

A ~~UKOLN~~ ^{personal} perspective on Knowledge Management

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What is KM?

http://en.wikipedia.org/wiki/Knowledge_management

- wide range of definitions!
 - *the organization, creation, sharing and flow of knowledge within organizations*
 - ...
 - *a marketing term to help sell database products*
- ‘knowledge’ is in people’s heads
- we facilitate ‘knowledge sharing’ through exchange of ‘information’
 - therefore, KM is some combination of ‘information management’ and ‘people/process management’?

Wilson, T.D. "The Nonsense of 'knowledge management'" *Information Research*, 8(1), paper no. 144
<http://InformationR.net/ir/8-1/paper144.html>

UKOLN perspective...

- ... on 'information management' comes largely from
 - development and use of metadata standards (Dublin Core, LOM, MARC, eGMS, etc.)
 - experience of Knowledge Organisation Systems (particularly from library world)
 - understanding of XML, RDF and the Semantic Web
 - application of these technologies in 'real world' developments like the JISC Information Environment, the Resource Discovery Network, the ePrints UK and eBank UK projects, and so on...

Knowledge organisation

- Knowledge Organisation Systems
 - classification schemes, thesauri, controlled vocabularies, ontologies
- many/most KOS grew up in a pre-Internet era
- need to be made more usable in the context of the ‘semantic Web’
 - assignment of unique URIs to concepts
 - availability of machine-readable concept definitions (and relationships to other concepts) at those URIs
 - e.g. using RDFS, OWL, ‘SKOS Core’

Power to the people?

- availability of KOS on the (semantic) Web may change their nature
- allows easy integration with community-driven ontologies (e.g. folksonomies)
- may make formal KOS more folksonomy-like
- for example:
 - if the whole of Dewey is available on the Web (with each concept having a unique URI) then I can easily pick and choose the bits I want and, more importantly, I can build extra bits around it

JISC IE

<http://www.ukoln.ac.uk/distributed-systems/jisc-ie/arch/>

- a framework for ‘resource discovery’ based on cross-searching and metadata harvesting – supported by exchange of ‘simple’ metadata in the form of ‘simple DC’, ‘RSS 1.0’ and ‘IEEE LOM’
- limited explicit links with KOS
 - ∴ limited ‘information management’ utility
- however, underlying technologies (e.g. OAI-PMH) can be used to exchange richer metadata – qualified DC, RDF, etc.
 - support machine-readable links with KOS concepts

Conclusions

- to facilitate richer ‘information management’ functionality...
 - need to assign URIs to KOS concepts
 - need to make machine-readable concept definitions available at those URIs
 - SKOS Core provides a good basis for this
 - need to exchange ‘widely understood’ metadata about stuff that includes machine-readable links to KOS concepts
 - the ‘Dublin Core Abstract Model’ (and its encodings in RDF and XML) provides a good basis for doing this

<http://dublincore.org/>
<http://dublincore.org/documents/dcmi-terms/>
<http://dublincore.org/documents/abstract-model/>