

Understanding Metadata

A Process Oriented Approach to Recordkeeping Metadata

Peter Horsman
Archiefschool, Amsterdam

Confusion

- ❑ Concept of Metadata
- ❑ No embedding in recordkeeping and archive theories
- ❑ Orientation on daily practice
- ❑ Not used to Models
- ❑ Complexity of Metadata schemas
- Aversion

Contents

- Hypothesis
- Metadata categories
- Methodologies for systems design
- Method for metadata analysis
- Techniques: user understandable modelling
- Validation
- Conclusion

Hypothesis

- ❑ A metadata system is not a goal in itself
- ❑ Implementation of a theoretical metadata schema is not a practical approach
- ❑ Metadata are closely linked to recordkeeping processes
- ❑ Processes are better understood than metadata

Metadata categories

- Descriptive – Intellectual Control
 - contents, context, structure
- Administrative - Administrative Control
 - provenance, ownership, rights, access, preservation
- Structural – Physical Control
 - technical

Metadata creation

- Deliberately created / captured by recordkeepers
 - Retrieval
 - Interpretation
- 'By products' of recordkeeping activities
 - Created and used in recordkeeping processes
 - Accountability

Metadata Matrix

	Intellectual control	Administrative control	Physical control
By-product	X	XX	X
Description Capture	XX X	X X	X

Systems Design



Assumption:

- A Recordkeeping system is an Information system
- Development of RKS is IS development
- Methodologies for IS development applicable for RKS development

System Design

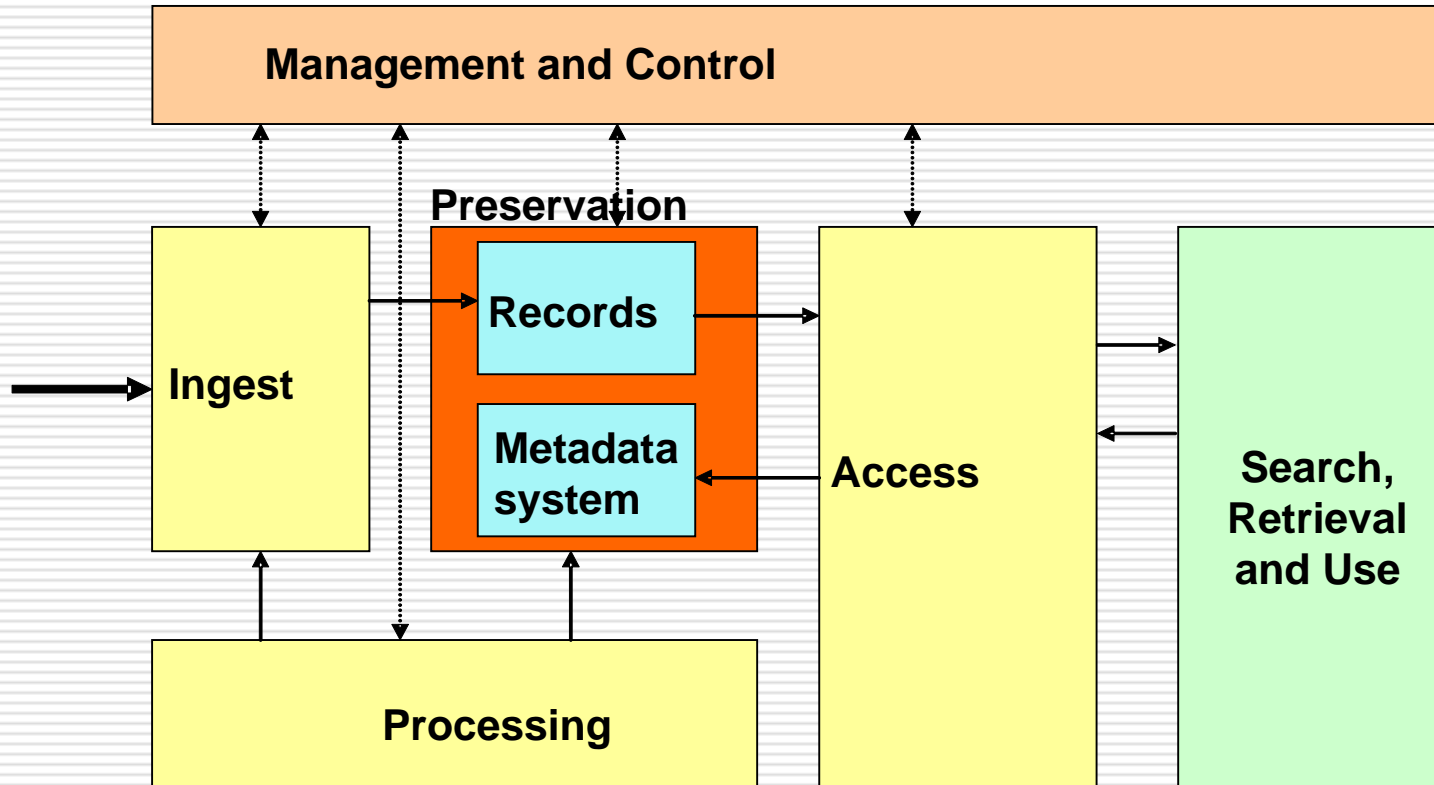
- Defining the System
 - RKS As a Black Box
 - Functions, Purpose, Interactions with Environment
- Analysing Processes
 - Identification, analysis, inputs/outputs, dataflows
 - Controls
- Analysing Data
- Linking Processes with Data
- User Involvement
 - Processes better understood than data

System Design

Process Analysis

- Identifying Recordkeeping Processes
- Identifying Controls
- Identifying Stakeholders and experts
- Identifying existing documentation
- Interviews
- Business Model as a framework / starting point
- Process decomposition – linking processes through flows (inputs and outputs)

RKS business model



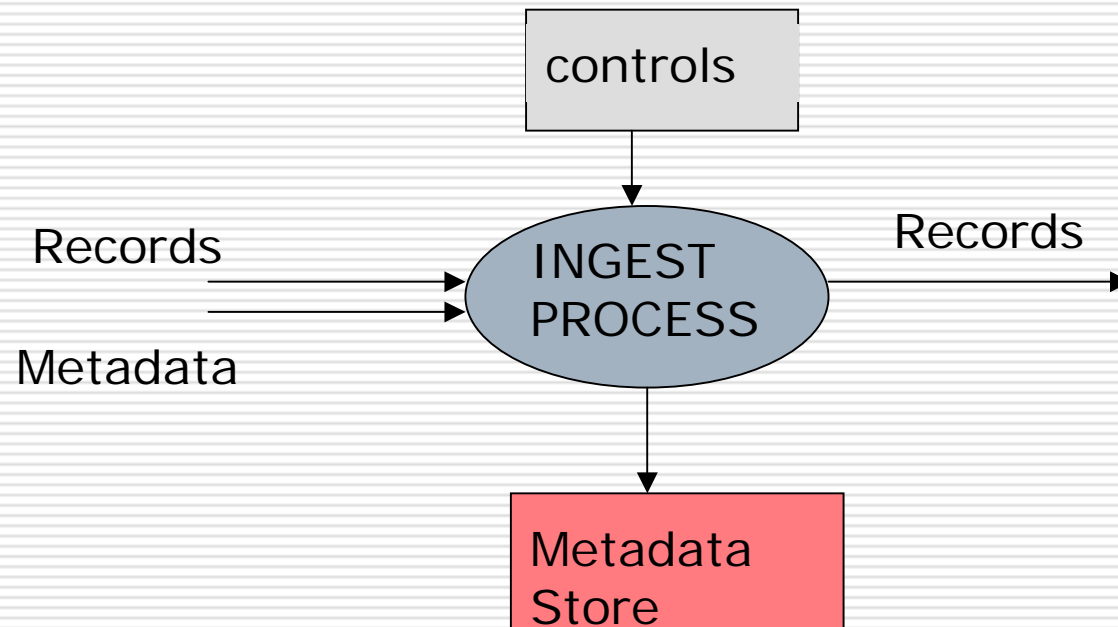
System Design

Process Analysis: Example Ingest

- ❑ Input: Records / documents – From?
- ❑ Input: Metadata (in different terminology) – From business application, other system
- ❑ Output: Captured records – To Storage / Process
- ❑ Output: Accession registration (local standards) / structural metadata – To metadata store
- ❑ Controls: Criteria, Forms, Rules ...

System Design

Documentation and Feed-back



Metadata Analysis

- Through analysis of processes
- Identifying Entities and data elements
- Terminology Trap
- Metadata Model
- Cross reference with Processes
- Documentation

Validation

- Recordkeeping Metadata schema as a Reference Model
- Identifying gaps
- Expert feed-back
- Differences in terminology

Conclusion

- ❑ Records professionals primary users of metadata systems - experts
- ❑ User involvement indispensable
- ❑ Metadata must be understandable for users
- ❑ Metadata schemas useful tools for analysts
- ❑ Labour intensive, but: process driven metadata analysis pays back

