



Cost Concept Model & Gateway Requirements Specification

Hervé L'Hours-UK Data Archive Archiving 2014 Berlin





What isn't it?

It is not a unified, functional, implementable cost modelling method, model or tool.





What is it

- A framework consisting of a *cost concept model* and *gateway specification* to support future research and development
 - Explaining the problems and challenges
 - Proposing a coherent approach to modelling, documentation and tool development issues





What & What?

A framework consisting of:

Cost Concept Model

"Core" concepts at the heart of most curation cost methodologies.

Gateway Specification

A structured approach to support future research and development.





Why?

Because existing cost models are difficult to:

- understand
- compare
- select





What are the goals?

Make future cost model work

- easier to evaluate and compare in terms of:
 - Scope
 - Effort
 - Accuracy
- Improve supporting documentation
- Drive appropriate adoption





Who?

- Stakeholders in the widest sense
- Cost Model Theorists
- Cost Model Tool Developers
- Archive Managers & other implementers
- Repository Tool Developers





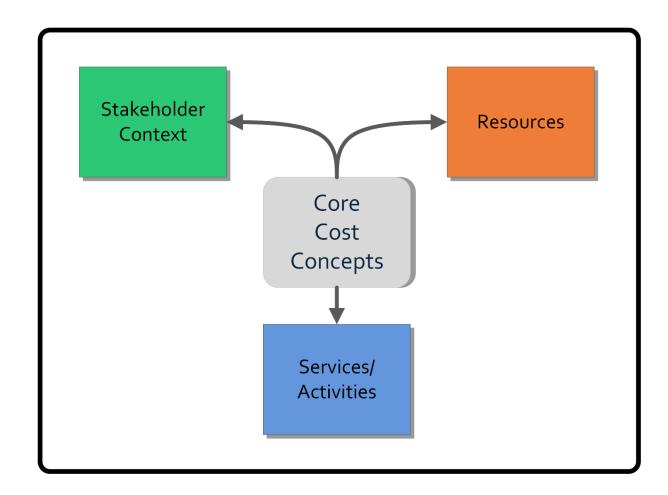
The Core Concept Model

- "Core" concepts at the heart of most curation cost methodologies
- Clearly defined
 - Suitable for re-use in future curation cost models
- Need to be extended to support a method





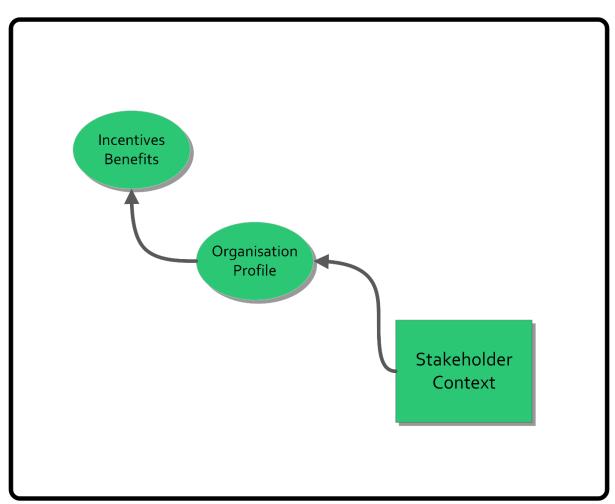
Context, Resources, Activities







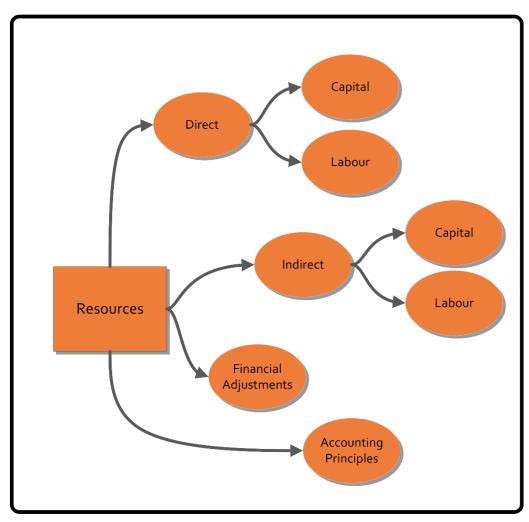
Stakeholder Context







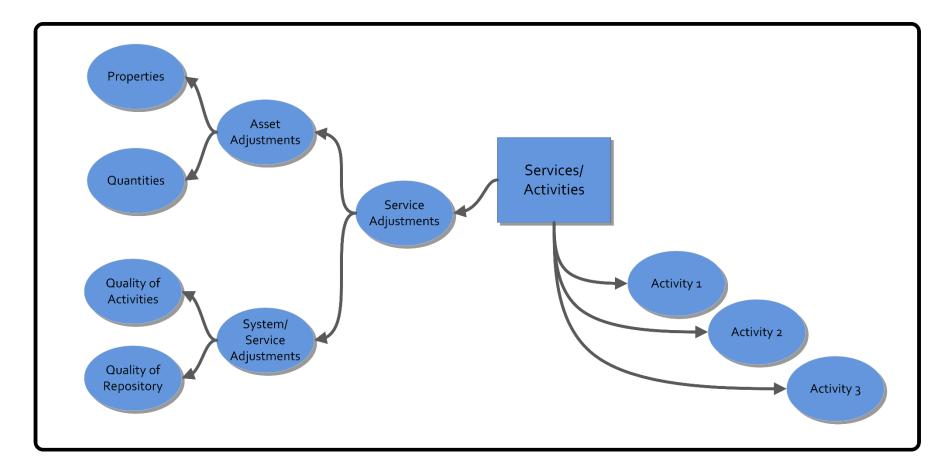
Resources





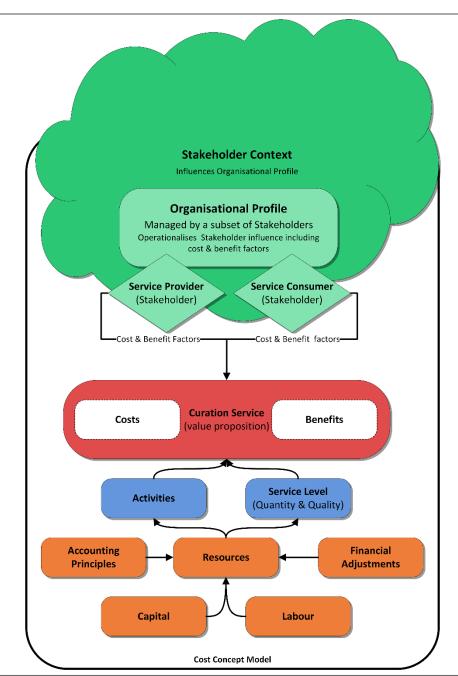


Activities













A multitude of Models

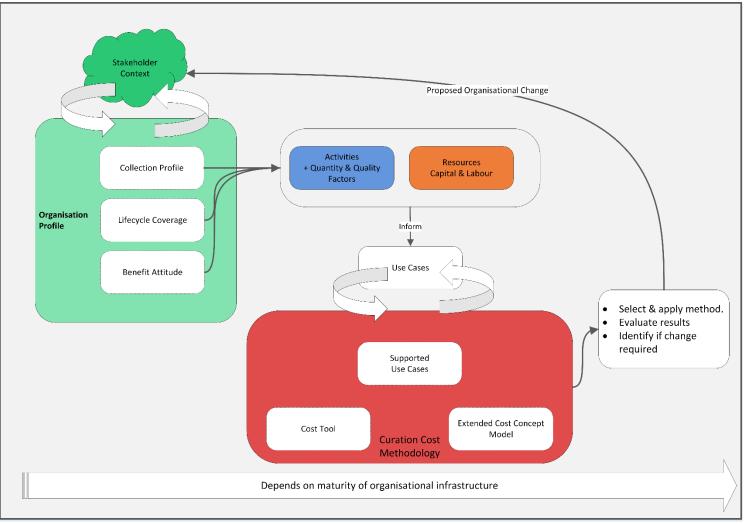
Ongoing work to place this in a wider context:

- OAIS Reference Model
- Data Lifecycle modelling approaches
- Economic Sustainability Reference Model
- Capability Maturity Model





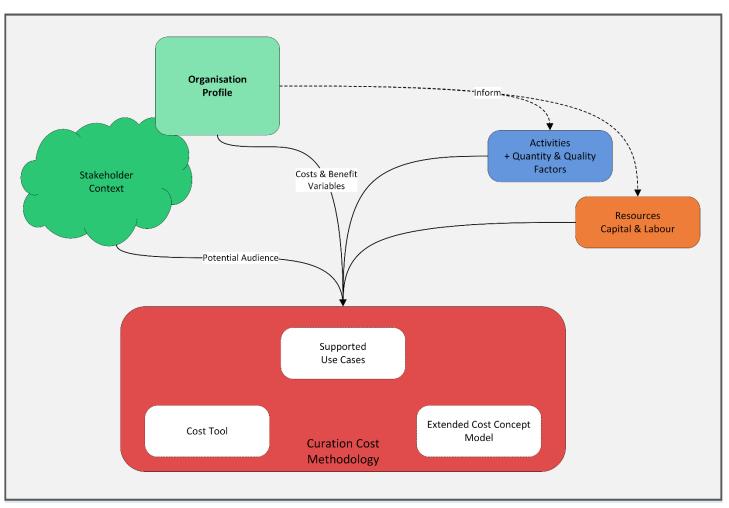
Implementer Perspective







Theorist Perspective







Methods, Models and Tools

A 'Cost Model' usually consists of:

- Some use cases or scenarios
- A *model* of the variables from the underlying curation system necessary to support the *method*
- The method which applies the calculations/comparisons to the model to deliver the conclusions required by the use cases
- A *tool* for data entry and calculations





Extending the Core Model, Developing a Method

Use Cases, what you count, calculate and compare and possible conclusions.

- Scenarios and Use Cases
- Stakeholder Context
 - Organisational Profile





Extending the Core Model, Developing a Method

- Resource Costing
- Service/Activity Costing
 - Custom vs Standard Activity breakdowns
 - Quality of Activities
 - Asset adjustments (properties/quality)





Extending the Core Model, Developing a Method

- Calculations
- Comparisons
- Accuracy Detail & Flexibility





Implementing Functionality: Design and Usability

- Technical Interoperability
- User Interface
- Data Capture/Results Output Efficiency
- Pre-defined Settings & customisation
- Documentation & Support





Your Thoughts and Feedback

- Identifying, managing and communicating with stakeholders
- Organisational context & curation costs
- Approach to incentives, risks and benefits
- Repository activities structure & quality
- Collection structure
- Labour force categorisation





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