



# Modeling Sustainability in Business Ecosystems

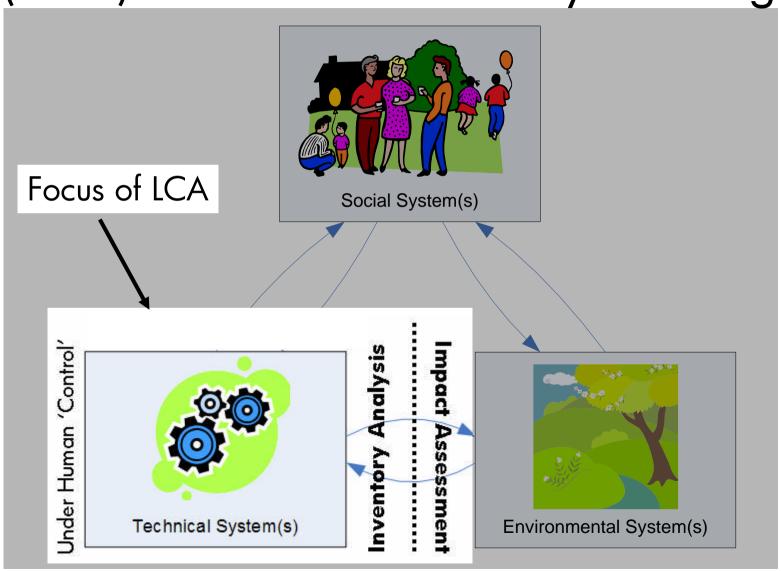
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\* Joint work with Steve Cayzer, Heppie Curtis, Chris Preist, Royston Sellman, Paul Shabajee



#### (Most) Current Sustainability Thinking





## What more is needed in ecosystem-level tools?

Validation

Scalability

Integration



# How is HP Labs creating ecosystem-level tools?



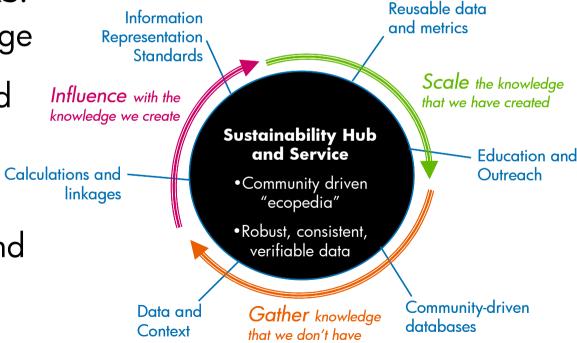
#### A Sustainability Hub

#### Goal:

Influence, gather, and scale knowledge within global sustainability community to enable an open-source service.

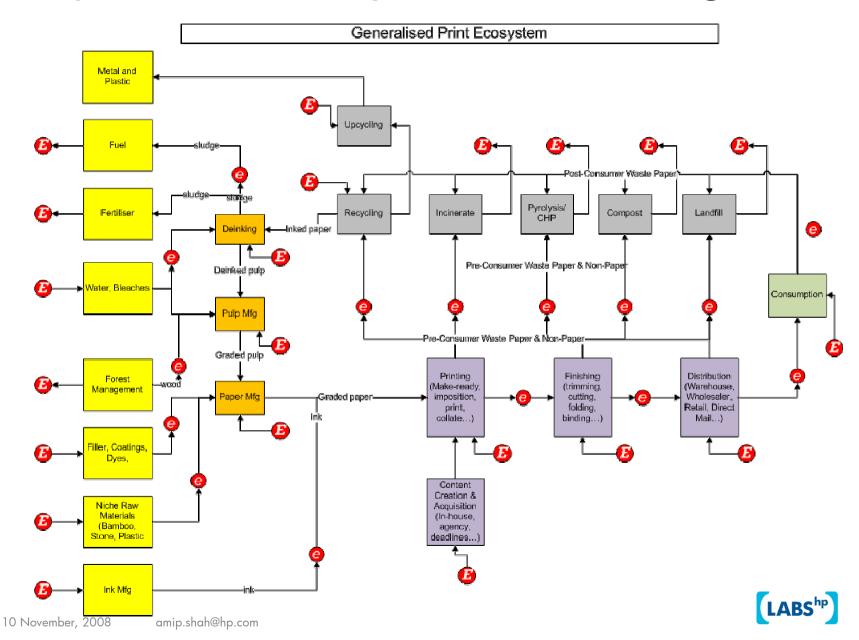
#### **Key Research Tasks**:

- Represent and manage context to provide robust, consistent and verifiable data
- Leverage user generated content
- Effective reporting and visualisation
- Engage community

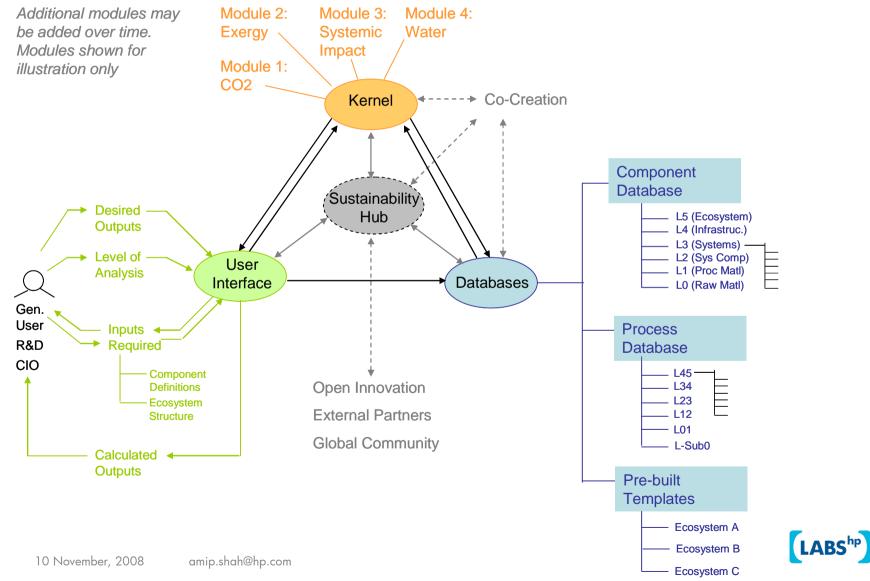




#### Example of an Ecosystem Block Diagram



#### Codifying the Ecosystem Tools



### Summary



#### Tools and Methodologies for Sustainable Transformation

#### Towards sustainable business ecosystems...

- Creation of new CAD-like ecosystem-level sustainability analysis tools
  - For example, that leverage thermodynamics to enable robust analysis;
- Application of sustainability tools to select business ecosystems
  - Such as printing and commercial publishing;
- Understanding of what makes business ecosystems more sustainable
  - And especially the relationship between sustainability and business drivers;
- 4. Provenance and Open innovation via a Sustainability Hub
  - By leveraging Semantic Web research in the sustainability domain.



### What do we want to add in ecosystem-level sustainability tools?

Validation

Scalability

Integration



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