

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

Digital Preservation Forum

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Developing life cycle models at the BL - work in progress

- 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

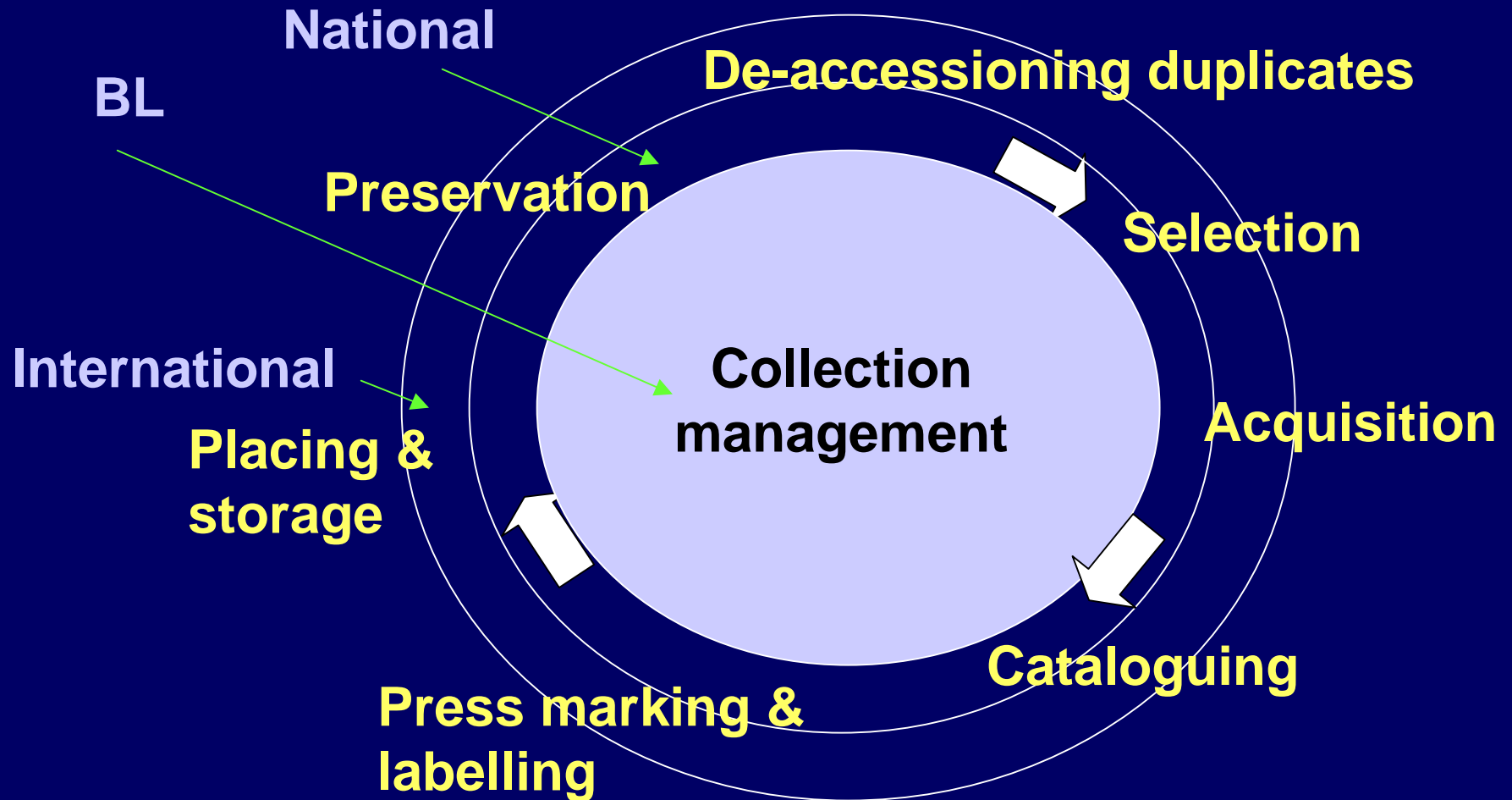
1. Traditional

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

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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

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2. Digital

2a. digitisation

2b. purchased digital objects

2c. digital objects acquired through voluntary legal deposit

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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%

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2a Digitisation model

BL examples of projects to point of storage & preservation

Percentage of time spent 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

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

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, $\text{acs}(t)$ = 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

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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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