

Interagency Working Group on Digital Data

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Co-Chairs:

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Membership:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of the Interior
- Department of Labor
- Department of Justice
- Department of State
- Department of Transportation
- Department of the Treasury
- Department of Veterans Affairs
- Central Intelligence Agency
- Environmental Protection Agency
- Library of Congress
- National Aeronautics and Space Administration
- National Archives and Records Administration
- National Science Foundation
- The Smithsonian Institution
- US Army Corps of Engineers
- Council on Environmental Quality
- Domestic Policy Council
- Homeland Security Council
- National Economic Council
- National Security Council
- Office of Management and Budget
- Office of Science and Technology Policy

Purpose:

The purpose of the IWG is to develop and promote the implementation of a strategic plan for the Federal government to cultivate an open interoperable framework to ensure reliable preservation and effective access to digital data for research, development, and education in science, technology, and engineering.

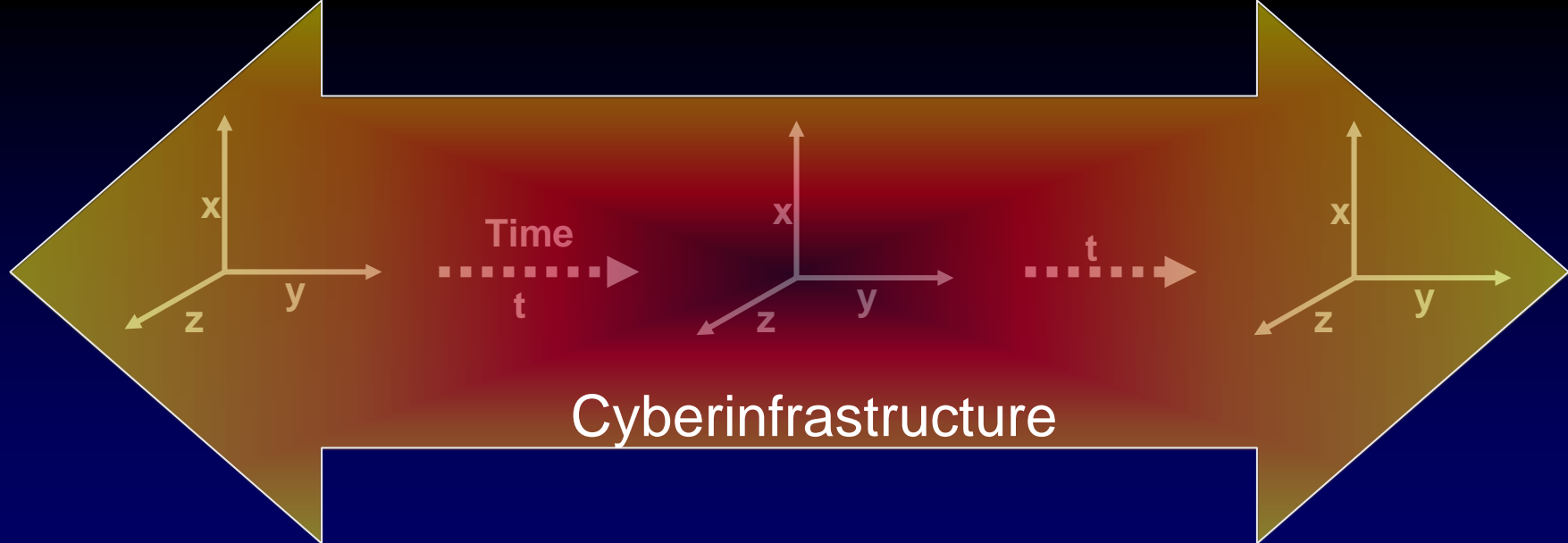
“In 2006, the amount of digital information created, captured, and replicated was $1,288 \times 10^{18}$ bits (or 161 exabytes) ... This is about 3 million times the information in all the books ever written”

The Expanding Digital Universe
IDC White Paper sponsored by EMC; March, 2007

Emerging First Principles:

- Science is global and thrives in 5 dimensions
- Digital scientific data are national and global assets
- Preservation of digital scientific data is both a government and private sector responsibility, and benefits society as a whole
- Communities of practice are an essential feature of the digital landscape
- Long-term preservation and access require management of the full data life cycle
- Not all digital scientific data need to be preserved and not all preserved data need to be preserved indefinitely
- Dynamic solutions migration strategies are required as no permanent solutions currently exist for long-term digital preservation and access

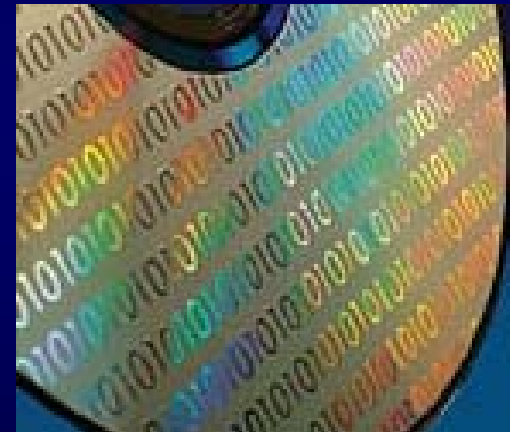
Science is global and thrives in 5 dimensions



Computational
capacity and
capability



Connectivity
for access and
interaction

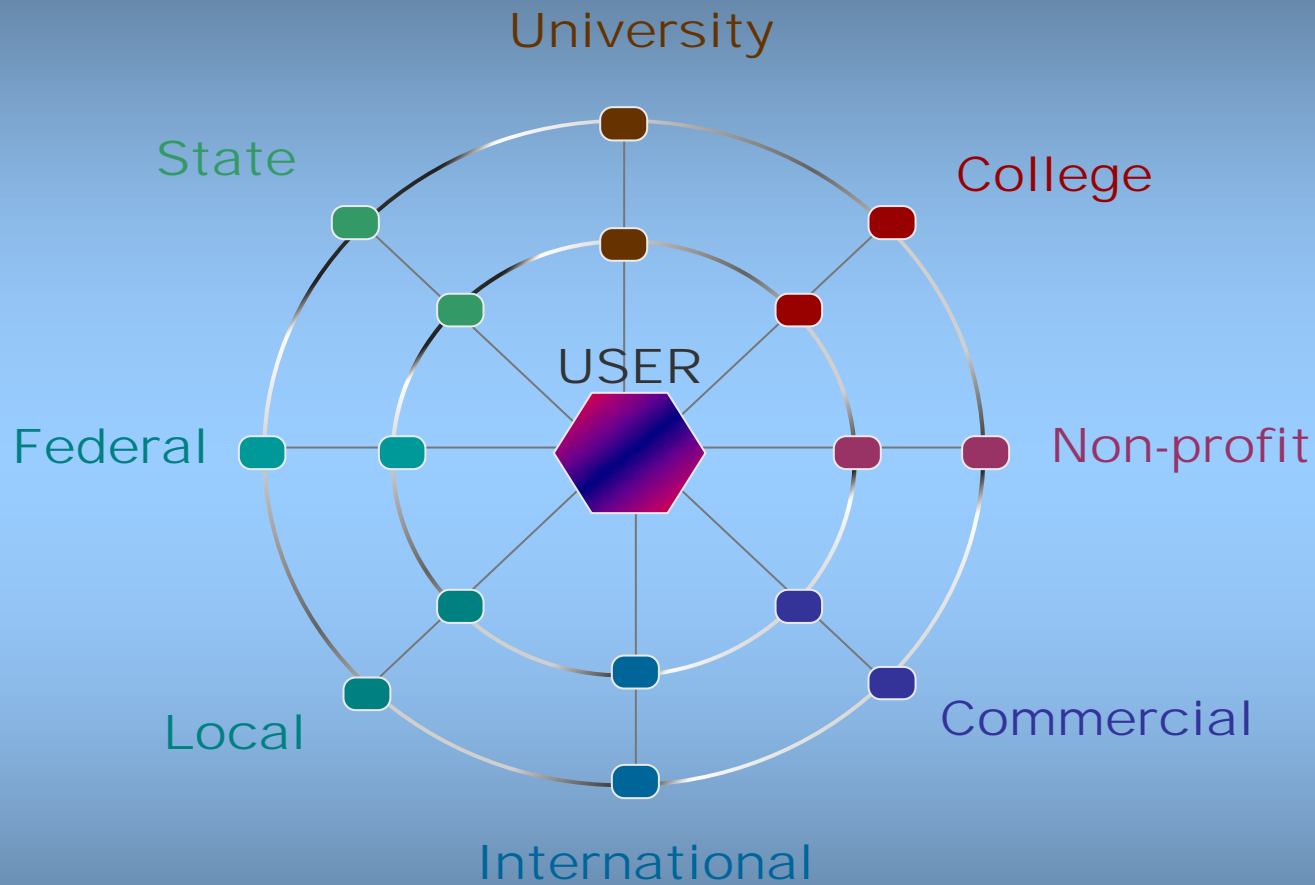


Information for
innovation and
discovery

Digital scientific data are national and global assets

Innovation and competitiveness in a global information society turn on who can most swiftly and reliably find, understand, share, and apply complex information from widely distributed sources for discovery, learning, progress, and productivity

Preservation of digital scientific data is both a government and private sector responsibility, and benefits society as a whole

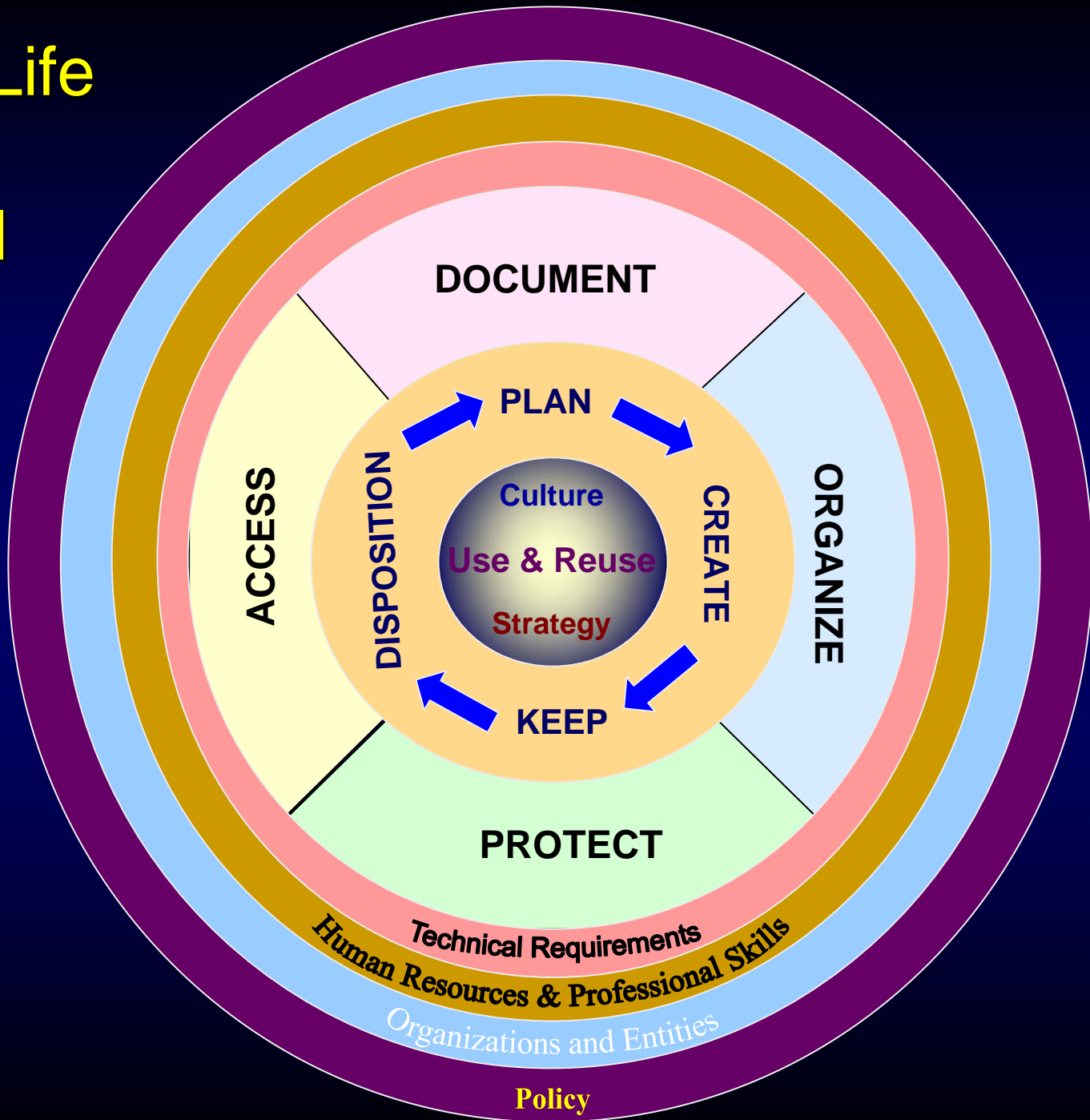


Communities of practice are an essential feature of the digital landscape

- Enable communities of practice while providing for interoperability, re-use and re-purposing
- No 'one-size-fits-all'

Long-term preservation and access require
management of the full data life cycle

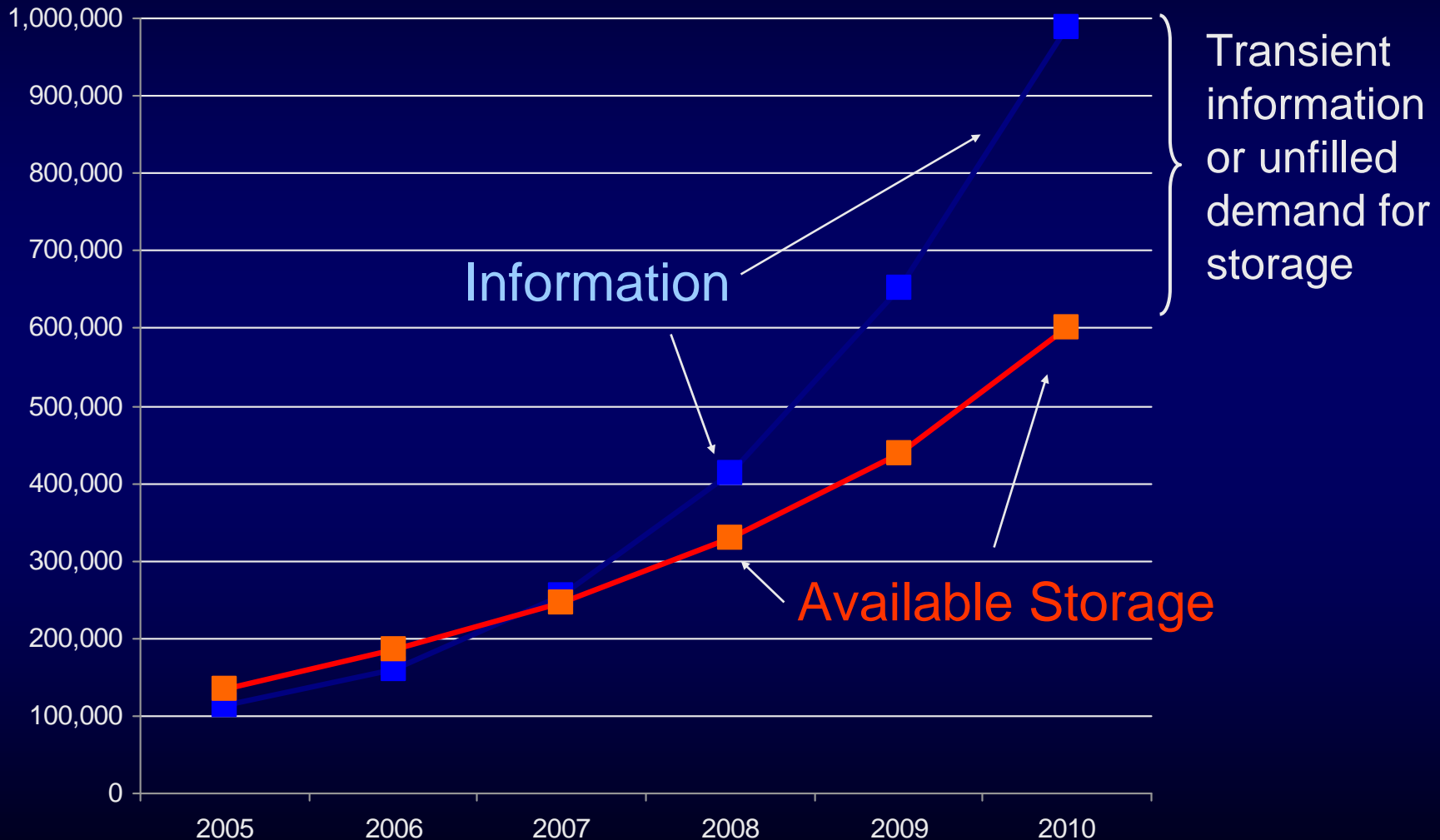
Data Life Cycle Model



Not all digital scientific data need to be preserved and not all preserved data need to be preserved indefinitely

Information And Storage

Petabytes Worldwide



Dynamic solutions migration strategies are required as no permanent solutions currently exist for long-term digital preservation and access

“Today, no media, hardware or software exists that can reasonably assure long-term accessibility to digital assets”

The Digital Dilemma, 2007
Science and Technology Council
Academy of Motion Picture Arts and Sciences

Thank you!

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