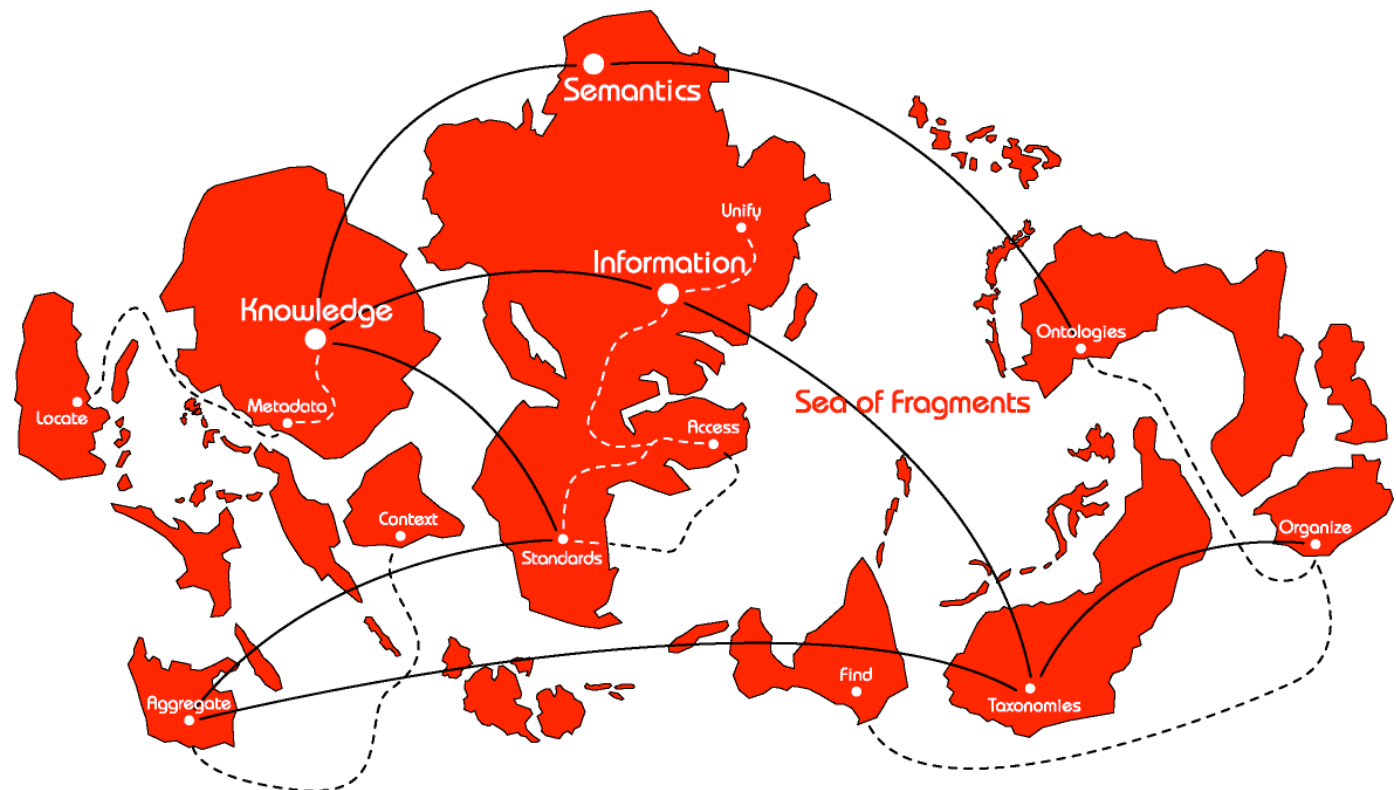# Web 2.0 and Topic Maps

Thoughts and Notes

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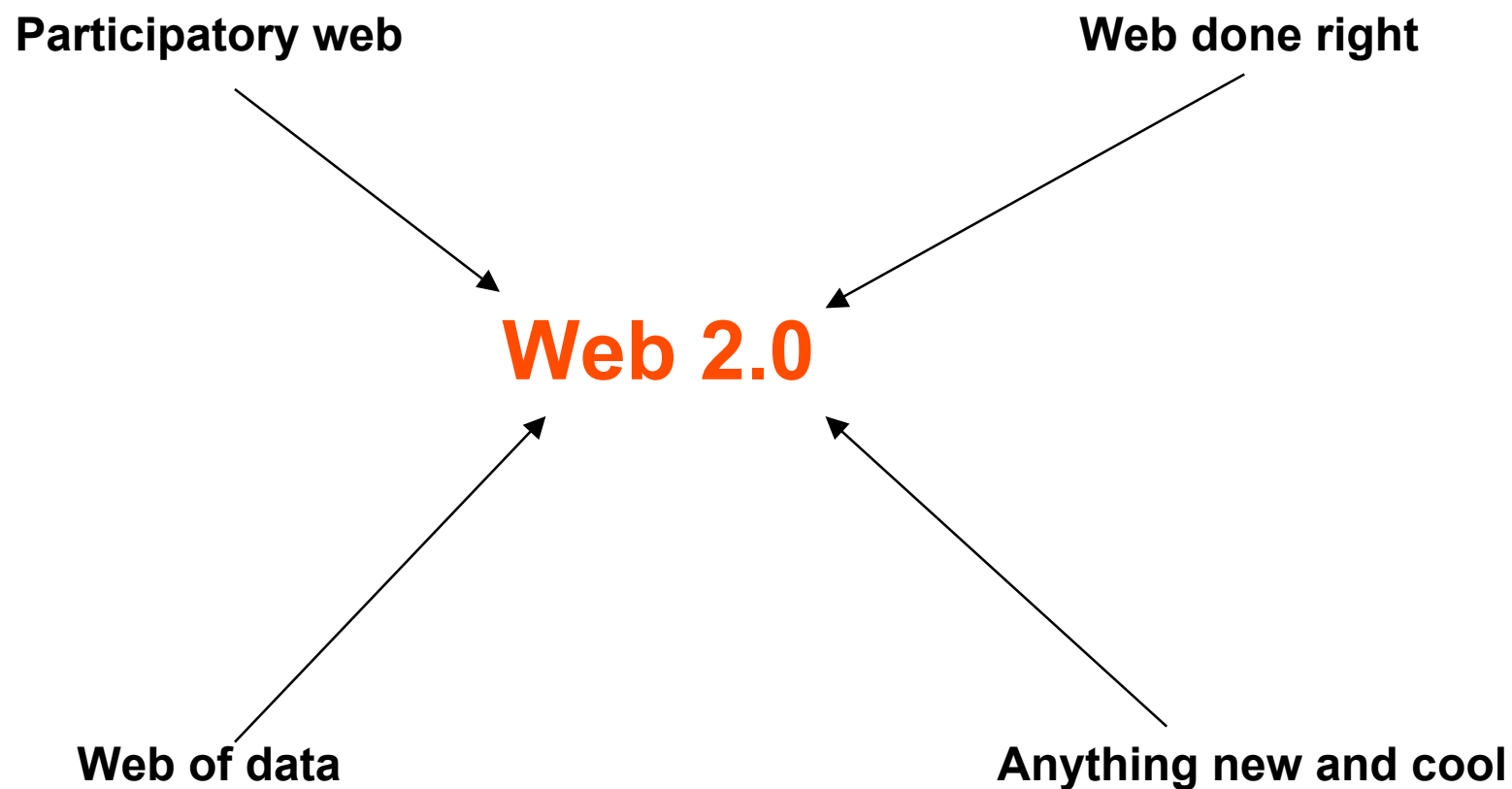
Emnekart.no

2007-02-25

Agenda

- **Web 2.0 - What is it?**

- **Web 2.0 and Topic Maps**

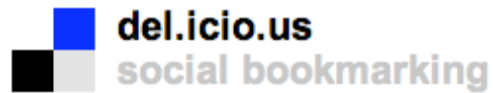- **Conclusion**

Web 2.0

What it is

Features

Web 2.0

- There is clearly a new wave of web applications

- These clearly have *something* in common

- This wave is often referred to as "Web 2.0"

- *But what is it?*

Definitions of Web 2.0

Participatory web

Web done right

Web 2.0

Web of data

Anything new and cool

Common examples of Web 2.0 sites

Common Web 2.0 features

- **AJAX**   **technology**
- **Wikis**   **technology**
- **Blogs**   **design pattern**
- **Comments**   **design pattern**
- **Voting**   **design pattern**
- **Tagging/folksonomies**   **technology (kind of)**
- **Trackbacks**   **design pattern**
- **User-contributed content**   **design pattern (kind of)**
- **Mashups**   **technology**
- **Web APIs**   **technology**
- **RSS**   **technology**

Web 2.0 - tentative conclusion

- **Web 2.0 is really the participatory web**
  - anyone can publish and interact with what's published
  - tends to form user communities with feedback loops

- **Other common features**
  - to succeed it must be "web done right"
  - if it succeeds it becomes "new and cool"
  - by being a "web of data" it allows developer participation, too

 http://www.ontopia.net/

"Harnessing Collective Intelligence"

- **This gets repeated a lot as a feature of Web 2.0 sites**
  - "The service automatically gets better the more people use it."

- **But more users doesn't necessarily improve the service**
  - it just makes the service reflect the views of more users
  - this may change the community behind the service, and thus the service itself
  - in some cases this may make the service *worse* for existing users
  - example: Digg.com refugees on reddit.com

Web 2.0 and other Webs

- **Web 1.0**
  - whatever the web was before
  - still goes on
  - many new sites are not Web 2.0 sites

- **Semantic Web**
  - vision of a future structured and intelligent web, based on RDF
  - not the same as the "web of data"
    - "semantics" here means "logic"
  - W3C people describe SW as "Web 3.0"
    - personally, I think it's "Web n+1"

- **Topic Maps**
  - not about the web at all
  - vision: "Seamless Knowledge"
  - could equally well support all three of the Webs

Web 2.0 and Topic Maps

Tagging and Folksonomies

Other features

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Web 2.0 features and Topic Maps

• AJAX	orthogonal
• **Wikis**	**similar**
• Blogs	orthogonal
• Comments	orthogonal
• Voting	orthogonal
• **Tagging/folksonomies**	**similar**
• Trackbacks	orthogonal
• Mashups	orthogonal
• Web APIs	orthogonal
• RSS	orthogonal
• User feedback loops	orthogonal

Wikis and Topic Maps

- **Wikis are subject-oriented content**
  - Wikinames are topics

- **Wikis emphasize text and images**
  - links are all unstructured

- **Topic Maps emphasize structure**
  - text/images are secondary

- **Combination could work *very* well**

Wikipedia example

Note how close this is to being a Topic Maps ontology.

In fact, this could be extracted automatically into a topic map...
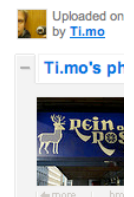
Tagging

- **Attaching keywords (tags) to resources**
  - blog postings
  - pictures
  - bookmarks
  - ...

- **Can be done by arbitrary users**
  - or by the publisher (in the case of a blog)

- **Tags are just phrases**
  - they get attached to resources, and that's it!
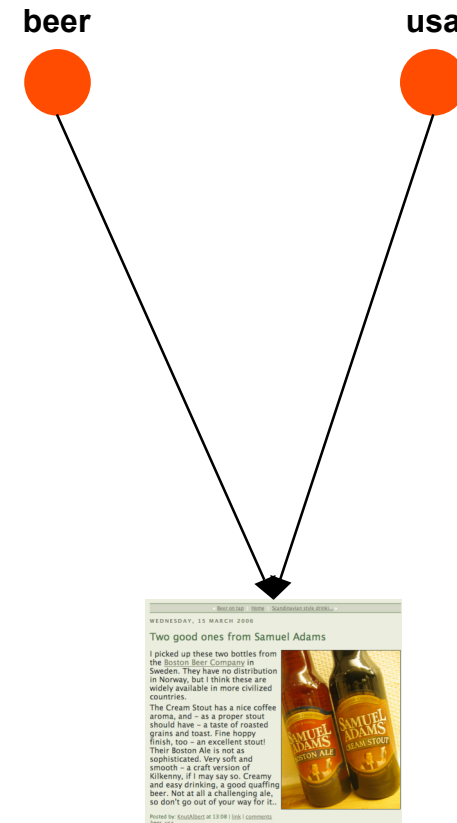 - ie: the tags are just a flat list

http://beerblog.motime.com

Tagging in Topic Maps

- **Representing tags**
  - create a topic type "tag"
  - for each tag, make an instance of this type
  - the tag becomes the name of the topic

- **Attaching a tag to a resource**
  - make the resource an occurrence of type "relevant-for" on the topic for that tag

- **Done!**

- **In other words**
  - tagging is Topic Maps without associations, scope, and internal occurrences

beer   usa

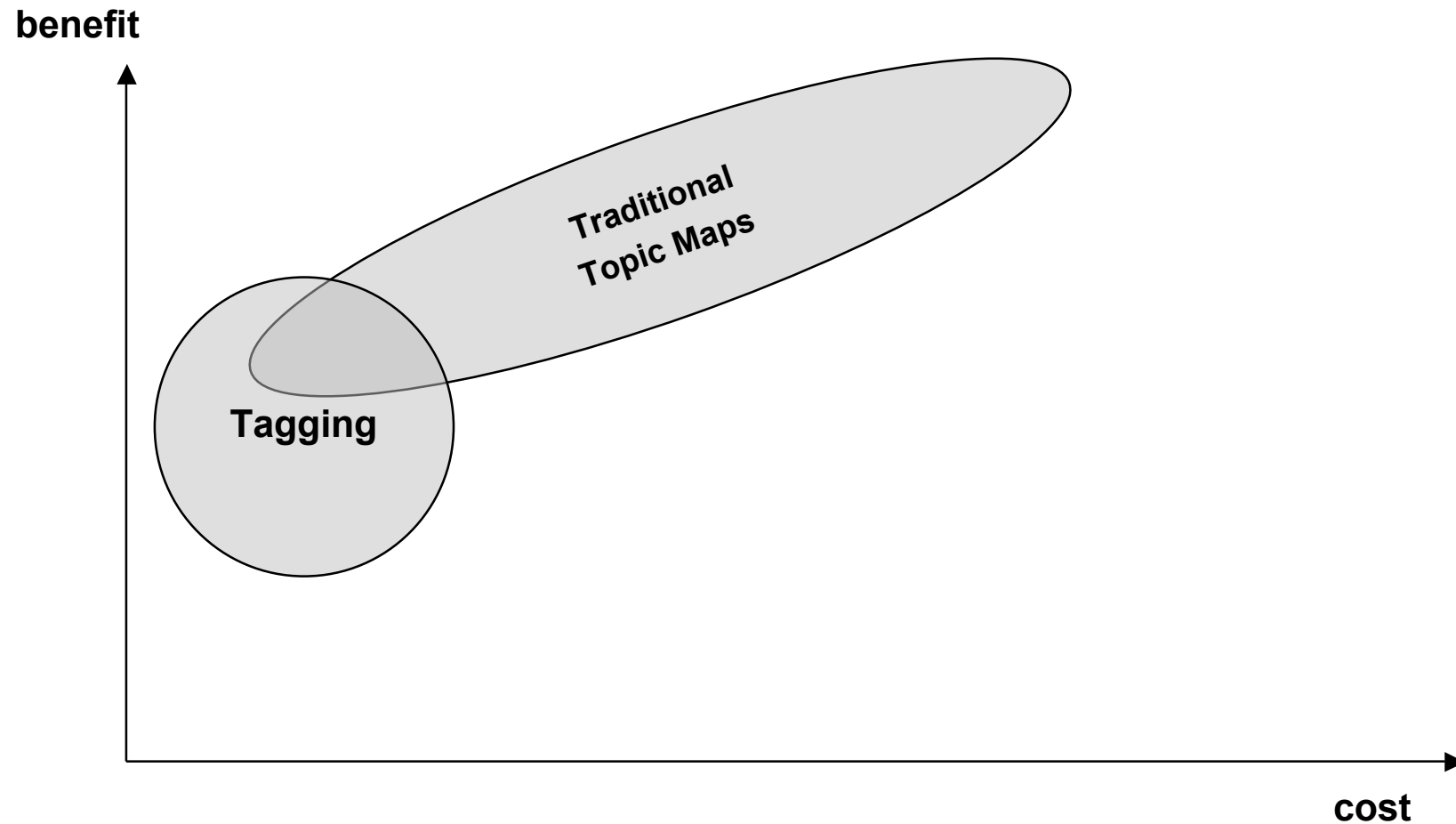http://beerblog.motime.com/sam-adams.html

Folksonomies

- **A folksonomy is a set of tags created by a distributed user community**
  - it's not just a set of tags
  - it was created by more than one user
  - it was created without editorial control

- **In other words**
  - del.icio.us and Flickr have folksonomies
  - the tags used by you on your blog are not a folksonomy

Tagging vs Topic Maps

benefit

Traditional
Topic Maps

Tagging

cost

Web 2.0 vs Topic Maps

- **Web 2.0 is mostly low on structure**
  - structure requires coordination between users, which is hard
  - tagging, voting, comments require no coordination

- **Topic Maps are all structure**
  - this means creators must collaborate to make it work
  - Wikipedia infoboxes show that this is possible in a Web 2.0 setting

- **Most Topic Maps sites are Web 1.0**
  - most of the web is Web 1.0
  - reflects what customers pay for

- **Web 2.0 is a lot about getting users to create the content for free**
  - requires content creation to be simple

Web 2.0-like Topic Maps applications

- **Topincs (Robert Cerny)**
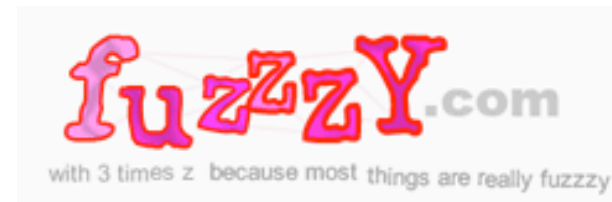 - groupware Topic Maps editor
  - AJAX application
  - http://www.cerny-online.com/topincs/

- **TMwiki (Hendrik Thomas)**
  - Topic Maps-based wiki system
  - more traditional web application
  - http://www.topic-maps.org/

- **Fuzzy.com (Roy Lachica)**
  - social bookmarking system
  - uses closed Topic Maps ontology
  - http://www.fuzzzy.com

- **BrainBank (Cerpus)**
  - e-learning system
  - not open or collaborative
  - http://www.brainbank.no