

Lifecycle Costing

The LIFE Project

Richard Davies

Digital Approvals Manager,
The British Library

JISC Digital Content Conference
1 July 2009

JISC

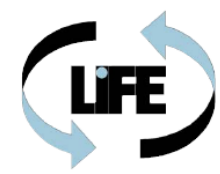
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- ▶ Overview of the project
- ▶ So far – LIFE1 and LIFE2
- ▶ Case Studies
- ▶ Next steps – LIFE3





LIFE Projects overview

Lifecycle Information For E-literature

①

LIFE

1 year

Completed in
April 2006

②

LIFE2

1½ years

Completed
August 2008

③

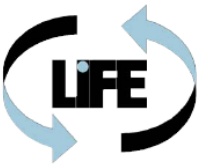
LIFE3

1 year

Begins
August 2009

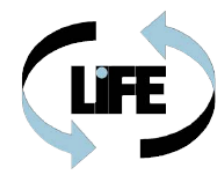
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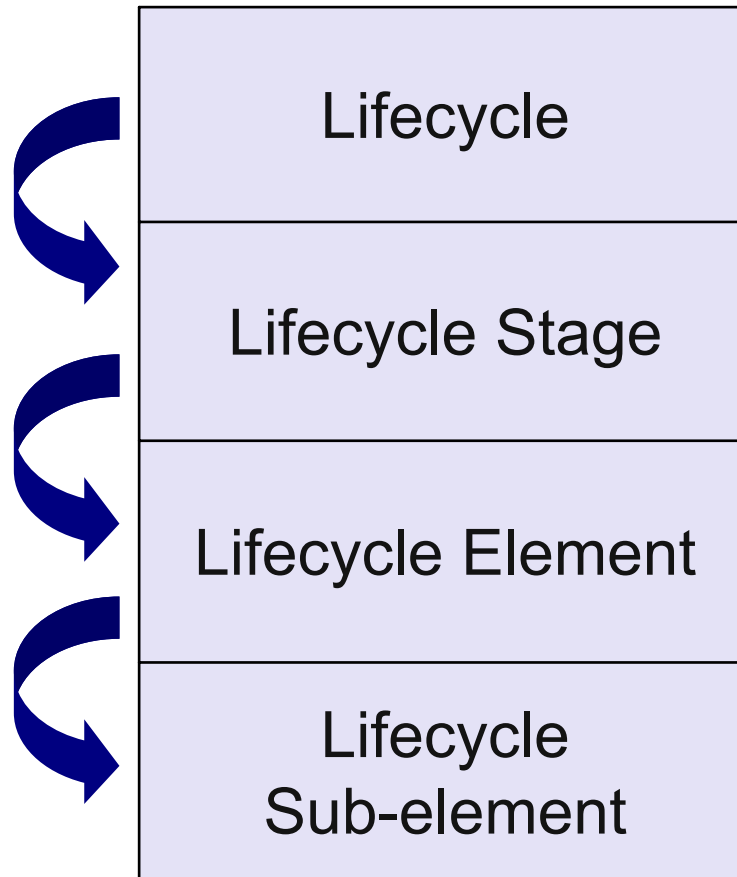
The LIFE Model (v2)

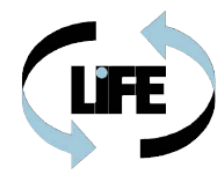
Lifecycle Stage	Creation or Purchase	Acquisition	Ingest	Bit-stream Preservation	Content Preservation	Access
		Selection	Quality Assurance	Repository Admin	Preservation Watch
Lifecycle Elements	Submission Agreement	Metadata	Storage Provision	Preservation Planning	Access Control
	IPR & Licensing	Deposit	Refreshment	Preservation Action	User Support
	Ordering & Invoicing	Holdings Update	Backup	Re-ingest	
		Obtaining	Reference Linking	Inspection	Disposal	
		Check-in				



The LIFE Model (v2)

$$L_T = C + Aq_T + I_T + BP_T + CP_T + Ac_T$$





LIFE Model v2: Sub-elements

Ensuring the Model is clear and unambiguous to apply:

- Detailed definitions
- Sub-element descriptions

Sub-elements are suggested functions or activities only

Sub-elements of Quality Assurance	Explanation / notes
QA Policy (policy/procedure)	Description of quality requirements and required mitigation actions should quality requirements not be met. Policy for sampling of objects for QA (if appropriate)
QA Characterisation (action)	Characterisation of the digital object. Identification of file format, and assessment of whether the object is valid, well formed, and/or renders correctly with current access software
Content Examination (action)	Assessment of whether the content of the digital object is of an expected, agreed or sufficient level of quality. Typically, a manual process on a sample of the ingested objects
Mitigation (action)	Action to mitigate quality issues (might include virus cleaning or re-ordering or obtaining the digital object)
QA Metadata (metadata)	Record QA metadata

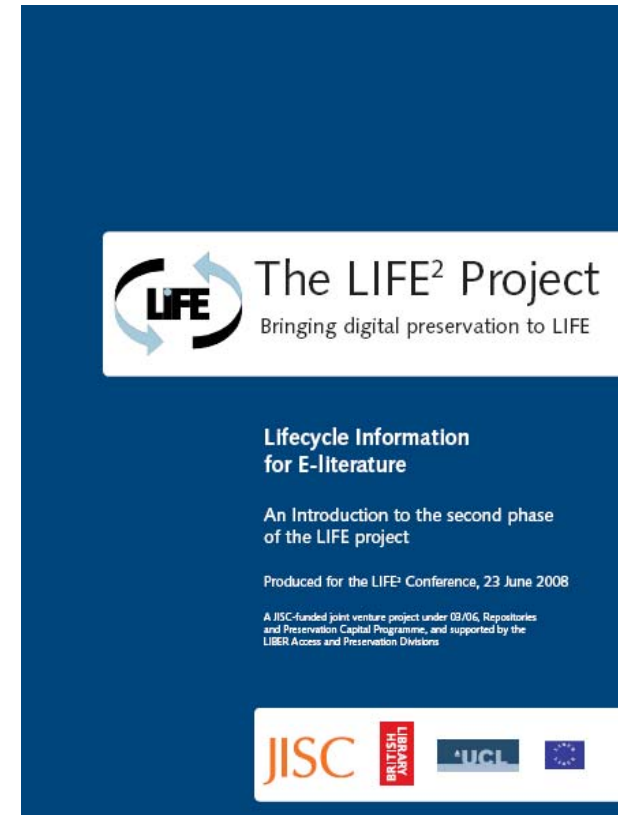
Case Studies

LIFE1:

- ▶ Voluntary Deposit
- ▶ Web Archiving
- ▶ eJournals

LIFE2:

- ▶ SHERPA LEAP
- ▶ SHERPA DP
- ▶ Newspapers – analogue and digital



The LIFE² Project
Bringing digital preservation to LIFE

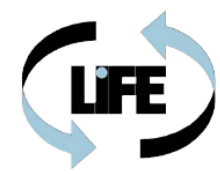
Lifecycle Information
for E-literature

An Introduction to the second phase
of the LIFE project

Produced for the LIFE² Conference, 23 June 2008

A JISC-funded joint venture project under 09.016, Repositories
and Preservation Capital Programme, and supported by the
LIBER Access and Preservation Divisions

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Case Study Outputs

- ▶ Full Case Study Write-up
- ▶ Workflow diagram
- ▶ Methodology
- ▶ Costing Spreadsheet

- ▶ Website www.life.ac.uk
- ▶ LIFE Blog www.life.ac.uk/blog

Lifecycle Stages	Practical Explanation	Cost notes	% of Staff time	Year 1 (individual costs)	Year 1	Year 2
Creation or Purchase						
				0.00		0.00
	Cost to digitise the total archive plus create associated project information	creation of digital archive			250,445.00	272,713.00
	Sub Total				250,445.00	272,713.00
Acquisition						
Selection						
Selection Policy (policy/procedure)		10% Curatorial Grade B	10.0%	5,556.32	5,556.32	0.00
Selection (action)	Sort Microfilm into correct order	50% Curatorial Grade C, 6 months	25.0%	10,713.15	10,713.15	
Selection Metadata (metadata)						
Submission Agreement						
Submission Agreement (policy/procedure)	Setting up of contract with third party	10% project Grade A	10.0%	6,647.62	6,647.62	6,647.62
Negotiation of Submission (action)						
Submission Metadata (documentation)	Recording of metadata relating to submission requirements.	5% Legal support Grade A	5.0%	3,323.81	3,323.81	0.00
IPR & Licensing						
IPR & Licensing (policy/procedure)						
Negotiation of Rights		5% Product development Grade B	5.0%	2,778.18	2,778.18	0.00

	A	B	C	D	E	F
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Burney Digital Collection- L

Lifecycle Stages	Practical Explanation	Cost notes	% of Staff time	Year 1 (individual costs)	Year 1
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Creation or Purchase

				0.00	
	Cost to digitise the total archive plus create associated project information	creation of digital archive			250,445.00
	Sub Total				250,445.00

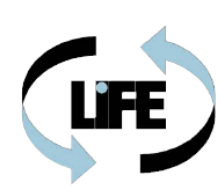
Acquisition

Selection

Selection Policy (policy/procedure)		10% Curatorial Grade B	10.0%	5,558.32	5,558.32
Selection (action)	Sort Microfilm into correct order	50% Curatorial Grade C, 6 months	25.0%	10,713.15	10,713.15
Selection Metadata (metadata)					

Submission Agreement

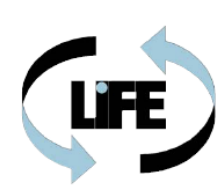
Submission Agreement (policy/procedure)	Setting up of contract with third party	10% project Grade A	10.0%	6,647.62	6,647.62
Negotiation of Submission (action)		5% Legal support Grade A	5.0%	3,323.81	3,323.81
Submission Metadata	Recording of metadata relating to submission				



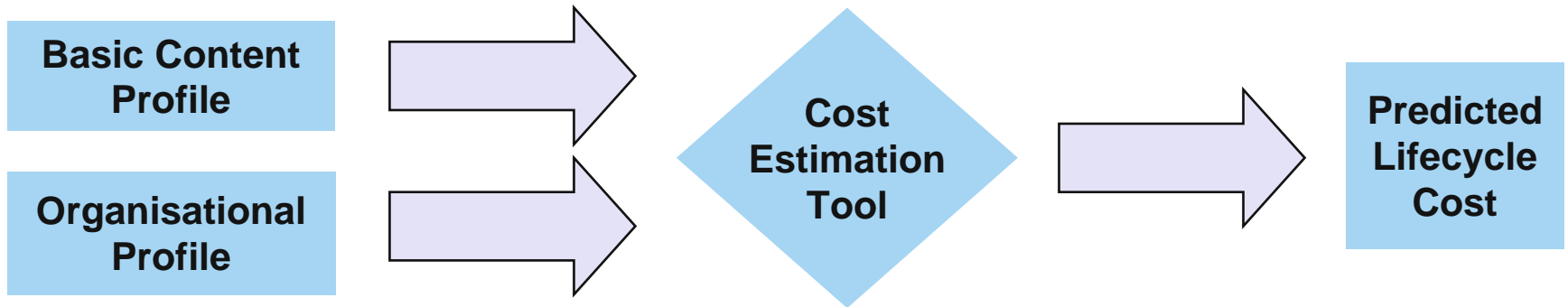
LIFE3 –

Estimating costs across the lifecycle

- ▶ Cost estimation across the whole of the digital lifecycle
- ▶ Builds on concepts developed in the Generic Preservation Model
- ▶ Support for users of existing LIFE work by automating lifecycle data capture
- ▶ Collaboration with HATII at University of Glasgow, to build on the DRAMBORA assessment tool



LIFE3 – Approach to cost estimation



User provides a profile of the content to be preserved and details of the organisational context

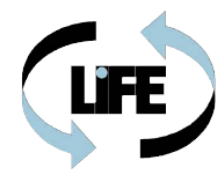
2 approaches to explore:

- Input of low level profile data such as number and size of objects
- Templates for both content and organisational inputs for broader categories of inputs and organisational context

LIFE3 Vision

- ▶ Assessing new digitisation projects
- ▶ Finite funding – prioritisation
- ▶ Cost of migrating existing content
- ▶ Analysing existing projects





Some observations



Invest up front to save more money later in the lifecycle. Justification to invest is critical.

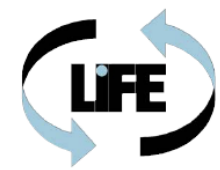
Cost remains one of the most important factors in timing and selecting an appropriate preservation strategy.



Targeting development resource on the bottle necks of preservation activity will return the greatest savings for the end user and the best return on investment for the funder.



Digital preservation costing is still in its infancy and it remains a challenge particularly if applied retrospectively.



Thank you.

LIFE Team Acknowledgements

- ▶ Paul Ayris
- ▶ Rory McLeod
- ▶ Rui Miao
- ▶ Helen Shenton
- ▶ Paul Wheatley

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Friday 10 A

...helping to bring digital preservation

Location: LIFE homepage >>

Menu

- ▶ Home
- What is LIFE?
- LIFE Team
- LIFE¹
- Documentation
- Conference
- LIFE²
- Documentation
- LIFE Cycles
- Glossary

Welcome to the LIFE Website

LIFE is a collaboration between University College London (UCL) and the British Library.

The LIFE Project has developed a methodology to model the digital lifecycle and calculate the costs of preserving digital information for the next 5, 10 or 100 years. For the first time, organisations can apply this process and plan effectively for the preservation of their digital collections.

Currently the LIFE Project is in its second phase ("LIFE²"), an 18 month project running from March 2007 to August 2008.






for enquiries contact life@bl.uk

LIFE (Life Cycle Information for E-Literature) is funded by the Joint Information Systems Committee (JISC) and is a collaboration between University College London (UCL) and the British Library

e richard.davies@bl.uk
t +44 (0) 20 7412 7182

www.life.ac.uk

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