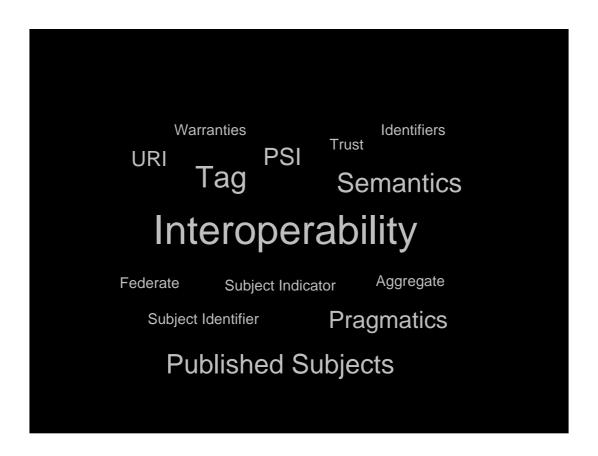
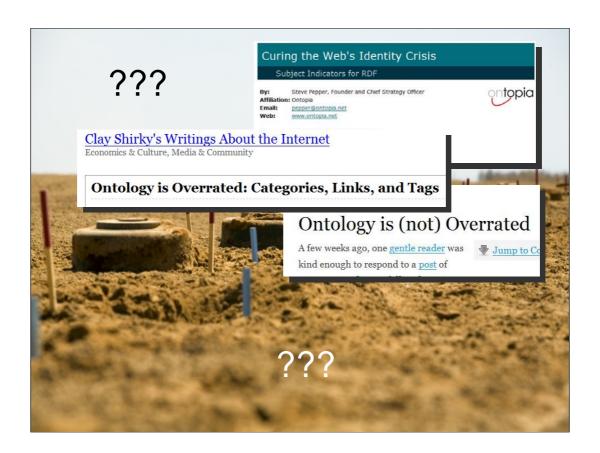




(photo: http://www.stockxpert.com/browse.phtml?f=view&id=371216, diego cervo) On stepping into mine fields



The mine field "tag cloud"



(photo: http://www.stockxpert.com/browse.phtml?f=view&id=371216, diego cervo)

On tags and folksonomies vs "just" URIs vs PSIs

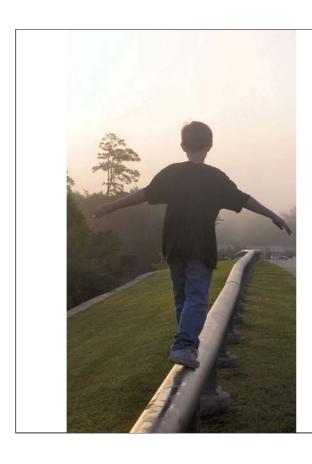
http://www.ontopia.net/topicmaps/materials/identitycrisis.html

http://www.shirky.com/writings/ontology_overrated.html

http://biblioklept.wordpress.com/2007/02/18/ontology-is-not-overrated/

http://www.peterme.com/archives/000558.html

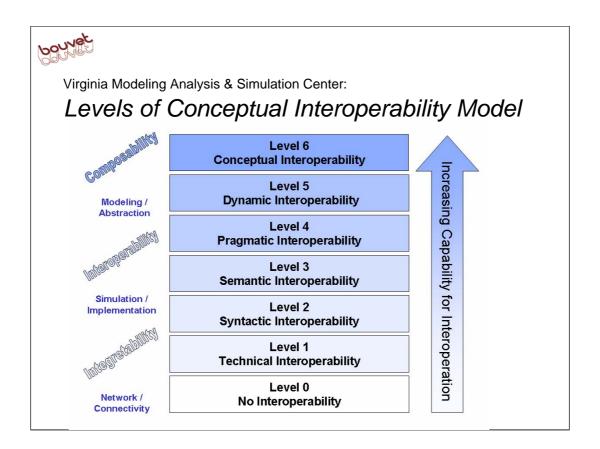
http://tomgruber.org/writing/ontology-of-folksonomy.htm



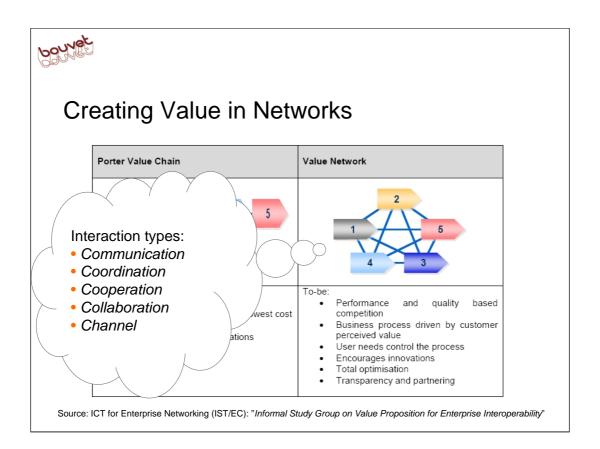
Usefully augment human endeavor

(photo: http://www.sxc.hu/photo/798034 by Stacy Braswell)

[&]quot;Tags are cheap" (D. Weinberger), but sometimes we can benefit from a little more investment and commitment...

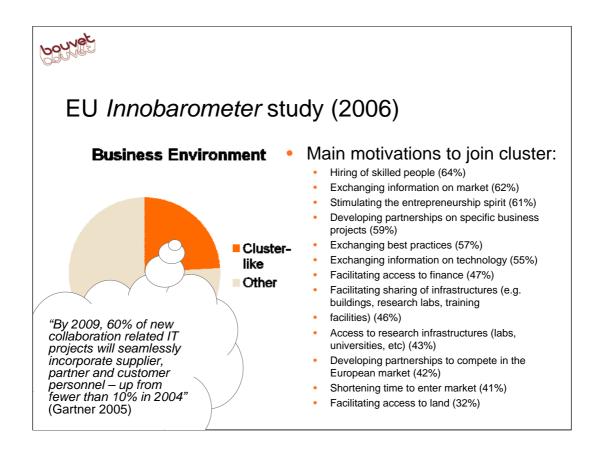


http://en.wikipedia.org/wiki/Conceptual_interoperability
Putting semantic interoperability into context
Useful framework for discussing solutions

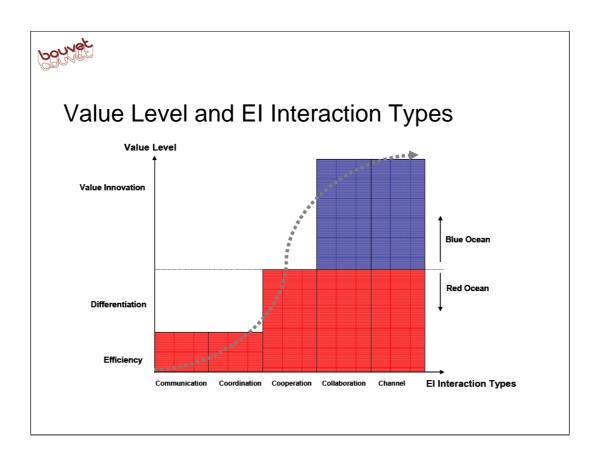


The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today

How the Porter Value Chain has been applied everywhere, and overemphasized the focus on cost cutting (efficiency) vs other ways to create value

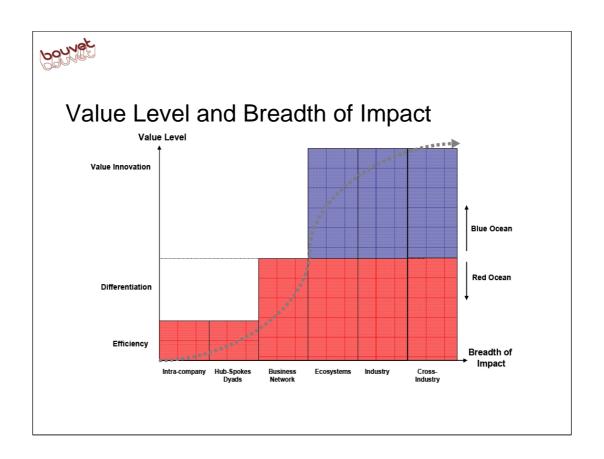


The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today



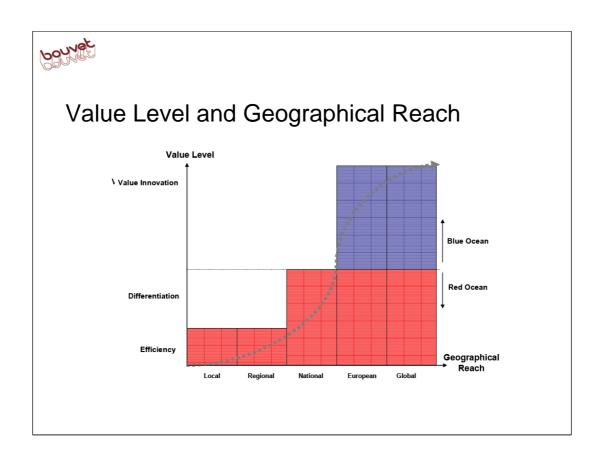
The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today

On classic "red ocean" (Porter) and increasingly important "blue ocean" strategies and value creation



The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today

On classic "red ocean" (Porter) and increasingly important "blue ocean" strategies and value creation



The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today

On classic "red ocean" (Porter) and increasingly important "blue ocean" strategies and value creation

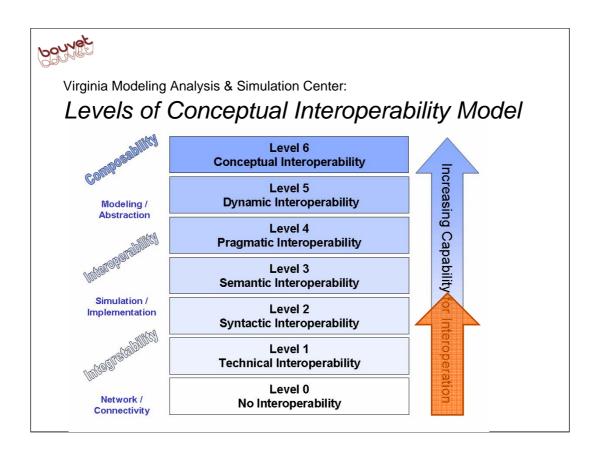


(photo: http://www.stockxpert.com/browse.phtml?f=view&id=779417) http://cordis.europa.eu/ist/ict-ent-net/isg.htm

The business case for when and why we want to enable interoperability all the way up to LCIM level 6, and not only level 2, which is the norm today

On top down management considered harmful, and how it influences IT systems

On the need to support a talented and competent workforce with IT in useful ways

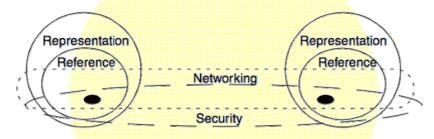


http://en.wikipedia.org/wiki/Conceptual_interoperability
On where we are today and what IT is expected to support



Interoperability Domains for LCIM Level 1-3

 A distributed system, even if the goal is transparency, has several co-existing domains of interoperability



 A domain is a set of objects sharing a common characteristic or abiding by common rules.

Source: OMG CORBA 2.3 Architecture & Specification (through Stu Charlton)

14

(from http://www.slideshare.net/StuC/oopsla-2007-the-web-distributed-objects-realized/)

Here: Focusing on the reference domain only

On the value of being able to reference globally, and the value of URIs (and URLs)

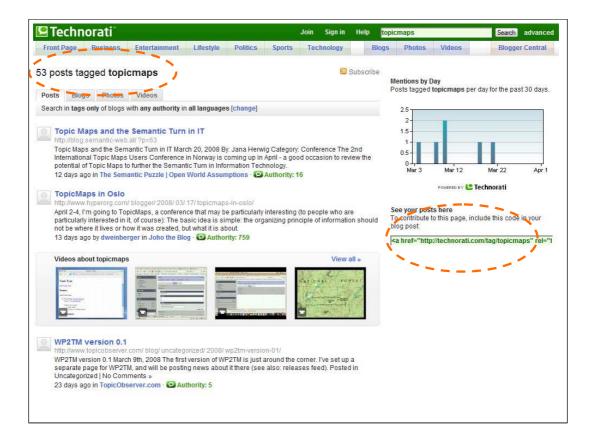
•BEA Confidential •14



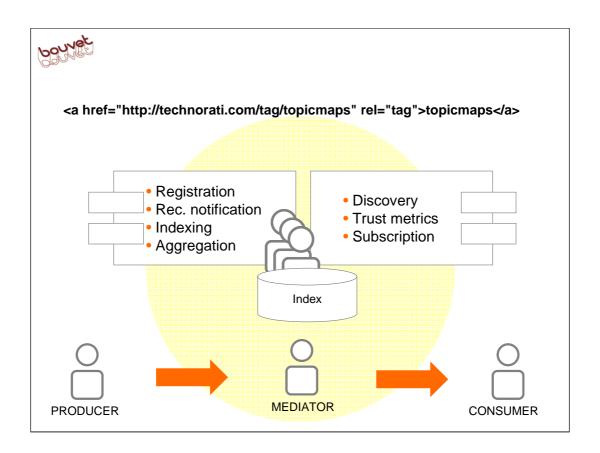
(from: http://www.hyperorg.com/blogger/)

On tags as local and very lightweight subject indicators and identifiers

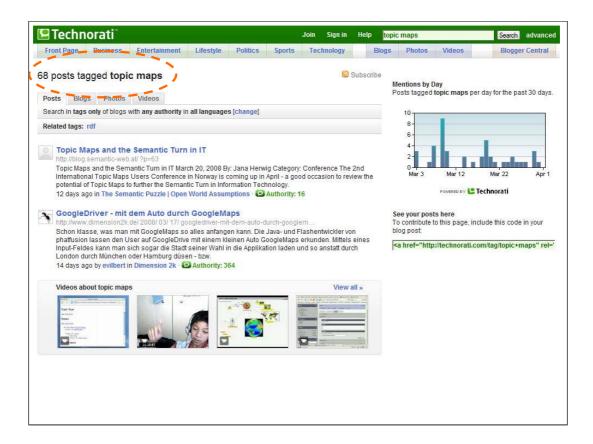
On adding value and commiting a little more by using the shared address space of a central aggregator rather than a local one



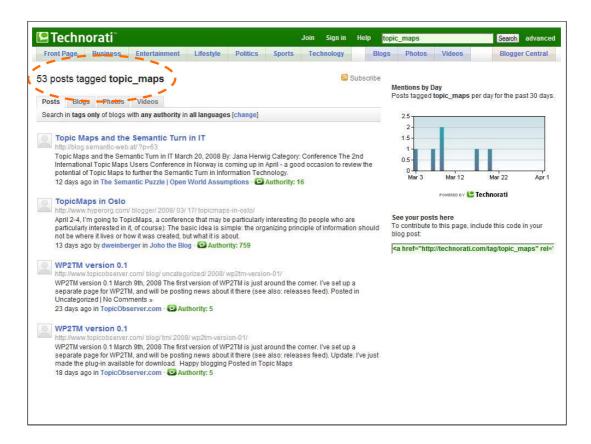
http://technorati.com/tag/topicmaps



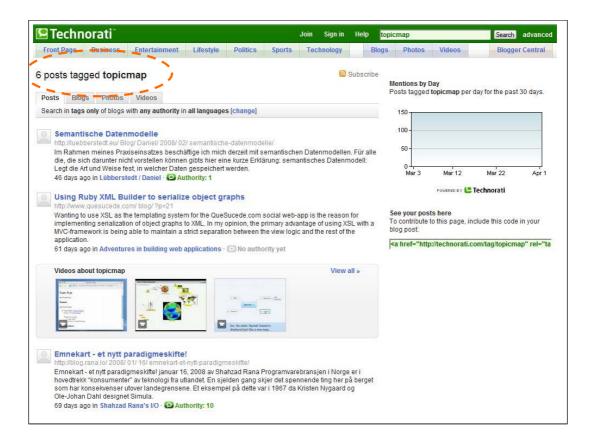
http://microformats.org/wiki/reltag
Quick Technorati intro



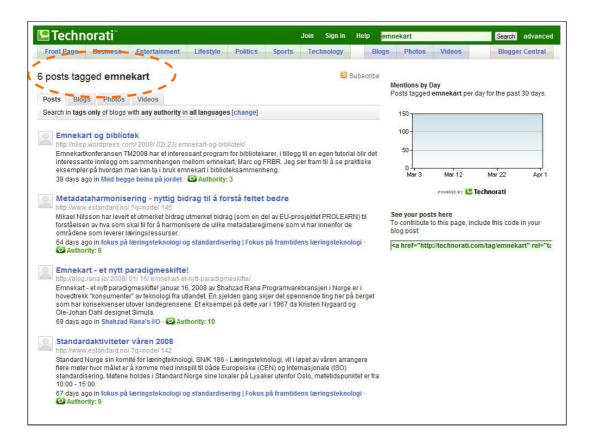
http://technorati.com/tag/topic+maps



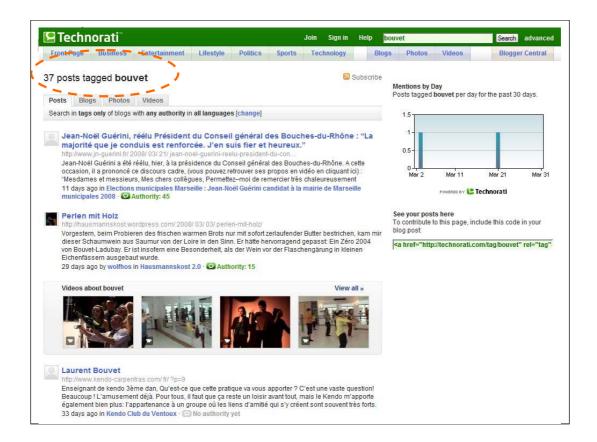
http://technorati.com/tag/topic_maps



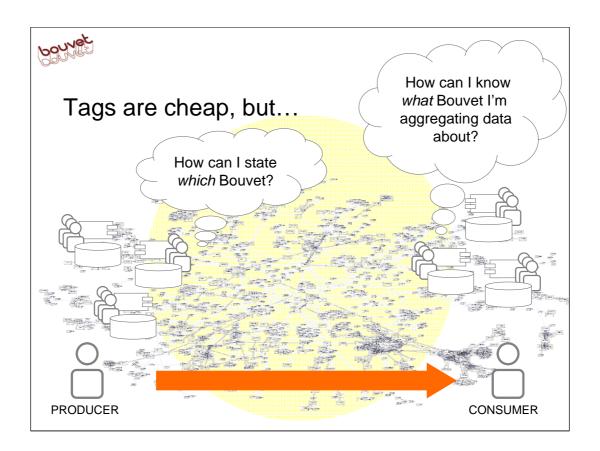
http://technorati.com/tag/topicmap



http://technorati.com/tag/emnekart



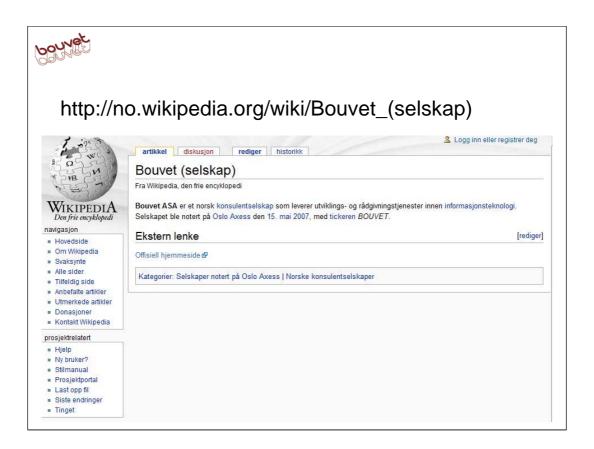
http://technorati.com/tag/bouvet
On the need for disambiguation



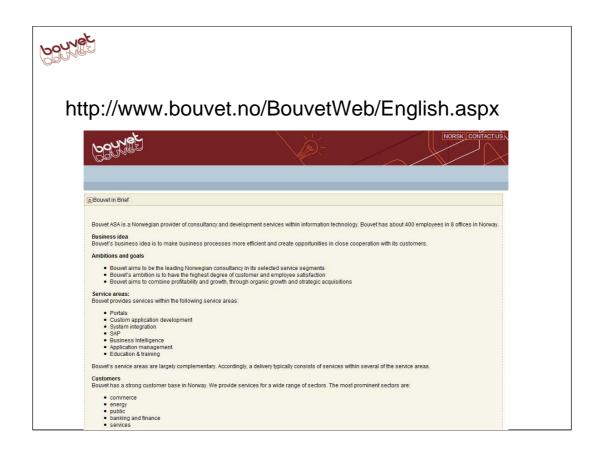
More on the need for disambiguation, more precision, more commitment (warranties, trust)

(photo: http://www.sxc.hu/photo/958915)

On the need for addressing "out of the digital domain" – subjects that are not addressable digital resources



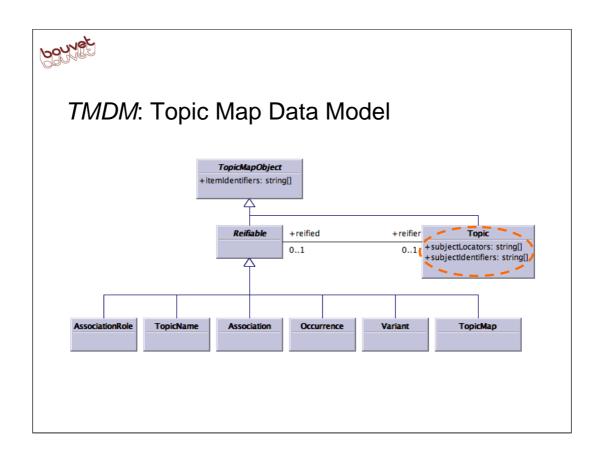
On Wikipedia for subject indication



On home page for subject indication

(photo: http://www.sxc.hu/photo/958915)

On the problem of using addressable digital resources like a web page for subject indication – do we mean the web page itself?

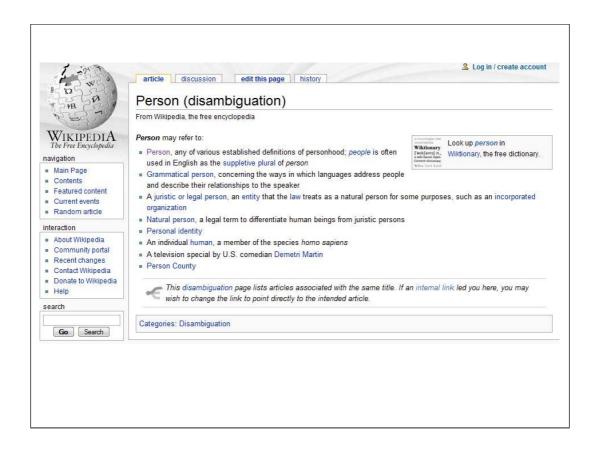


http://www.isotopicmaps.org/sam/

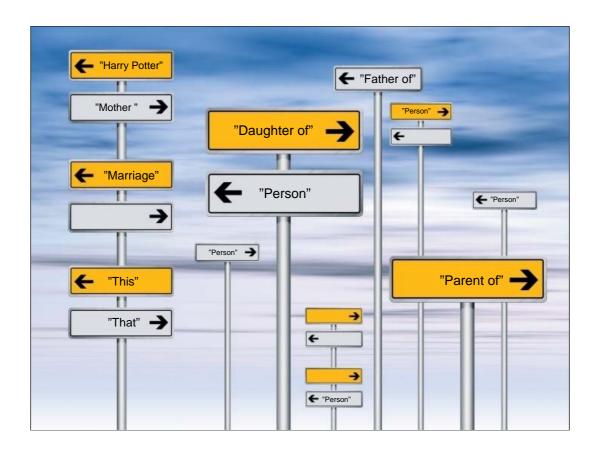
How TMDM handles the distinction between adressable digital resources and non-adressable subjects based on indication



Possible subject indicator, but is this really what you mean?



Wikipedia on different definitions of the subject "person"



(photo: http://www.stockxpert.com/browse.phtml?f=view&id=842344) On the need for "bottom up" subject indication and identification



OASIS TC: Published Subjects - Requirements

- 1. A Published Subject Identifier must be a URI
- 2. A Published Subject Identifier must resolve to an human-interpretable Published Subject Indicator
- 3. A Published Subject Indicator must explicitly state the unique URI that is to be used as its Published Subject Identifier

Source: OASIS Published Subjects Technical Committee Recommendation, 2003-06-24

http://www.oasis-open.org/committees/download.php/3050/pubsubj-pt1-1.02-cs.pdf



OASIS TC: Published Subjects - Recommendations

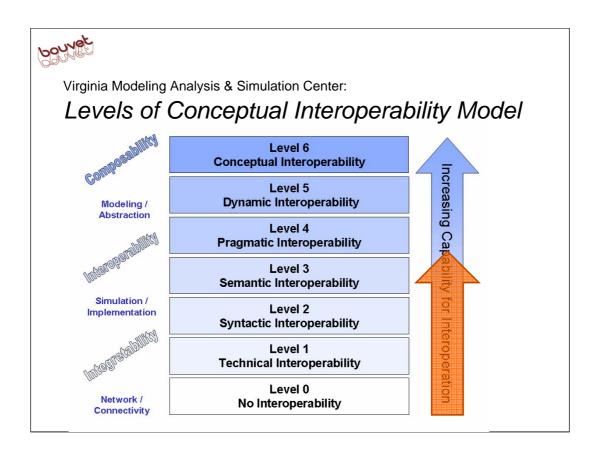
- 1. A Published Subject Indicator should provide humanreadable metadata about itself
- 2. A Published Subject Indicator may provide machineprocessable metadata about itself
- 3. Metadata defined in Recommendations 1 and 2 should be consistent, but need not necessarily be equivalent
- 4. A Published Subject Indicator should indicate that it is intended to be used as a PSI
- 5. A Published Subject Indicator should identify its publisher

Source: OASIS Published Subjects Technical Committee Recommendation, 2003-06-24

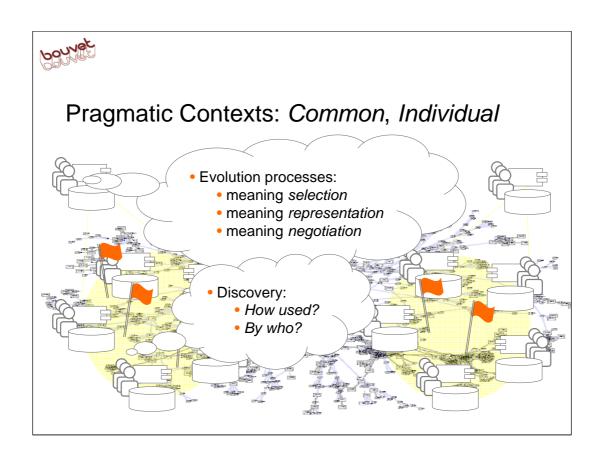
http://www.oasis-open.org/committees/download.php/3050/pubsubj-pt1-1.02-cs.pdf



http://psi.ontopedia.net/Topic_Maps
A simple example of a published subject



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

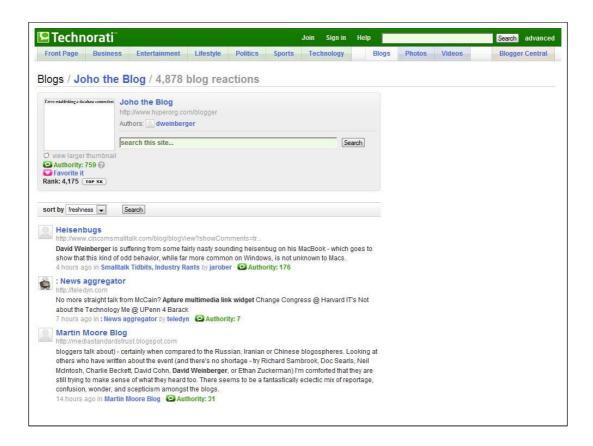


http://en.wikipedia.org/wiki/Pragmatic_web

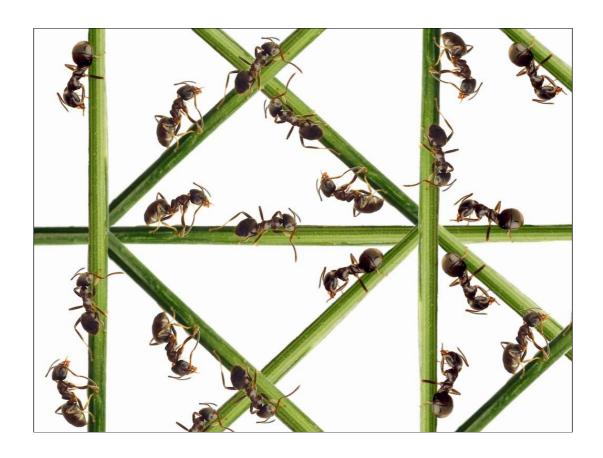
http://growingpains.blogs.com/home/2005/08/patterns_for_th.html

http://www.pragmaticweb.info/

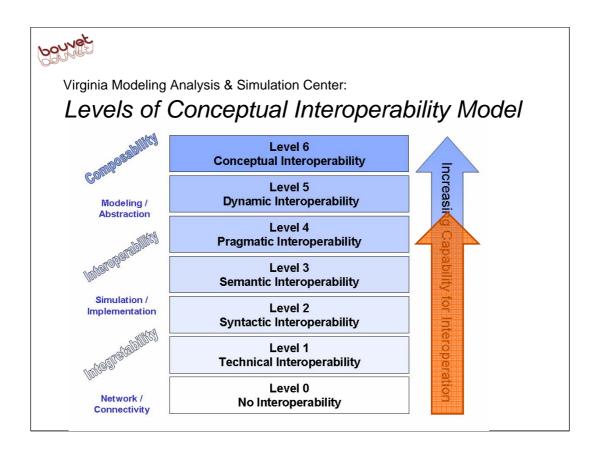
http://www.uni-hohenheim.de/wi1/Publikationen/2006/PragWebManifesto.pdf



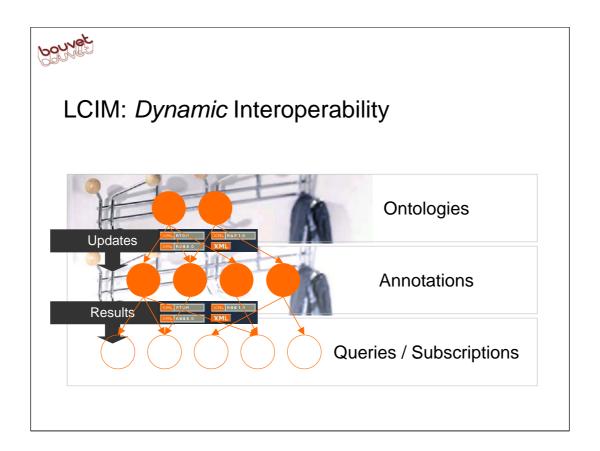
http://technorati.com/blogs/hyperorg.com%2Fblogger?reactions Authority, trust ("who is using it?"/"how is it used?") On the need for lookup services for subject identifiers



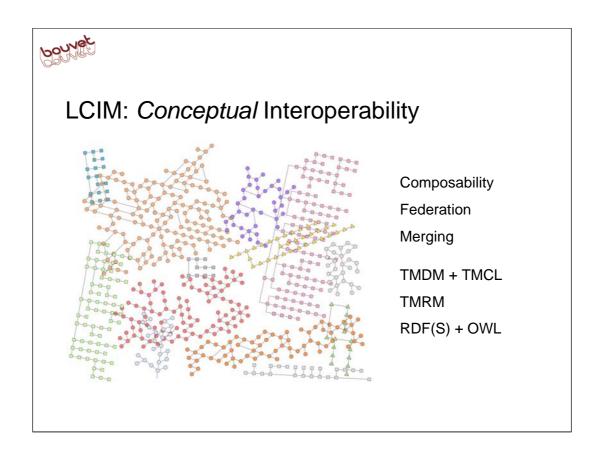
(photo: http://www.stockxpert.com/browse.phtml?f=view&id=793679)
http://tomgruber.org/writing/ (the concept of "snap to grid", 2006-2007)
On the need for services supporting "autocomplete" to ease reuse of identifiers



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

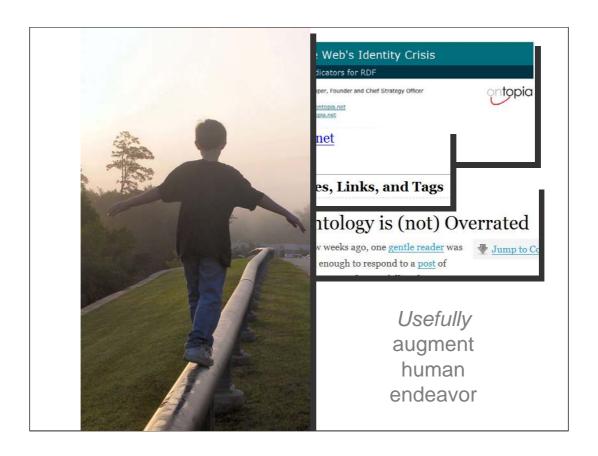


On the need for run time ontological updates, and a quick indication on how feed based notification and changes sets have been used for this in the Norwegian educational sector (Grep – the curriculum topic map for lower education)

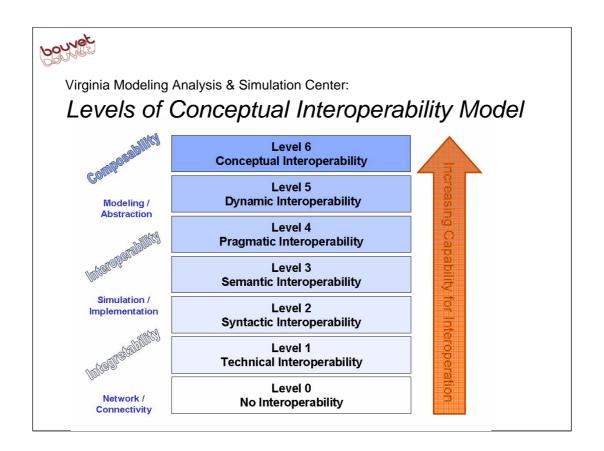


(Illustration: http://www.mkbergman.com/wp-content/themes/ai3/images/2007Posts/070515b_multiple_ontologies_jumbled.jpg , by Michael K. Bergman)

On how a certain few data models support run time composability (federation, merging)



(photo: http://www.sxc.hu/photo/798034 by Stacy Braswell) Summary of the scope of this presentation



http://en.wikipedia.org/wiki/Conceptual_interoperability Repeating the framework for discussing a possible solution



(photo: http://www.stockxpert.com/browse.phtml?f=view&id=129301 by Sun Jeng Tan) Wrong question! The business case shows that we absolutely need to make it fly...! Many pieces in place, and useable today, but with limitations...



Next...?

- Investigate richer published subject services
 - Discovery services (pragmatic interop)
 - How used?
 - By who?
 - Update services (dynamic interop)
 - Metamodel mappings (conceptual interop)
 - "Snap to Grid" widgets
- Good example cases to copy
- Businesses/eGov/communities to grab the opportunities!



Recommended Reading

- Various: "Conceptual interoperability"
 http://en.wikipedia.org/wiki/Conceptual_interoperability, incl. references.
- ICT for Enterprise Networking (IST/EC): "Informal Study Group on Value Proposition for Enterprise Interoperability" http://cordis.europa.eu/ist/ict-ent-net/isg.htm
- Jan L.G. Dietz: "Enterprise Ontology"
- Tom Gruber's 2006-2007 writings: http://tomgruber.org/writing/>