WELCOME

From a thesaurus standard to a general knowledge organization standard?!

09/11/2018

My background

- Content & Knowledge Engineering
- Master thesis at Airbus
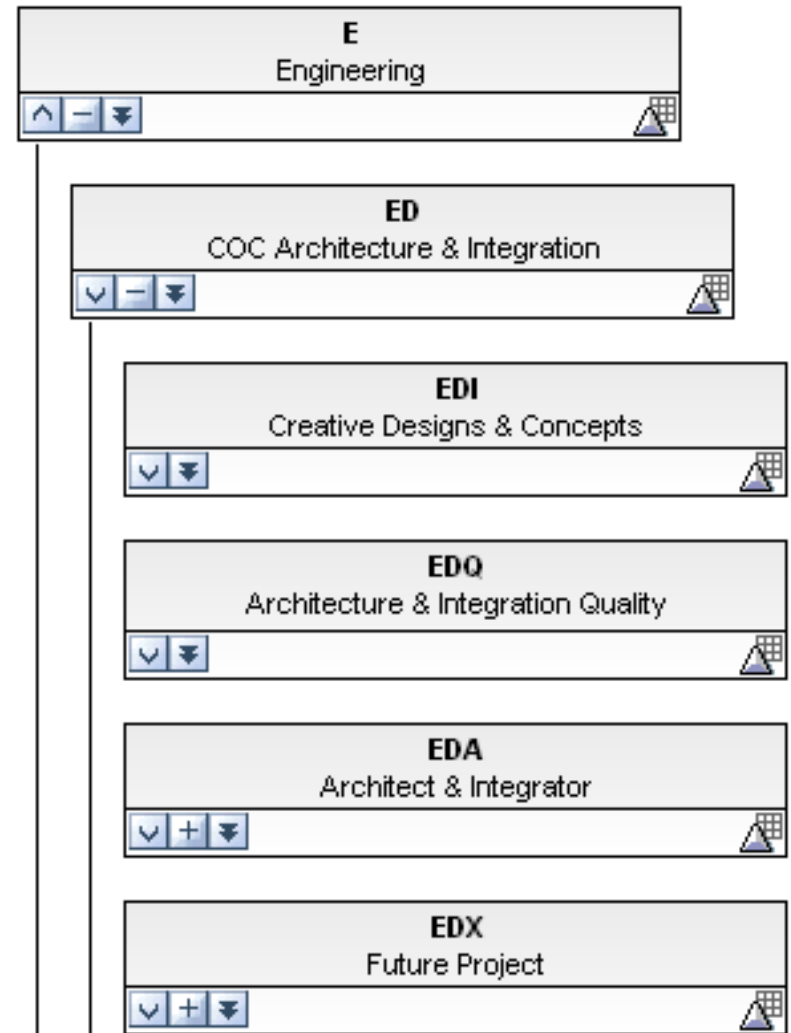- Airbus (Pumacy) + PhD
- DIN member

Industrial knowledge organization cases
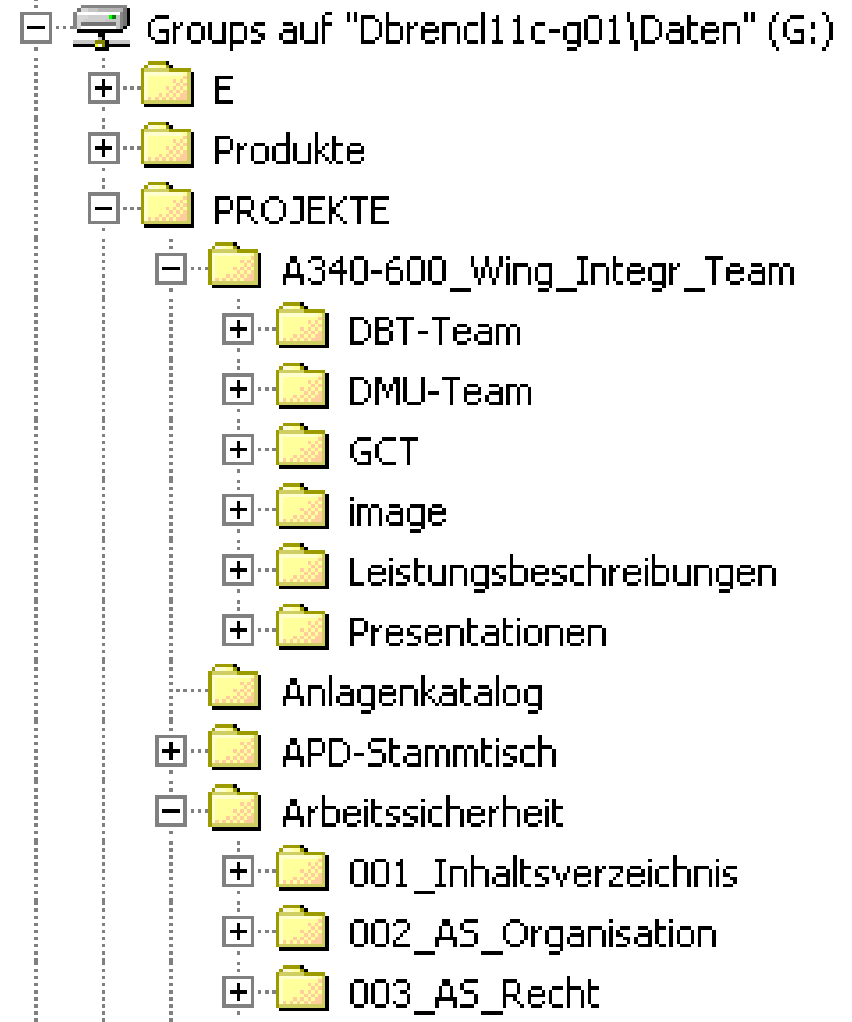
- Skill catalogs
- Competence management

Industrial knowledge organization cases

• Organizational structure

Industrial knowledge organization cases

- File directories
- Shared folders

Industrial knowledge organization cases

- DMS

Industrial knowledge organization cases

- Knowledge maps

Industrial knowledge organization cases

- Corporate Encyclopedia
- Acronym tables

Term Data Sheet

TERM	Annotation
Definition	An annotation supports detailed information pictures. It summarises all relevant knowle Annotations should use generic headings to ICARE forms in the MOKA methodology.
Status	For information
Domains (Sub-domains)	
Source of definition	EOMMW, KM UK team
Remarks	
Glossaries	Knowledge Capture

All Abbreviations
(✅ Approved and ⓘ For Info)

A B C D E F G H I J K L M N O P Q R S T U V W X Y

Abbr ▾	Status ▾	Usage ▾	Full Form ▾	Remarks ▾
A	✅	General	Amber	
A	ⓘ	None	Air	
A	ⓘ	None	Alternate	
A	ⓘ	None	Area	
A-D	ⓘ	None	Airbus Deutschland	
A-E	ⓘ	None	Airbus Espana	
A-F	ⓘ	None	Airbus France	

Industrial knowledge organization cases

• Search engines

Industrial knowledge organization cases

- Web sites

Industrial knowledge organization cases

• Book / complex documents

Public/academic knowledge organization cases

- Ontologies / AI
  - Semantic web
  - Software agents
  - Expert systems

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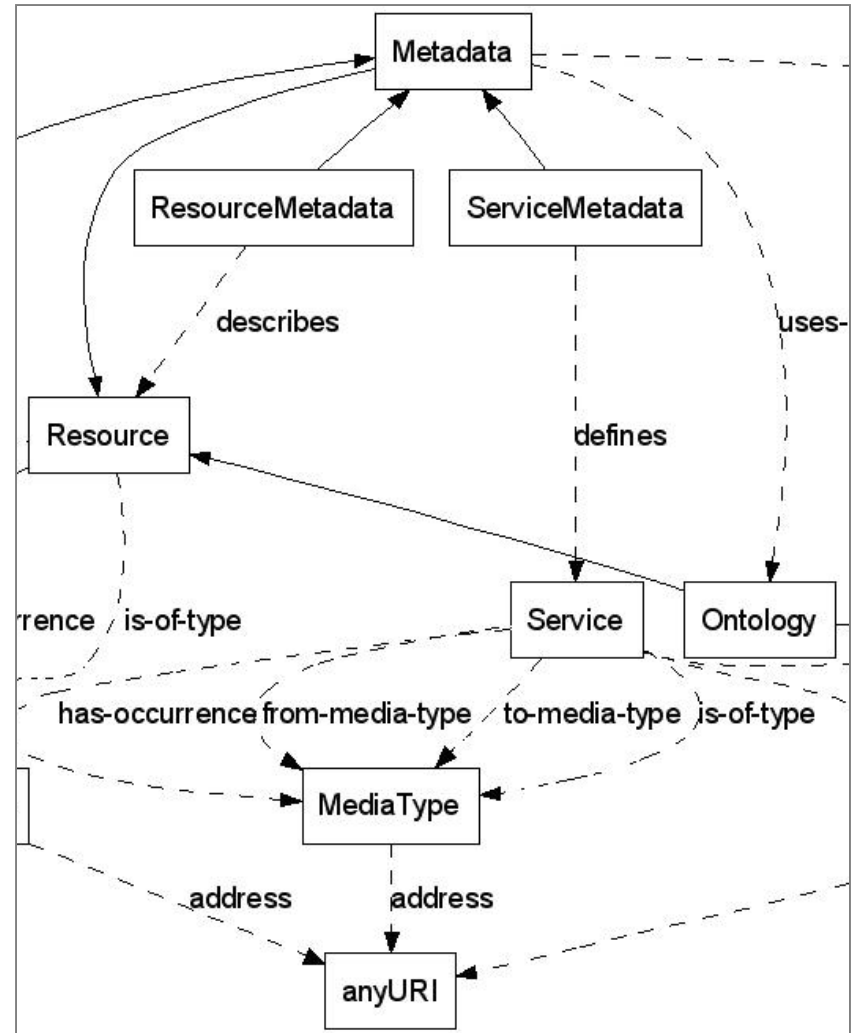
Public/academic knowledge organization cases
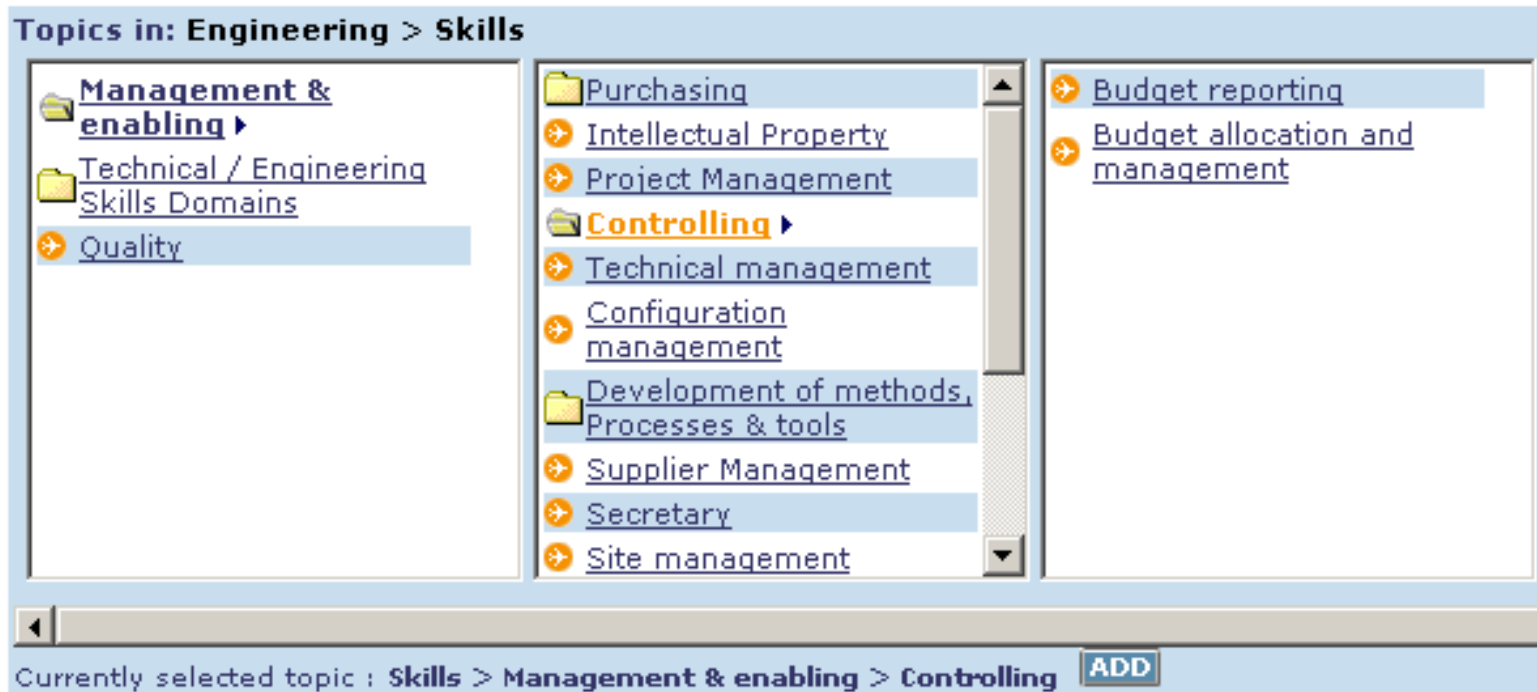
- Libraries
- Archives
- Museum

Title:	Der **Alchimist** : Roman / Paulo
Author:	Coelho, Paulo *1947-*
Other persons:	Swoboda Herzog, Cordula
Published:	Zürich : Diogenes, 1996
Extent:	172 S. ; 19 cm
Uniform title:	O alquimista <dt.>
ISBN:	3-257-06126-9
Subject heading:	*Nordafrika / Hirt / Belletristisc
Subject:	18.33 Spanische Literatur auße
	18.38 Portugiesische Literatur
	17.97 Texte eines einzelnen Au
Abstract:	Der lateinamerikanische Autor b

Industrial knowledge organization cases

• Knowledge management tools

→ Thesaurus often not appropriate or a discussable choice

To be shown …

1. There are knowledge gaps:
   – Orientation for choosing the "right" vocabulary type and the "right" knowledge organization approach
   – Guidelines for constructing and maintaining content of vocabularies other than thesauri

2. It is worth filling these knowledge gaps:
   – Part 3 of BS 8723 made first steps
   – Internationalization (ISO 25964) is a chance
   – Beneficial for new + traditional audiences

Vocabulary types & construction techniques

- Vocabulary types:
  - Lists
  - Synonym rings
  - Classification schemes
  - Business classification schemes
  - Taxonomies
  - Ontologies
  - Topic Maps
  - Thesauri

- Alternatives*:*
  - Folksonomies
  - Free-Text

- Construction techniques:
  - Reuse & Merging
  - „Manual" structuring
  - Collaborative structuring
  - Automatic structuring (scanning, clustering, etc.)

Need for guidance

Coverage of existing thesaurus standard

Vocabulary control	BS 8723-2
Term form	BS 8723-2
Structural relationships	BS 8723-2
Multi-word terms	BS 8723-2
Classification of terms	BS 8723-2
Multilingualism	**BS 8723-4**
Presentation and layout	BS 8723-2
Management aspects	BS 8723-2
Updating issues	BS 8723-2
Requirement of management software	BS 8723-2
Interoperability between vocabularies	**BS 8723-4**
Interoperability with applications	**BS 8723-5**
Methods for construction	BS 8723-2
Formal language for description	SKOS

Std. avail.	Other Std. avail.

Comparison with other standards

	Thesaurus	Ontologies
Vocabulary control	BS 8723	Paper/Books
Term form	BS 8723	–
Structural relationships	BS 8723	Paper/Books
Multi-word terms	BS 8723	–
Classification of terms	BS 8723	–
Multilingualism	BS 8723	–
Presentation and layout	BS 8723	Paper/Books
Management aspects	BS 8723	–
Updating issues	BS 8723	Paper/Books
Requirement of management software	BS 8723	Paper/Books
Interoperability between vocabularies	BS 8723	Paper/Books
Interoperability with applications	BS 8723	Paper/Books
Methods for construction	BS 8723	Methontology
Formal language for description	SKOS	RDF, OWL, DAML+OIL

	Std. avail.		Other Std. avail.		Literature, paper avail.		Nothing avail.

Transferability

- "Roughly" transferable, but not directly
  - Interpretation of hierarchy
  - Semantic concepts
  - Purposes / application areas

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Content of Part 3 in BS 8723

Part 3 … "Vocabularies other than thesauri"

- *Differences* thesauri vs. other vocabularies
  - Vocabulary control / semantic concepts
  - Treatment of hierarchy
  - …

→ BS 8723 remained thesaurus-focused

→ Part 3 = "detour" from thesauri

Options for encountering the knowledge gap

1. Separated standards with a comparison to other vocabularies ("Part 3") each
2. Separated standards and a general vocabulary guide ("Part 3")
3. One universal standard

Benefits

- Valuing up current standard
- Enrichment for original audience: Alternatives
- Attracting new target groups
- Bridging communities
- Keeping (and amending) today's content
- Strengthening "knowledge organization" as professional discipline
- More precise differentiation of vocabularies

Challenges

- Different communities
- Few people with deep knowledge and experience
- Considerable effort
- Often treated as "secondary topic" at industry
- Different *real* usage of existing vocabularies *today*

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THANK YOU FOR YOUR ATTENTION

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