# Creating a Digital Preservation Network with Shared Stewardship and Cost

## The National Digital Information Infrastructure and Preservation Program Experience
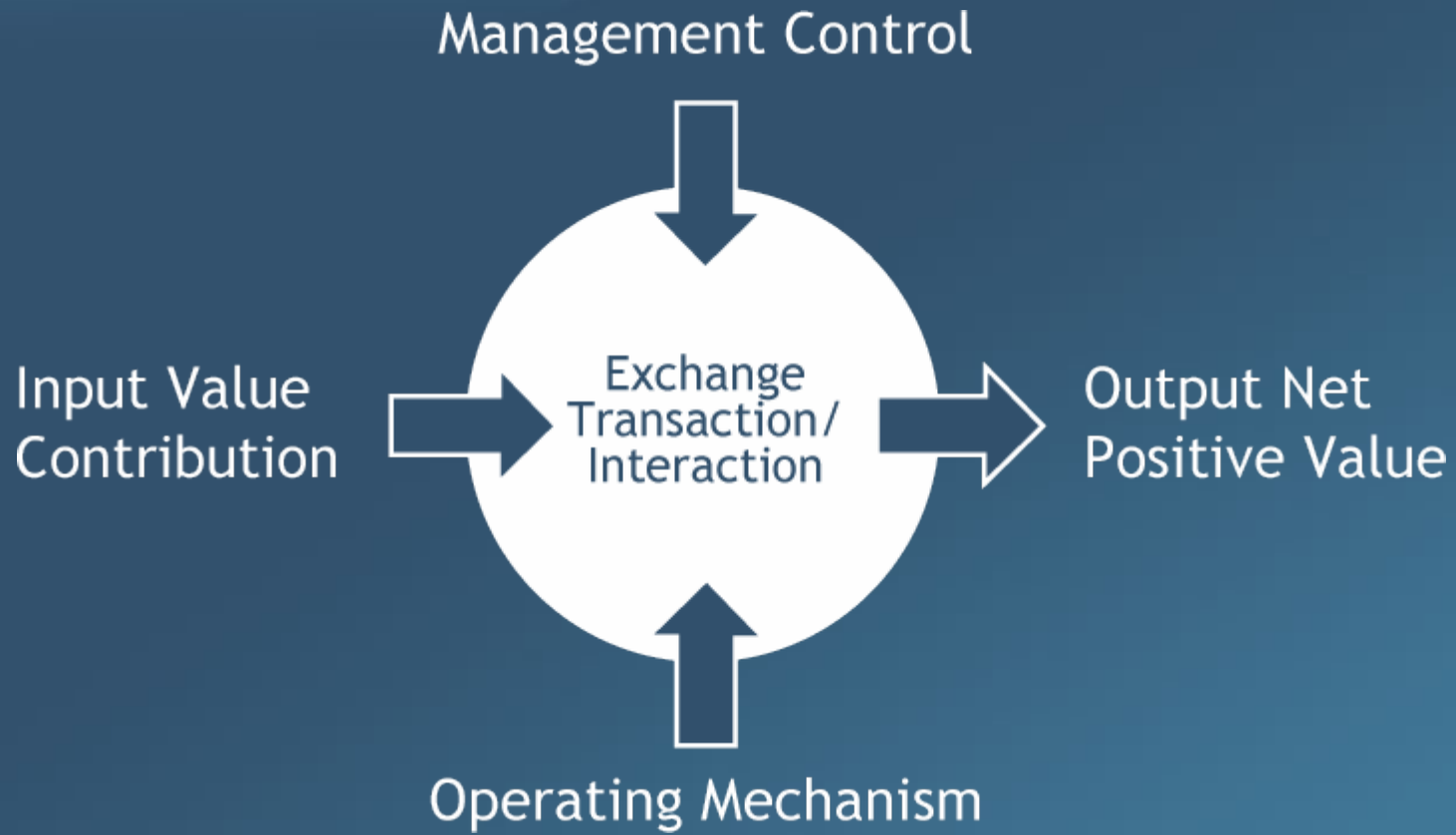
# NDIIPP Investments

- Preservation Network Partnerships

- Basic Research Support

- Intellectual Property Working Group

# National Digital Preservation Network – Current View

Uniquely Defined by:

- Our broad purpose and intention

- Diverse member attributes

- Reliance on existing member network relationships – "connectedness"

# Fundamental Network Elements

Management Control

Input Value Contribution → Exchange Transaction/ Interaction → Output Net Positive Value

Operating Mechanism

# Broad Array of Expected Member Attributes, Value Contributions, and Exchanges

- knowledge and expertise
- information or content resources
- services
- tools
- production capacity
- infrastructure capacity
- financial and other capital investments
- community and network reach
- trust and social capital

# Broad Set of Expected Benefits

- More effective standards and best practices adaptation

- More efficient use of capital and infrastructure

- Increased capacity to target and influence public policy

- Increased issue visibility and awareness

- Increased opportunities for sub-network formation, community building, knowledge sharing, problem solving, etc.

# "Public Good" Value Attained Through Complex Network of Networks

- Large-scale, long-term, multi-level, cross-sector, cross-disciplinary undertaking

- "Public good" societal value of shared costs and content stewardship attained through cumulative network effects over time

# Network Over Time

- Network formation, development, operation, and sustainment follow stages of maturity and are evolutionary

- Members and their contributions change

- Attributes of network members change

- Exchange transactions and interactions change

- Management controls and operating mechanisms should likewise evolve

# Layers in a Stewardship Network



Committed Content Custodians

Communities of Practice and Information Exchange

Services

Capacity Building

# Four Layers

- *Layer 1: Committed Content Custodians.* This is the heart of the network - committed partners that accept responsibility for collecting specific types of digital content as part of what will collectively become the universal digital library.  As of mid-2007, these partners have saved more than 66 terabytes of important content – content that would probably be lost otherwise.

- *Layer 2: Communities of Practice and Information Exchange.* the focus is on sharing of expertise.  It is where overlapping communities of practice tasks are executed.  (*Depending on the task, some activities may be non-recurring. Organizations in this layer may see themselves more as "contributors" than as permanent "members." For example, standards-setting bodies will play a role, yet the work they do, while crucial to NDIIPP, may not be carried out specifically for the program*).

- *Layer 3: Services.* The players in this layer perform services that involves more than the mere sharing of expertise and information.  These services may be provided by commercial for-profit or non-profit entities,  including open-source software developers. Some examples of services in this layer are tool and format registries or content registration and deposit tools.

- *Layer 4: Capacity Building.* The players in this layer seek or provide funding and other support for sustaining activities in all four layers. The funding will be expected to produce results that benefit entities across the network. Government agencies at the federal, state and local levels will have a significant role here, including supporting training and education and the development of curricula in digital preservation.

# References

- National Digital Information Infrastructure and Preservation Program (NDIIPP),  http://www.digitalpreservation.gov

- "Preserving Our Digital Heritage: Plan for the National Digital Information Infrastructure and Preservation Program," October 2002. http://www.digitalpreservation.gov/library/pdf/ndiipp_plan.pdf

- Section 108 Study Group, http://www.loc.gov/section108