

# Digital Curation and Sustainability DigCCurr 2007

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# Aspects of Sustainability

- To keep in existence, to maintain or prolong
- Meeting the needs of the present without compromising the ability of future generations to meet their own needs
- Resources—broadly defined—for keeping digital materials available and accessible over time.
  - Technology
  - Staff
  - Cash
- Concept applicable at different levels: national, consortial, local



# Sustainability and NDIIPP

- An early topic of interest
- Closely linked with other key issues, such as collecting content, developing technology, and outlining public policy
- Preparing for substantial discussion of sustainability in final report



# A Timely Issue

- To Stand the Test of Time ARL
- Cyberinfrastructure Vision for 21st Century Discovery - NSF
- Developing the UK's e-infrastructure for science and innovation UK OSI
- · Our Cultural Commonwealth ACLS
- JISC/University College London LIFE Project



# Need is Clear

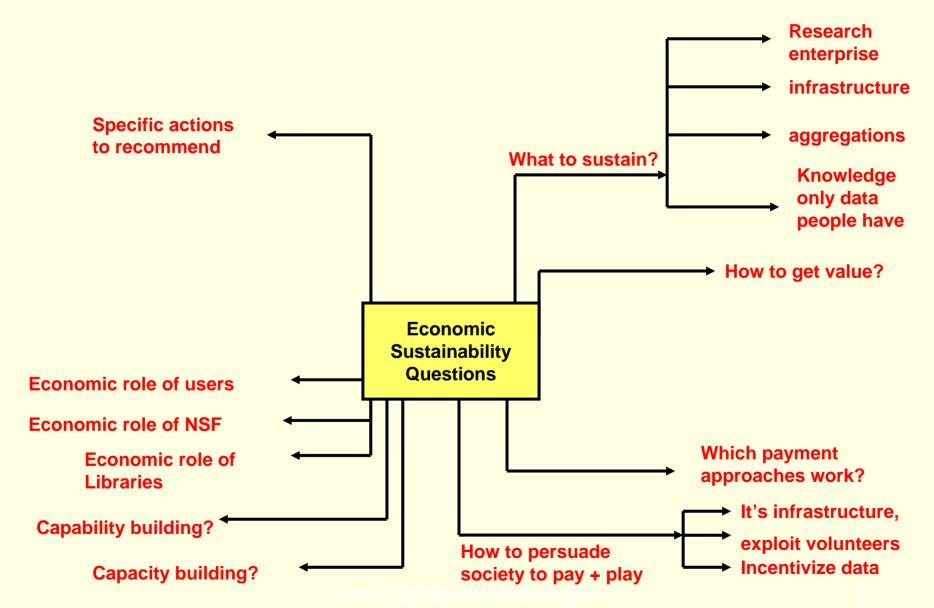
- Expanding digital stewardship requirements
- Infrastructure, capabilities still largely geared to analog
- Digital funding largely project based
- Broad range of work necessary to effectively manage content across life cycle
- Rapid change means regular migration of data, systems



# ...But there are Open Questions

- How to preserve, make available
- How to transform existing stewardship organizations and practices
- What are the costs
- Who pays
- Why it matters

#### Chris' Mindmap Provided a Framework for Discussion



http://www.arl.org/bm~doc/econ\_models.ppt



#### **Basic Action Items**

- Make content value explicit
- Probe business case elements
- Explore business models



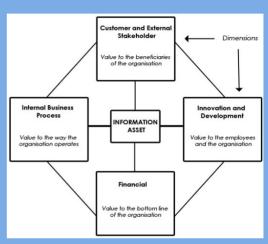
## Content Value: "Why Should I Care?"

- Values of digital material are typically intangible, as is the material itself
- Funders need clear, concrete evidence for importance of digital content
- Must clarify the demand side
  - What values accrue as a result of preservation
  - What are the deficits if content goes away



# Content Value Clearly Explained

- Need frameworks to consider dimensions of value for various digital materials, e.g.
  - Value for institutional users
  - Value for institutional reputation, prestige
  - Value for posterity







# Business Case: Risks, Fixes, Costs

- Compelling story about risk
- Incentives/barriers
- Plan for addressing risk
- Some estimate of cost
- Value added by curatorial practices







## The How and the How Much

- Needed levels of service, e.g.
  - Bag and tag
  - Transformation, disaggregation, rich metadata
- Prospective workflow
- Credible cost estimates

$$L_{\tau} = Aq + I_{\tau} + M_{\tau} + Ac_{\tau} + S_{\tau} + P_{\tau}$$



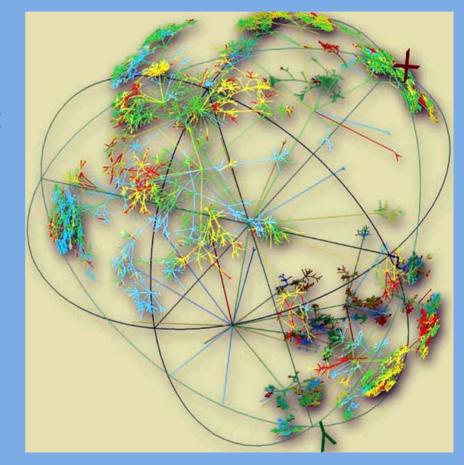
## **Business Models**

- How to put preservation into operation
- Provide for resources on an ongoing basis
- Leverage incentives, remove barriers
- Emergent models, but experimental at this point; modeling and testing appropriate
- Collaboration is key



# Working Within a Network

- No one institution, community, or sector can develop the best solution; collaboration is essential
- Networks build shared infrastructure, reduce costs
- Repositories will vary but all can draw from shared suite of tools, services, and best practices





## Self-Interest and the Public Good

- Institutions work together in pursuit of individual net positive value
- Key to sustainability: Members get value from networks, but benefits accrue to all from exchange of knowledge, tools, services, capacity, etc.
- Network administration and overhead addresses inequity, provides aspirational assistance



# Summary of Collective Needs

- Work to illuminate content value for decision makers
- Make the case for specific curatorial actions with supporting cost data
- Implement, test, and document business models
- Seek solutions across community boundaries