# Developing life cycle models at the British Library - work in progress

Digital Preservation Forum

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- One of six strategic objectives for the BL is to develop a new policy & economic framework for life cycle collection management
- Objectives of the project
  - to establish the optimum apportionment of resources between the phases in the life cycle of the BL' collections (traditional and digital) now and define the impact for the future
  - to identify, document and, if possible, benchmark the collection service and resource interdependencies between each stage of the collection life cycle
  - to produce a report, recommendations and implementation strategy for a policy and economic framework by April 2003

## First steps

- 1. Traditional
- can earlier formula be updated and used?
- 2. Digital
- can life cycle model for traditional be adapted and used for digital?
- 2a. digitisation projects
- 2b. purchased digital objects
- 2c. digital objects acquired through voluntary legal deposit
- 3. Combine traditional and digital to reflect all BL's collections

## 1. Traditional

Relationship between the stages in a collection item's management

selection - acquisition - cataloguing - pressmarking - labelling - stamping/ownership marking - placing - preventive conservation storing - preservation - interventive conservation - moving surrogacy - deaccessioning duplicates

Economic interdependencies between the different phases



#### Traditional: revisit earlier formula

$$K(t) = s + a + c + pl + hl + p(t) + h(t)$$

Where K(t) is the total cost of holding an item for a period of t years

Where s = selection, a = accessioning, c = cataloguing, pl = initial preservation, hl = initial handling, p(t) = longer-term preservation, h(t) = storage

### Traditional: revisit earlier formula

$$K(t) = s + a + c + pl + hl + p(t) + h(t)$$

Example

Acquisition cost : life cycle cost

Everyman Psalter £1,000,000 : £65

Anyman Papers £0 : £51,142

## 2. Digital

2a. digitisation

2b. purchased digital objects

2c. digital objects acquired through voluntary legal deposit

## 2a Digitisation model - examples of European projects

	Percentage of time spent on activity		
Activity	project X	project Y	project Z
selection/preparation	33%	15%	20%
digitisation	33%	15%	20%
description/document	33%	70%	60%

## 2a Digitisation model

## BL examples of projects to point of storage & preservation

Percentage	of time s	pent on	activity

Activity	project A	project B	project C
management	7%	7%	2%
selection	74%	0%	3%
preparation	4%	1%	4%
digitisation	12%	41%	42%
metadata	4%	51%	25%
ipr	0%	0%	24%

## 2a Digitisation model - first draft

Cost of digitisation

$$K(t) = s + ipr + cons + r + cap + q + m + acs(t) + p(t)$$

Where K(t) is the total cost of digitised item over a period of t years

Where s = selection, ipr = checking of intellectual property rights, cons = conservation check and remedial conservation, r = retrieval and reshelving, cap = capture of digitised master, q = quality assurance of digitised master and production of service copies, m = metadata creation, acs(t) = access over time, p(t) = preservation and storage over time

## 2a First draft digitisation model

- Preservation assessment of material and remedial conservation are frequently overlooked
- For policy decision on whether to retain digitised masters scanning is a relatively small percentage
- Checking of intellectual property rights can add significantly to costs
- Calculation of storage and preservation costs are most difficult

## 2b Stages in life cycle of purchased digital objects

- Policy statement and resource commitment
- Select object
- Acquire object
- Ingest object
- Resource disclosure
- Resource use
- Preserve object
- Rights management

## 2b Life cycle of purchased digital objects first draft - early life stages of selection and processing

Activity % of total time

Evaluation/selection 70%

Accessioning 3%

Metadata description 27%

## 2c digital objects acquired through voluntary legal deposit

- Voluntary legal deposit of electronic material since Jan 2000
- Impact analysis of monographs and serials reporting Oct 2002
- Material received on physical carriers and electronically
- CD-ROMs declining; 'e' increasing, particularly in serials
- Feasibility of secure network between legal deposit libraries
- Issue of long-term preservation

## **Next steps**

- Outcome of impact study on legal deposit
  - accessions; cataloguing; metadata; access; storage; secure network
  - cost models
- Ratify all models
- Verify amount spent on each life cycle stage now
- Produce matrix of managerial, service and economic interdependencies between the stages
- Report, recommendations and implementation strategy

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