LIFE CYCLE MODELING,
THE BACKGROUND

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British Library/JISC

LIFE conference April 2006
OVERVIEW

- History of Lifecycle approaches
- Approaches at AHDS and JISC
- Impact and take-up
- (selectively) utilises *LIFE Research Review* by James Watson  Nov 2005 (with some additions)
EARLY HISTORY

• **Terotechnology Handbook 1978**
  – The report advocates the life cycle costing approach and provides case studies on a selection of physical assets, including: a GLC Office Block, the National Bus Company and Rank Xerox.

• **The life cycle stages of physical assets are defined by the report as:**
  – Acquisition (of physical assets)
  – The operational life (of physical assets)
EARLY HISTORY

- LIFE Review was cast wider with research into the broader context of the concept of “life cycles” including:
  - Construction (Building and Maintenance) Life Cycle
  - Cost Analysis
  - Cost Design
  - Cost Impact
  - Family Life Cycle
  - Information (Resources) Life Cycle
  - Information System Life Cycle
  - Information Technology Life Cycle
  - Organisational Life Cycle
  - Plant Life Cycle
  - Records Life Cycle
  - Software Development Life Cycle
  - Waste Management Life Cycle
LIBRARY LIFE CYCLE COLLECTION MODELS

- **Andy Stephens 1988**
  - The application of life cycle costing techniques to library collections began with Andy Stephens of the British Library.
  - He introduces the formula for working out the total cost of keeping an item in a library throughout its life from acquisition.
  - The system is discussed and advocated, but, in this early study, no figures are applied.

- **Andy Stephens 1994**
  - uses practical case studies to input data into his model
LIBRARY LIFE CYCLE COLLECTION MODELS

• Hernon (1994)
• provides specific, generic stages, namely:
  – Information Creation and Gathering
  – Production, Processing and Publication
  – Transmittal (Access, Dissemination and Distribution)
  – Retrieval and use
  – Retention (Storage and Archiving) and Disposition
• Models item rather than organisational life-cycle
• Established late 1996-distributed service to promote creation, archiving and re-use of digital research
• I joined AHDS January 2007 to develop common collection development/rights/funders
• Integrating support for creation, archiving, and use fundamental to ethos and policy of service
• Basic digital item life cycle approach in first collection policy
pro-active partnership with researchers promotes creation of good digital resources
10 guides online [http://ahds.ac.uk/](http://ahds.ac.uk/) and
Oxbow books for print editions
ARTS AND HUMANITIES RESEARCH BOARD ICT POLICY

• AHRB/AHDS strategic partnership - AHDS role:
  – advise the AHRB on matters involving ICT in the arts and humanities
  – advise the AHRB in the technical assessment of grant applications
  – advise the AHRB, its applicants and award-holders on standards and best practices
  – act as a repository for selected data resources created in whole or in part with AHRB funding
  – educational re-use of those data resources and disseminate them for that purpose;
A STRATEGIC FRAMEWORK FOR CREATING AND PRESERVING DIGITAL RESOURCES

• Develops basic AHDS Collection Policy and tests for wider application
• policy framework life-cycle(“continuum”) of a digital resource and preservation
• Desk-top survey and 15 interviews with archives, libraries and museums
• 5 Case studies, best practice guidelines, resources and other studies
• Research starts 1997 – report Beagrie and Greenstein 1998
THE FRAMEWORK

• Three main phases of the life cycle:
  – creation
  – management/preservation
  – use
• Sub-divided into more specific stages
• Separates data storage and data preservation for first time
IMPACT AND TAKE-UP

• Hendley 1998 establishes the first life cycle based cost model for digital preservation.
  – adopts the strategic framework as basis of cost model
• Moving Theory into Practice: Digital Imaging for Libraries and Archives Anne Kenney/Oya Rieger 2000
  – Develop Formal policies to Encompass the Lifecycle of Digital Resources
  – Digitisation Workshop and Online tutorial
• Hodge 1999 Digital Electronic Archiving: The State of the Art, The State of the Practice for ICSTI
FURTHER INFORMATION

*LIFE Research Review*
by James Watson  Nov 2005

http://www.ucl.ac.uk/ls/lifeproject/documentation/review.doc