

# A Multistakeholder Approach to Value-Driven Co-Design of Recommender Systems

## Evaluation Metrics in Digital Archives

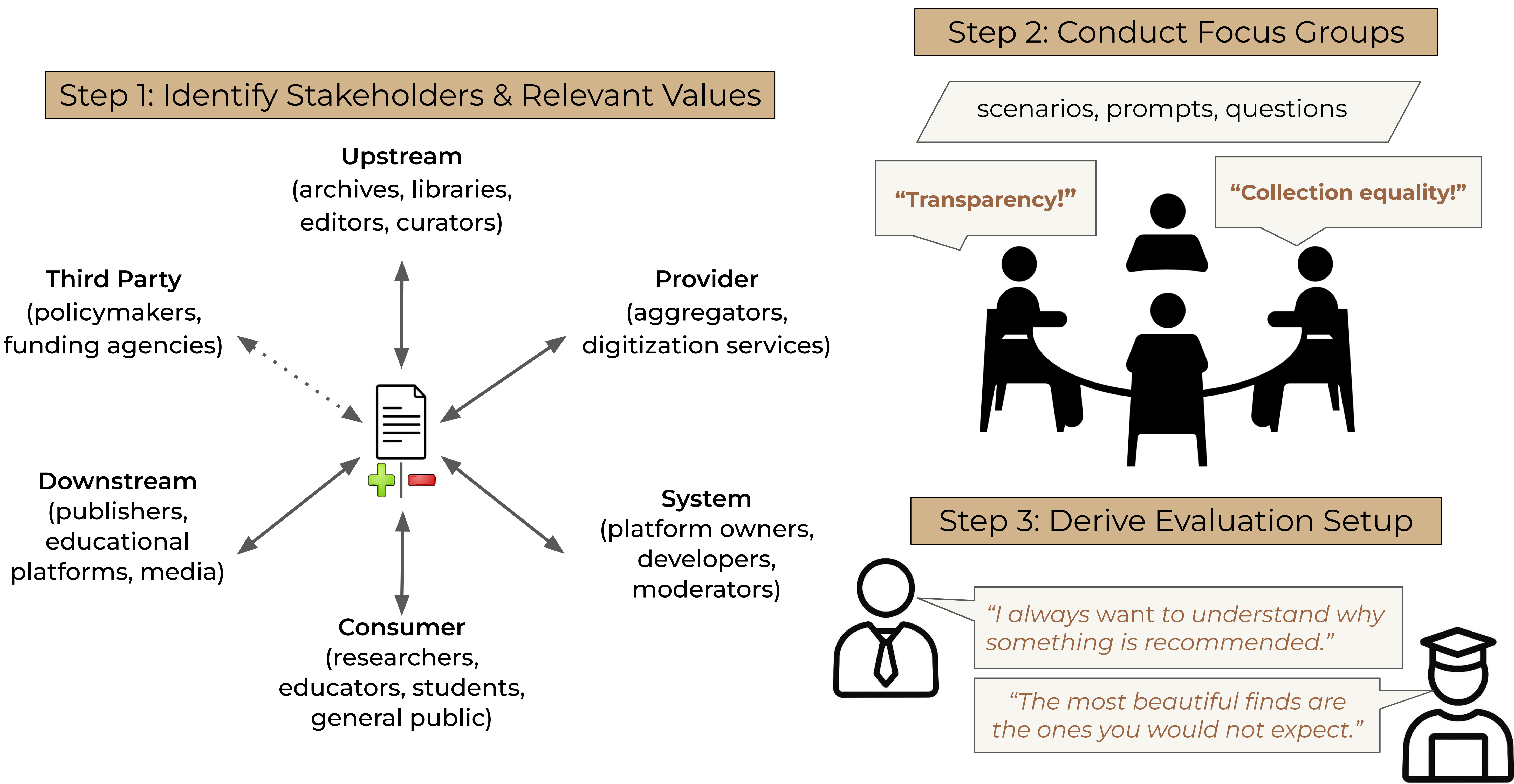
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### Problem

- Traditional RecSys evaluation is insufficient for **(digital) cultural heritage** applications.
- Digital archives serve **diverse stakeholders** with (sometimes) **conflicting value** sets.
- For an upcoming RecSys in [Monasterium.net](https://monasterium.net), who gets a say on designing it?

### Method

- 5 groups x 5 experts. 60 minute discussions on values, trade-offs, and evaluation.
- Transcription, abductive coding, analysis. Deriving grounded evaluation setup.



### Findings

- Value in digital archives (for primary sources) emerges through **extended (scholarly) engagement** (→ *research funnel* framework).
- Stakeholders do want new discovery tools but often lack knowledge about how they work.
- **Serendipity, trust, and explainability** are key.

Funnel Stage	Metric Direction
Discovery	Research Path Quality
	Collection Representation
Interaction	Contextual Appropriateness
	Control Effectiveness
Integration	Metadata-Weighted Relevance
	Document Relationship Insight
Impact	Research Integration
	Cross-Stakeholder Value Alignment

### Transfer

- 🌐 Process: Systematic stakeholder selection → value-driven interviews → formalizing metrics.
- 🔄 Domain: Any area with a value-sensitive, long-term, and multistakeholder perspective.
- 📄 Next Steps: Operationalization, implementation, validation through user studies and feedback.