

Storage Media Symposium

June 11th, 2013

Preservation Research and Testing Division, Library of Congress FUJIFILM
Recording Media, USA / Japan



Fenella G. France PhD MBA FAIC

Chief, Preservation Research and Testing Division, Library of Congress

Purpose of the Symposium

Preservation of Storage Media

- To address the need for increasing understanding of degradation mechanisms in older tape and audio-visual storage media formats
- Challenge with re-creating degradation mechanisms in order to retard, reduce further degradation
- Long-term requirements for storage media longevity
- Review of current and future directions in storage media
- Impact of longevity on migration policy
- System challenges (media and machine)



Preservation Challenges

Physical and Digital

- Need for migration
- Complex, changing technical climate
- Range of products and formats
- Need for integrity of entire data sets
- Demand for continual and faster access
- User repurposing of content
- IP and restrictions on access and use

PRTD Technology Approach to Digital Preservation of Scientific Data

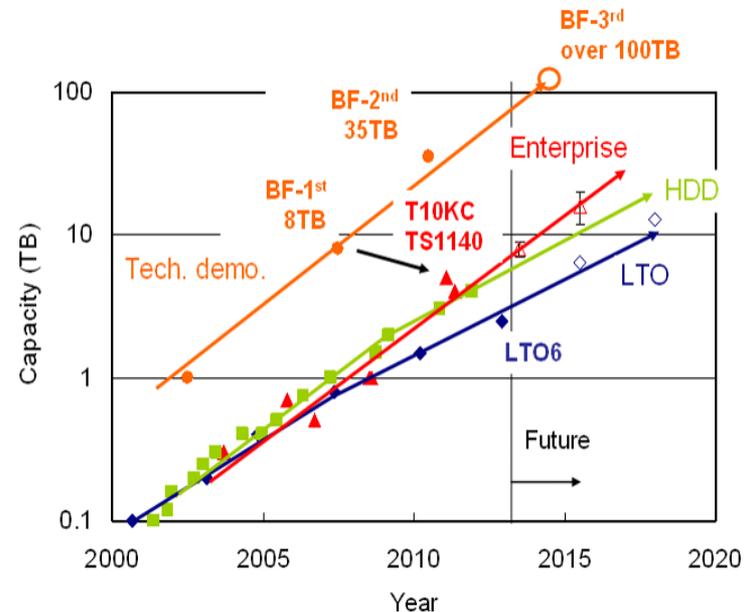
- Flexible and nonproprietary approach
 - Clearly defined and open standards
- Define capabilities with stakeholders
- Phased development and analyses
- Standardized data and metadata

**Government-Industry-Academia-
Institutional Collaborations**

Overview of Fuji Research

- Evolution of tape technology
- FUJIFILM's Barium Ferrite Technology
- Archival reliability
- Next technologies

Capacity Trends of Tape System



Enterprise roadmap source: http://www.oracle.co.jp/events/jpm120809/materials/20120809-10_StorageSumit_A-2.pdf
LTO roadmap source: <http://www.lto.org/technology/index.html>

Next Steps

- Development of a MOU between LC and Fuji to utilize their accelerated aging laboratories to understand degradation mechanisms with testing of older tape formats
- Donation of extant older media formats for testing

