Sustainable digital preservation and access

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Roadmap

- Sustainable digital preservation
- Economic sustainability
- Some issues and challenges
Sustainable digital preservation

- Raw materials of research & learning increasingly digital
  - e-journals, eprints, data sets, learning objects, blogs, podcasts, ...
- Resources confer value through meaningful engagement
  - Comprehensive: critical mass of content & services
  - Actionable: linkable, sharable across users/environments
  - Sustainable: persistent
- Must secure enduring digital scholarly & cultural record
  - Sustainable digital preservation
Blue Ribbon Task Force on Sustainable Digital Preservation and Access

- Task Force:
  - Supported by NSF, Mellon, Library of Congress, JISC, CLIR, NARA
  - Cross-domain, cross discipline
  - http://brtf.sdsc.edu/

- Mission: Frame digital preservation as sustainable economic activity
  - Deliberate allocation of scarce resources
  - Mechanisms for sustaining allocation over long periods of time
  - Articulate the problem/recommend solutions
Definition: economic sustainability

The set of business, social, technological, and policy mechanisms that encourage the gathering of important information assets into digital preservation systems, and support the indefinite persistence of digital preservation systems, enabling access to and use of the information assets into the long-term future.

Economically sustainable digital preservation requires:

- **Recognition of benefits**
- **Incentives for decision-makers to act**
- **Selection**
- **Mechanisms to support ongoing, efficient allocation of resources**
- **Appropriate organization and governance**
Benefits & Incentives

• Clearly articulate benefits of digital preservation activity
  • Benefits should emphasize outcomes, not processes; not preservation, but what can be done with preserved materials
  • Articulate benefits ➔ cultivate sense of value ➔ “willingness to pay”

• Clearly articulate incentives for decision-makers to act
  • Identify and leverage institutional “self-interest”: business opportunity; mission-driven; policy compliance; various hybrids
  • Orchestrate incentives to secure ongoing participation by key stakeholders; transfers of custody
  • Appropriate incentives ➔ “willingness to provide”
Selection & Efficiency

- **Selection:** can’t “preserve everything for all time”
  - Prioritization: allocate resources where they generate most value
  - Manage expectations
  - Effective/reliable delivery ➔ predictability

- **Mechanisms to support ongoing, efficient allocation of resources**
  - Coordinate transfer of resources from those who are “willing to pay” to those who are “willing to provide” (pricing, donations, fees/taxes)
  - Efficiency: leverage economies of scale (spread costs over scale, volume) and scope (spread costs over multiple services)
  - Ongoing/efficient provision of resources ➔ sufficient and productive
Preservation activities can be managed through a variety of organizational forms, e.g.:

- Organization with no private interest in preservation (e.g., third party service)
- Organization with private interest in preservation; preserves on behalf of itself and other organizations (e.g., research library)
- Organizations with mandate to preserve, conferred by public policy and aimed at fulfilling stated public interest (e.g., national archive)

**Governance**: strategy, responsibility, accountability

Organization/governance → trust
Framework for economic sustainability

Supply-side:
- Incentives (willingness to provide)

Demand-side:
- Value (willingness to pay)

Digital Preservation Activity
- Predictable
- Sufficient/productive use of resources
- Trusted

Providers

Beneficiaries
Issues and challenges

- Separating preservation costs from other costs is difficult
  - No clear distinction between process of “making things available now” v. “making things available in the future”
  - Presents challenges for segregating digital preservation as separate activity and answering question “what does it cost?”

- Monetizing and charging for a “social good”:
  - Public-spirited, mission-driven institutions sometimes resistant to charging for content & services
  - Compelling value expressed in monetary terms, coupled with mechanism for charging reasonable fee to those who share in value
Issues and challenges

• Digital preservation is not just “for the future”
  • Incur costs now for future benefits
  • Perception: Digital preservation separable from interests of today’s stakeholders; focused on future stakeholders
  • Reality: Digital preservation more about ensuring digital assets are handed off in good condition to next succession of stewards 5/10 years from now, than taking actions to benefit users 100 years hence

• Non-monetary incentives can be important
  • Preservation bestows societal benefits to research, learning, culture
  • Engage private enterprise in supporting provision of these benefits
  • Leverage corporate recognition and reputation enhancement
Conclusion

Next steps:

• Publish first report (mid-December 2008)
• Strategies, recommendations, guidelines (December 2009)

Back to meaningful engagement:

• Requires sustainability
• Sustainability strategy is a means to mitigate economic risk
• Elements of sustainability are about elevating preservation activities from “proof of concept”, to reliable, valued, ongoing components of long-term data curation