



Digital Content Management Standards for the Personalised Multilingual Web

Alexander O'Connor <Alex.Oconnor@scss.tcd.ie>


950,000 kindle books for sale

750,000,000 facebook users

Where do we stand with **Web 2.0**?

48 hours of video uploaded every minute

200 million tweets per day



“If web 2.0 could be summarized as interaction, web 3.0 must be about recommendation and personalization.”

- *Jemima Kiss, Guardian Feb 2008*



Your web history is limited to searches. [Expand your web history.](#)

Web History is paused

[Resume](#)

[Learn more](#)

All History

Web



Remove

Remove all Web History

Images

News

Products

Sponsored Links

Videos

Maps

Blogs

Books

Trends

Bookmarks

You have removed 2 items from your history.

Your search history is currently empty.

Web Activity

Sep 2011



S	M	T	W	T	F	S
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1

1 - 5 6 - 10 11 - 20 21+

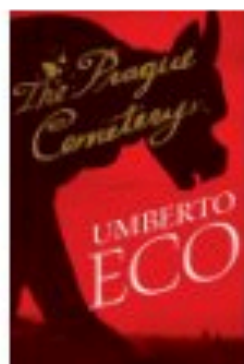
©2011 Google

[Google Home](#)

[Web History Help](#)
[Google](#)

[Privacy Policy](#)

[About](#)

amazon.com[Help](#) | [Close window](#)**Recommended for You****The Prague Cemetery**

by Umberto Eco (Author), Richard Dixon (Translator)

Our Price: \$16.58[Pre-order this item](#)[Add to Wish List](#)

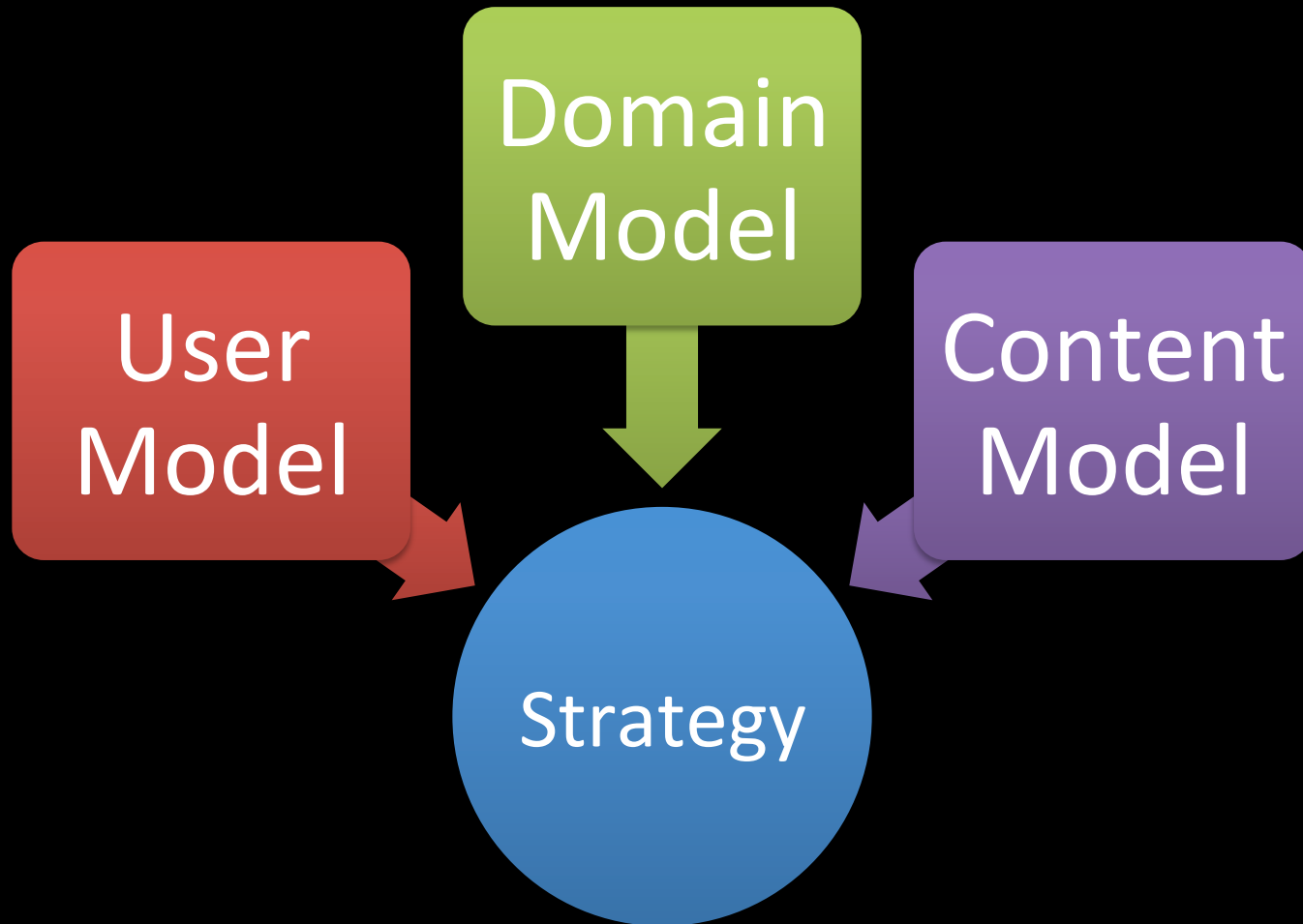
Rate this item

 I own it Not interested**Because your Wish List includes...****1Q84** (Hardcover)

by Haruki Murakami (Author), et al.

 Don't use for recommendations[Help](#) | [Close window](#)

Personalisation In a Nutshell



Knowledge Models	Collaborative Models
Rule-based	Item-based
Ontology-based	User-based



Content Standards

- XML

- Docbook
- DITA
- DC*

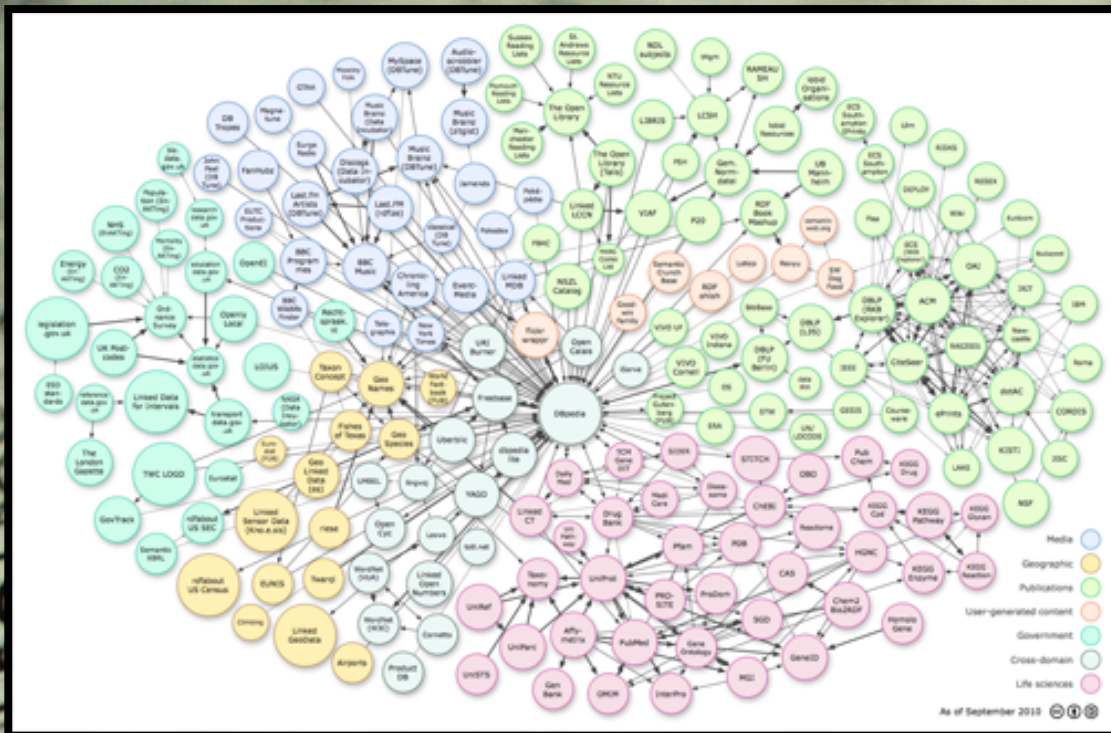
- HTML

- Microformats

- vCard
- hReview

- RDF

- RDFa
- FoaF
- DC*
- SIOC



schema.org

- Web History
- Clicks
- Search Terms
- Tweets / Status Updates
- Purchase History

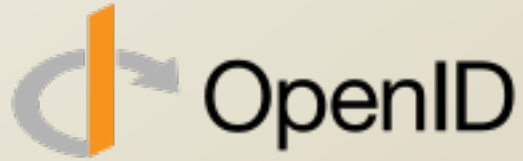
Implicit Model





Explicit Model

- Likes
- +1s
- Bookmarks
- Retweets
- Ratings
- Dislikes
- Interests

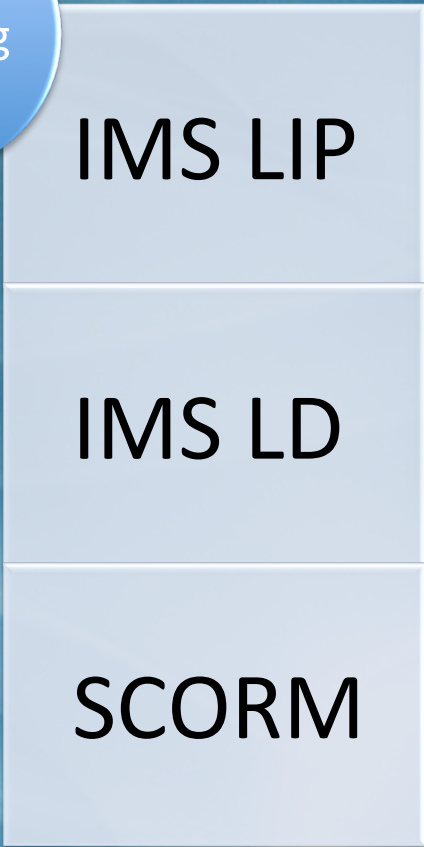


WebID

Attention
Data



Learning





DataPortability Project





Challenges and Opportunities

Randomised
Recommendation

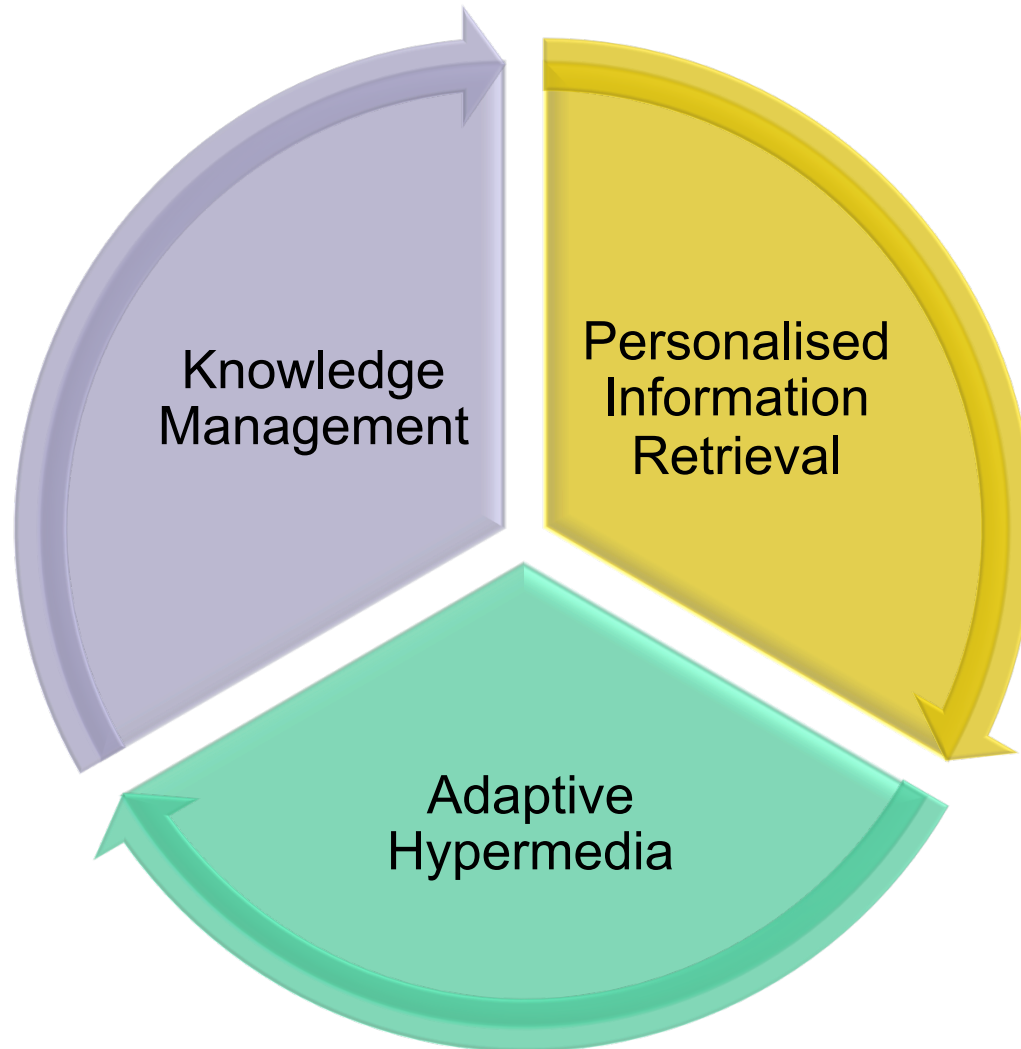
Internet Driving
Licence

Multilingual
Personalisation

Globalisation of
Content

Context

Digital Content Management Research



Sources

- Amazon Quaterly report to shareholders 2011 --
<http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NDMwNzUwfENoaWxkSUQ9NDQ4NDkxR5cGU9MQ==&t=1>
- Facebook Statistics --
<https://www.facebook.com/press/info.php?statistics>
- Youtube Statistics – http://www.youtube.com/t/press_statistics
- Twitter Statistics --
<http://blog.twitter.com/2011/08/weather-so-hot-right-now.html>
<http://blog.twitter.com/2011/08/your-world-more-connected.html>
- Product Quote
<http://www.metafilter.com/95152/Userdriven-discontent#3256046>
- Internet Driving License
<http://www.codinghorror.com/blog/2010/11/your-internet-drivers-license.html>

Photo Credits

- Audience at a Theatre <http://www.sxc.hu/photo/905436>
- Checkmate <http://www.sxc.hu/browse.phtml?f=view&id=288794>
- Books 4 <http://www.sxc.hu/browse.phtml?f=view&id=622757>
- Shoeprint <http://www.sxc.hu/photo/442696>
- CCTV <http://www.sxc.hu/photo/642388>
- Dollar <http://www.sxc.hu/photo/669930>
- Light Effects <http://www.sxc.hu/photo/454273>
- Application Form <http://www.sxc.hu/photo/478224>
- Fields <http://www.sxc.hu/photo/1174771>
- Outstretched <http://www.sxc.hu/photo/1224442>

Acknowledgements

This research is supported by the Science Foundation Ireland (Grant 07/CE/I1142) as part of the Centre for Next Generation Localisation (www.cngl.ie) at Trinity College Dublin.

