATE PRESERVATION-AWARE COMMUNITIES**
 - Create public-private partnerships to align distinct stakeholder groups
 - Convene expert communities to address the selection and preservation needs of valuable materials for which there is no stewardship (Web materials, digital orphans)

Summary Recommendations 2

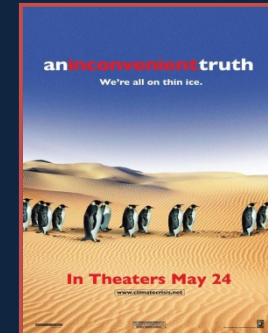


- **REFORM REGULATION:**

- Reform national and international copyright legislation to address and support digital preservation needs

- **RAISE AWARENESS:**

- Provide leadership in training and education for 21st century digital preservation, including domain expertise and core competencies in STEM.
- Promote digital preservation skills and awareness. “Does your dry cleaner know what digital preservation is?”



- **TAKE INDIVIDUAL RESPONSIBILITY:**

- Provide nonexclusive rights to preserve and distribute created content
- Partner with preservation experts throughout the data lifecycle to ensure your data will be maintained in a form that will be useful over the long term
- Pro-actively participate in professional societies and relevant organizations to create stewardship best practices and selection priorities.

Economic Sustainability for Digital Information is a Work in Progress



- Some movement on all fronts but for most, digital preservation is still not a first-tier priority with first-tier resources

- **Short-term priorities:**

- Clarification / reform of rights, ownership, privacy of digital information
- Viable economically sustainable preservation options for digital research data, cultural assets, etc.
- Redefining digital cyberinfrastructure / assets as critical infrastructure



Outreach



Sustaining the Digital Investment:
Issues and Challenges of Economically Sustainable Digital Preservation

Interim Report of the Blue Ribbon Task Force on Sustainable Digital Preservation and Access

[Click to download](#)

http://brtf.sdsc.edu/biblio/BRTF_Final_Report.pdf

Scope problem space
Understand current practices
Identify systemic challenges
Over 43,000 downloads to date



Sustainable Economics for a Digital Planet:
Ensuring Long-Term Access to Digital Information

Final Report of the Blue Ribbon Task Force on Sustainable Digital Preservation and Access

[Click to download](#)

http://brtf.sdsc.edu/biblio/BRTF_Interim_Report.pdf

Economic analysis
Findings and recommendations
Priorities for near-term action
Over 80,000 downloads to date

Blue Ribbon Task Force
on Sustainable Digital Preservation and Access

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Sustainable Economics for a Digital Planet:
Ensuring Long-Term Access to Digital Information

Final Report of the Blue Ribbon Task Force on Sustainable Digital Preservation and Access

[Click to download](#)

BRTF-SDPA Symposium

 **A National Conversation on the Economic Sustainability of Digital Information**
Thursday, April 1, 2010 | Washington, D.C.

[View Event Webcast](#)

BRTF-SDPA: Goals

Update

The BRTF-SDPA proposed a **Grand Challenge** recommendation for the U.S. **Office of Science and Technology Policy's** [submission website](#) to ensure that the knowledge of today is available for use tomorrow. Read the BRTF-SDPA Grand Challenge submission report [Strategy for American Innovation](#).

brtf.sdsc.edu
Bibliography
Webcast of Symposium “A National Conversation on the Economic Sustainability of Digital Information”
Reports