

IA 2.0

An Open Conversation about Context, Mobility and Semantics

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Design for Context

www.DesignForContext.com

An Exploration... A Discussion...

- > Setting the scene
- Part 1
 - Structured & dynamic data
 - Large, heterogeneous data
- Part 2
 - Mobile
 - Social



Why?

Setting the Scene



Web 1.0 (publish, relate)

IA 1.0

Web 1.5 (find, use, act)

UX

Web 2.0 (user-generate)

Web 2.5 (share real-time)

IA 2.0 ?

Now what?



The Context Web > Experience

- Data experience
 - Shareable structures
 - Open Linked Data
 - Models that represent data domains
 - Increasing number of tools for data display, translation and manipulation
- Design experience
 - · Flexible and fluid interactions
 - Platform independence and integration
 - Knowledge of users and their patterns of use
 - Methods focused on context and relevance-awareness

- Relevant
- Integrated
- Illuminating
- Personal
- Social
- Mobile
- Location-aware
- Situated
- Temporal
- Multi-modal



Flexibility as a Goal

- > The ability to easily manipulate an interface to respond to a user's situation and support user and organizational/societal goals
- Interaction is:
 - Seamless User goals and tasks are facilitated more easily, no matter what technologies and applications involved
 - Frictionless Data is free to move between applications and uses as needed
- The underlying model(s) that drive interaction are easily extended and changed - to remain relevant to users



Seeking the seamless and frictionless experience



Part 1

- Structured & dynamic data
- Large, heterogeneous data

Part 2

- Mobile
- Social

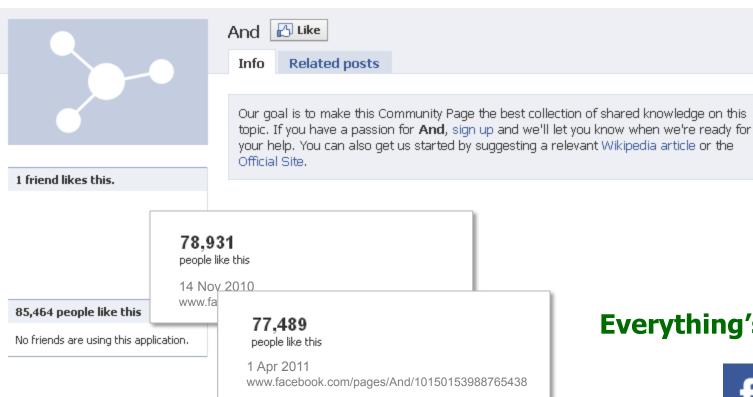




Relevance

Structured & Dynamic Data

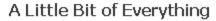




Everything's a topic now



OpenGraph





Music

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137,513 people like this

14 Nov 2010 www.facebook.com/pages/ A-Little-Bit-of-Everything/113683898648991





Google ...more structured data in results

Java SE Desktop Articles

Java SE provides everything you need to make your Swing apps swing, ... Understanding the Caret and Highlighter Interfaces in Swing's Text Package ... java.sun.com > Java Technology > Java SE - Cached - Similar

Swing (Java) - Wikipedia, the free encyclopedia

Swing is the primary Java GUI widget toolkit. It is part of Sun Microsystems' Java Foundation Classes (JFC) — an API for providing a graphical user ...

en.wikipedia.org/wiki/Swing (Java) - Cached - Similar

🛨 Show more results from en.wikipedia.org

Videos for swing



Savage - Swing 3 min - Feb 3, 2006 Uploaded by breathewithme youtube.com



Trace Adkins - Swing 4 min - Jun 14, 2007 Uploaded by CapitolNashville youtube.com

News for swing



Bautista emulating Aaron with strong swing - 23 hours ago

He's laying off some tough sliders down and away, which a lot of guys who are trying to hit everything will swing at those pitches. ...

MLB.com - 656 related articles CBC.ca.

Books for swing

Swing: A Mystery - Rupert Holmes - 2006 - 384 pages

Accompanying the novel is a CD of original songs and music that feature prominently in ...

Swing - Scott Yanow - 2000 - 514 pages

Covering the gamut from Duke Ellington to Big Bad Voodoo Daddy, this complete guide ...

Swing: a beginner's guide - Herbert Schildt - 2006 - 590 pages

In this fast-paced guide, master programmer and bestselling author Herbert Schildt ...

books.google.com



Google ...structured refinement

Evervthing

Videos

News

Books

Images

Shoppina

Maps

Blogs Updates

Discussions

Fewer

swing dance clothing swing dance songs swing dance moves salsa dance swing dance swing dance video swing dance history swing dance music swing dance steps swing soulja boy child swing hips swing baby swing swing swing sets

Any time Latest

Past 24 hours Past 2 days Past week Past month

Past year

Custom range...

All results

Nearby Custom Location

Standard view

Related searches Wonder wheel Timeline

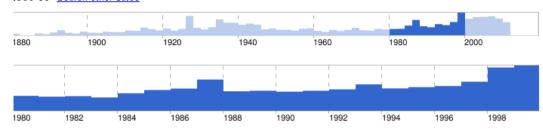
Standard results

Sites with images Fewer shopping sites More shopping sites Page previews



[imeline

1980-99 Search other dates



Page previews

Videos for swing dance



Fast Swing Dancing - ULHS min - Oct 3, 2006 Uploaded by lindyhop411 youtube.com



How to Swing Dance: Swing Dancing Combination ... 2 min - Apr 27, 2007

Uploaded by expertvillage youtube.com

Swing (dance) - Wikipedia, the free encyclopedia

"Swing dance" is a group of dances that developed concurrently with the swing style of jazz music in the 1920s, '30s and '40s, although the earliest of ...

Each local swing dance community has a distinct local culture and defines "swing dance" and the "appropriate" music to accompany it in different ways. ...

A strong tradition of social and competitive boogie woogie and rock'n'roll in Europe add these dances to their local swing dance cultures. ...

Forms of Swing - Competition, social dancing ... - See also en.wikipedia.org/wiki/Swing (dance) - Cached - Similar



Translated search

Translated results for **swing dance** - My language: English **v**

Language

Translated query

French X

danse swing - Edit

390,000 results

German 🔀

Swing tanzen - Edit

118,000 results

Spanish 🔀 Italian 🔀

la danza del oscilación - Edit

51,600 results 53,400 results

×

Swing Dance - Edit

Add language ▼

Related searches

swing soulja boy

Related searches for swing:

swing lyrics swing music swing sets java swing

swing savage swing song child swing swing dance steps

outdoor swing

swing dance

let me see your hips swing **baby** swing

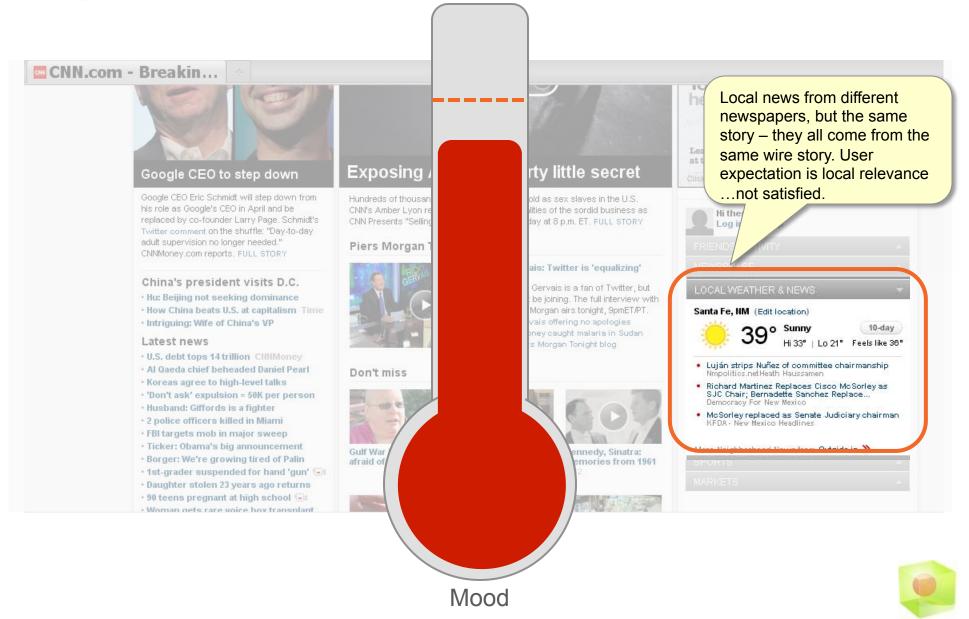
porch swing swing movie swingtown schwing

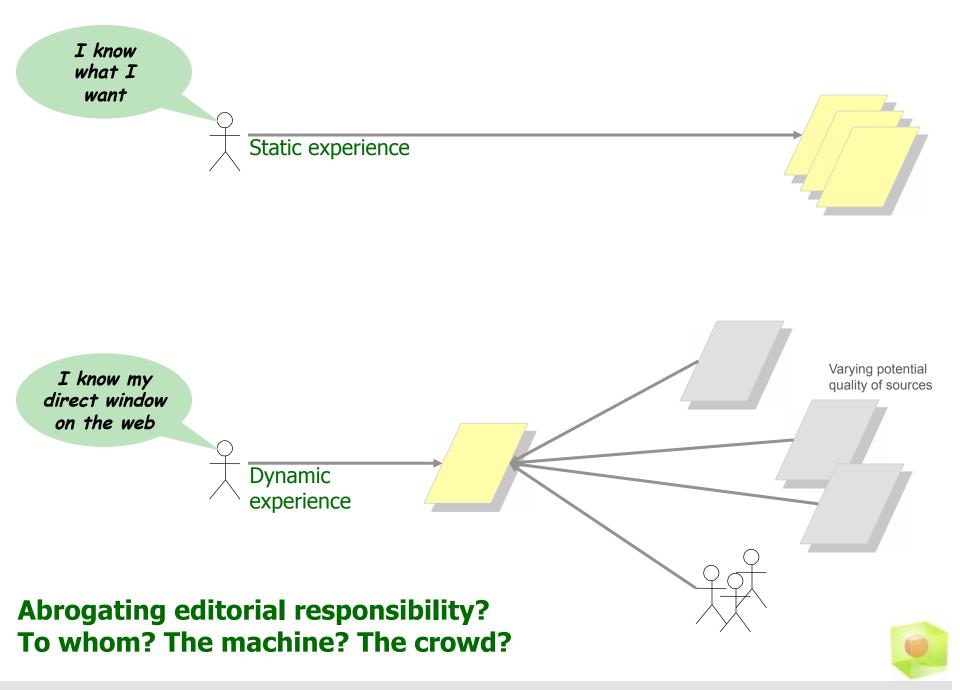
swinglife bebop

knocked up soundtrack

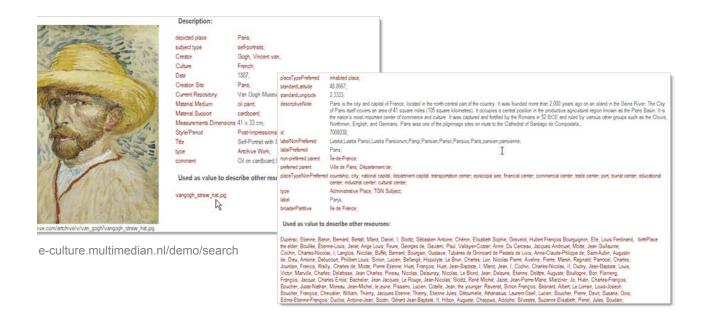


Dynamic data





"Now everything can link to everything..."



industry is no exceptio? o a broad away at the market shares of Europwith higher labor costs.

www.nytimes.com (double click words on page)

Increasing structured data needs to be handled with care... or it can overwhelm and distract from user goals.



Slide 15

aqua.queenslibrary.org/

"Unsupported architecture..."

"It's too academic..."

"The quality will be crap..."

There's a lot of concern and naysaying... but the Semantic Web has a strong role.

Does the Semantic Web play a role?

"The crowd can curate..."

"The algorithms can curate..."

"It's too hard..."

"Those eggheads must be smoking something..."



Semantic Web / Linked Data

Powerful advantages for design from one simple capability...

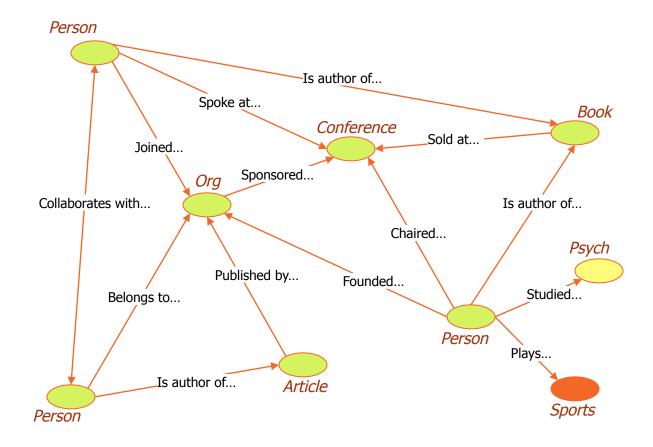


Naming the lines

(verbs for the Web)



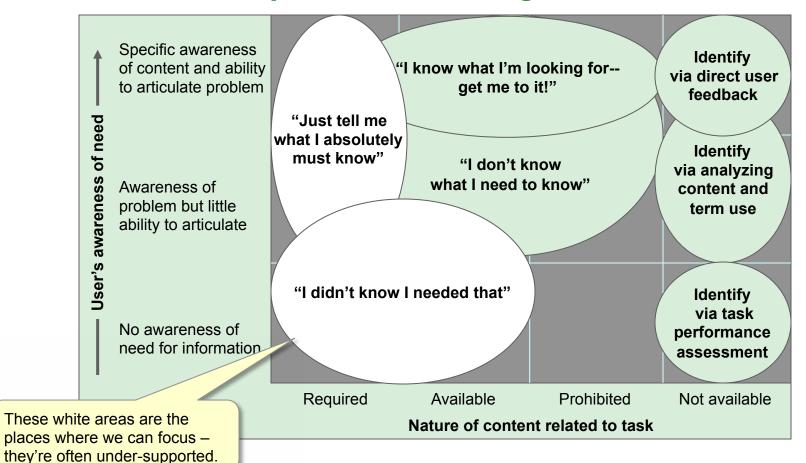
Relationships help support *Understanding*



You can interpret a lot without even knowing the objects... and this provides huge leverage for designers!



Relevance requires context recognition



Degler/Battle (2003). Can Topic Maps Describe Enterprise-Wide Context?

http://www.designforcontext.com/publications/dd-lb_topic-maps_context_extreme2003.pdf



Scalability

Large, Heterogeneous Data Sets/Sites



Scalability

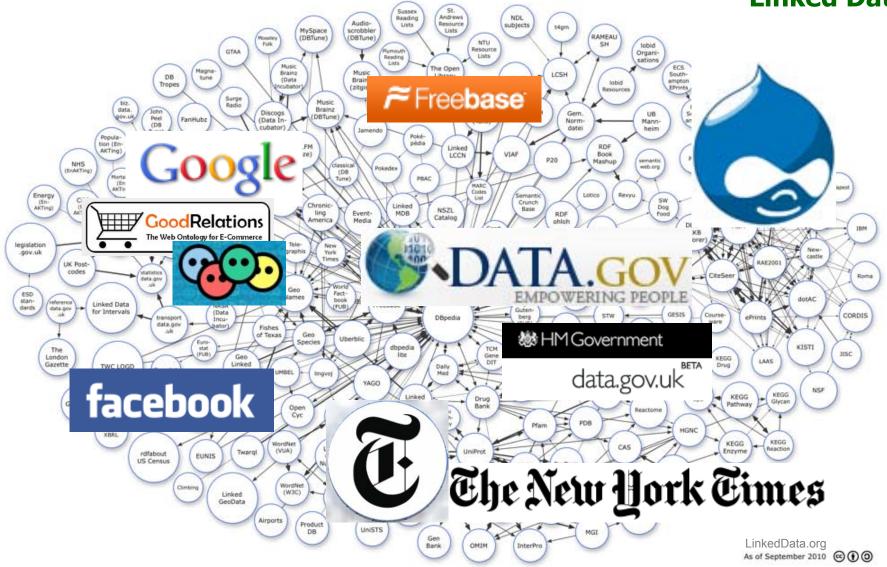


Tags

Options *



Commitment to Linked Data





Facets... even more multi-dimensional

Structure for following additional data relationships

this page:

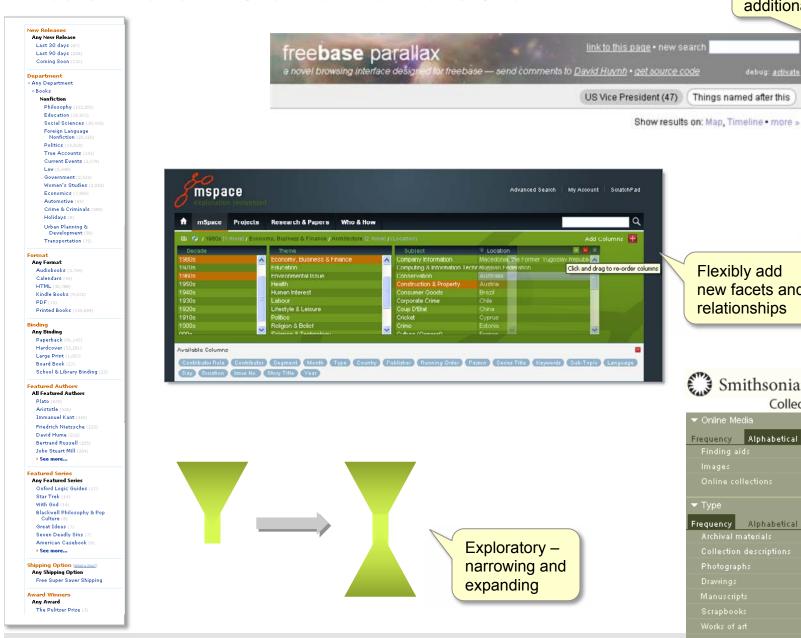
Contains (3193)

Student (40)

People born here (138) Population (194) Postal codes (67)

Connections from the topics on

more connections »

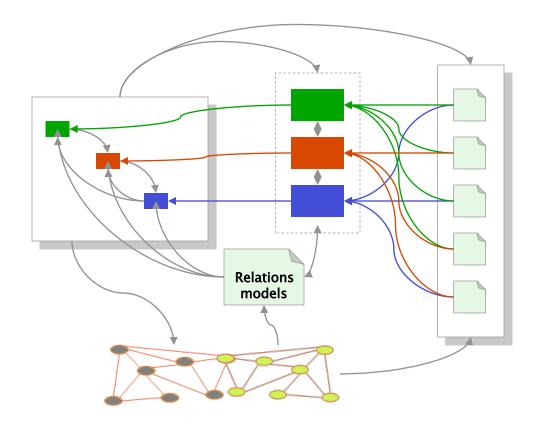


Flexibly add new facets and relationships

debug activate

Smithsonian Institution Collections**Search**Center ▼ Online Me<u>dia</u> Alphabetical Frequency (22) (13)(4) Alphabetical Frequency (14)(12)(12)exclude term Slide 23

Semantics-driven facet browsing



- > Flexible add new data types and relationships any time
- > Expose relationships for greater user control



Participant discussion: curation

- Should we curate structure the terminology and relationships as well as content?
 - How do we curate it, particularly when it is more dynamic?
 - Is that part of the IA's role?
 - It is an interesting question how far the IA goes in processes for curating all the elements that surround context and content establishing processes, reviews, guidelines but the larger task is daunting, even though agreed to be important!
- If we need to curate and standardize to achieve structured information... do we need to train our users (content creators and, in some cases, end users) to do this?
 - Is it possible? Is it appropriate?
 - Where global content creation or social content is the norm, there is no way that "training" can be a goal
 - One lesson we've learned from Web 2.0 is that it is possible to get users to apply basic data that can be used to support categorization and improving structure, but that it requires good interaction design and has to be:
 - Simple
 - Resilient
 - Suitable for purpose... perfection isn't the goal for loose curating



Participant discussion: controlled vocabulary

- Is there really a "black & white division" between structured and unstructured information? Or is there room for both in the context web going forward?
 - We only began the potential discussion about inter-mingled roles of both structured and unstructured content, and how they can act together to serve user needs.
- > Is a controlled vocabulary...
 - *Necessary?* in some situations where the richness of relationships and importance of accuracy/maintainability matter, people said yes...
 - Desirable when/where possible? certainly, but would need to be explored more deeply on a case-by-case basis to understand the issues
 - Impossible? some felt that circumstances could sometimes make the use of a controlled vocabulary impossible; but then how does content gain additional useful structure and co-exist with other dynamic content?
- Further discussion and exploration of controlled vocabulary creation, use, and maintenance is necessary
 - Useful to understand the role of automated methods for applying structure (auto extraction and machine-aided categorization, for example), although it was said that these techniques can be fragile



Participant discussion: mental models

- > How are these techniques related to understanding **Mental Models**?
 - A few people saw a close connection between the methods needed to understand user context and content/data relationships, and the methods applied to understand user mental models
 - I feel there is a very close connection, because the goal is *relevance to users*; creating structured data relationships that reflect their perception of relevance means we need to understand/articulate their mental models and contexts
 - Close tie-in as well with the work being done at the BBC using Domain Models; see Mike Atherton's Beyond the Polar Bear (http://www.slideshare.net/reduxd/beyond-the-polar-bear)



Location, Location, Location

Mobile Interaction









Bring awareness of your location to others

Bring information to experience of place





Maintain awareness of objects



Facilitate exploration of spaces



Location-aware... context

Bring place to usefulness of information















Images: www.apple.com/ipad/





Maybe it's a dashboard, too?





Burning Question: Why Isn't My House Out-Thinking My Dog Yet? By Bryan Gardiner March 22, 2010 | 12:00 pm | Wired April 2010



http://www.wired.com/magazine/2010/03/ts_burningquestion_housesmart/



Interesting use of Android platform, potentially allows mobile management of inplace physical devices



Touchrev.com Androidguys.com



Participant discussion: location awareness & relevance

- What question is the user asking? Is it location-related?
 - What answers can be delivered that understand the user's situation and goals in that location?
 - What happens as the location moves?
 - Does that signal a change in context?
 - Does that signal a change in the relevance of questions being asked?
- How does a user easily express that location matters in their current interaction context? Should it be assumed?
- > Explore the idea of an "Interaction Ecology"...
 - Following your location path/trail
 - Also following device-to-device movement carrying the useful context of previous actions, but not ignoring the change in context based on device change



Participant discussion: mobile and multi-platform

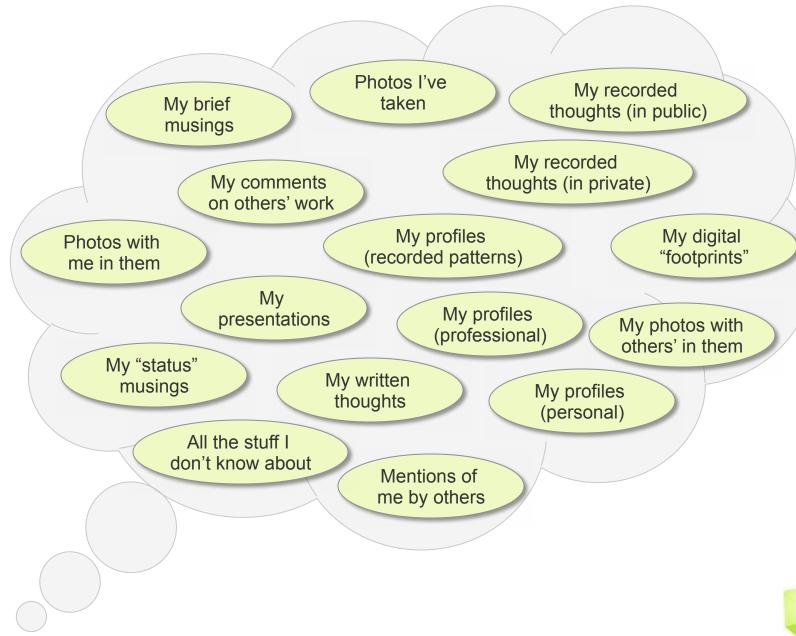
- Important to consider synching the user's experience across multiple devices and contexts
 - Different devices have different capabilities, and the user's goals are likely to be different in particular situations/contexts
 - However, the overall experience with *information* should not be disorienting to users as they move between platforms (seamless experience)
 - · Mental models, again, play a role
 - Trend, seeing the use of multiple devices at the same time
 - E.g. TV prompting the use of mobile device as an extension of what is available in a show, in real time
- > Some people are designing for "mobile first" as it makes the most demands on simplicity of interaction ("least able device")
 - However, some described the risk of never getting to the richer experience
 - Valuable rich taxonomies or inter-related navigation models might also be avoided, because they are much harder to execute on small devices
- Be careful not to frustrate the user, either through platform specificity that does not carry over where needed, or lack of appropriate platform support where it would aid understanding

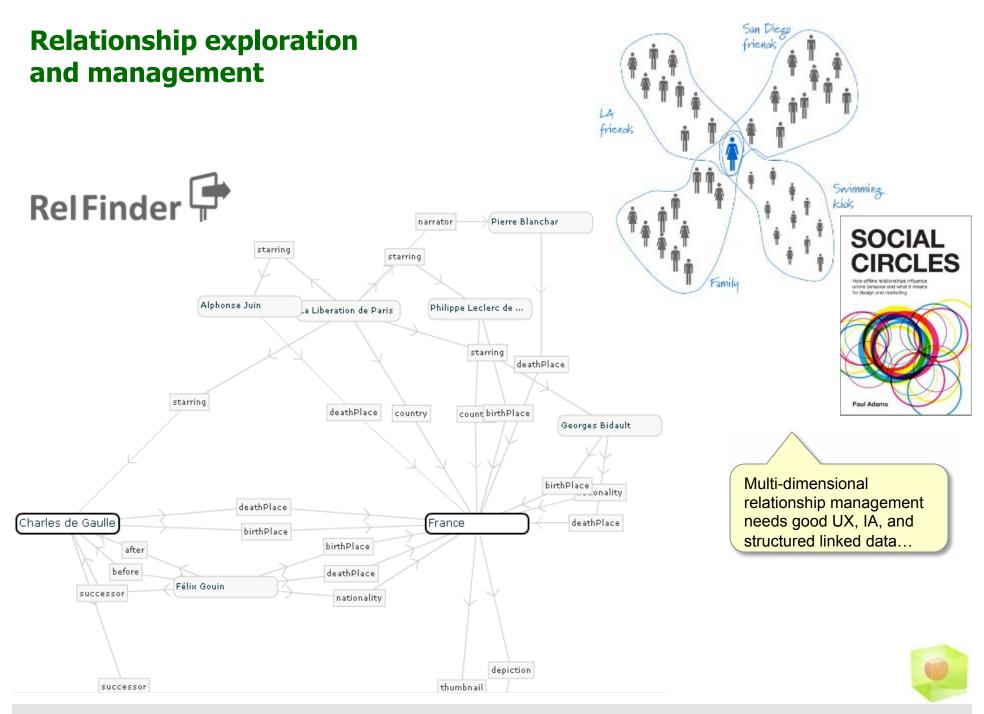
It's not what you know, it's...

Social Environments & Data



My diffuse self on the disconnected Web...





"What's happening?"

Are algorithms moderating your relationships?



Copying a post from a friend's page: Facebook has changed its News Feed so that by default you can only see updates from people you have recently interacted with! To change this, click "most recent" then use the little arrow down and go to "edit options" and check the box to receive updates from ALL friends. Most importantly, repost this! Remember only a few of your friends will actually see it.

17 February at 04:56 * Like * Comment

Something Else FB didn't tell us...

on Wednesday, 09 February 2011 at 13:15

+ Write a note

PLEASE READ - THIS IS VERY IMPORTANT TO EVERYONE WHO USES FACEBOOK FOR BUSINESS OR PERSONAL REASONS.

HERE'S THE FIX: Scroll down to the bottom of the newsfeed on the homepage and click on "Edit Options", click on "Show Posts From" and change the setting to "All Of Your Friends and Pages" Note: This is the fix for personal pages but I am unsure of whether or not the business pages are set up the same way.



I don't understand, FB. Why a "links" tab, to segregate the links my friends' post? Especially since seme of the orgs I've friended are specifically to see their upcoming events? Why is FB continually full of "unimprovements"?

43 minutes ago : Comment : Like

Cracking the Facebook Code

by Thomas E. Weber 🕕

How does the social media giant decide who and what to put in your feed? Tom Weber conducts a one-month experiment to break the algorithm, discovering 10 of Facebook's biggest secrets.

http://www2.thedailybeast.com/blogs-and-stories/2010-10-18/the-facebook-news-feed-how-it-works-the-10-biggest-secrets/full/



"Who's in control?"

The New FB Privacy setting called "Instant Personalization" went into effect and is enabled. It shares your data with non-FB sites. Go to Account>Privacy Settings>Apps & Websites>Instant Personalization>edit settings & uncheck "Enable". BTW If your friends don't do this, they will be sharing info about you as well. Copy and repost.

I'm seriously thinking of quitting FB--anyone have any good options?

01 February at 10:10 - Like - Comment

OK, what happened to "Invite friends to join group"? All I can do now is add them, and poof! they're members whether they agree of not. Me not like.

about an hour ago . Like . Comment

The New York Times

Business Day

Published: May 12, 2010

Facebook Privacy: A Bewildering Tangle of Options

http://www.nytimes.com/2010/11/10/business/media/10privacy.html

THE WALL STREET JOURNAL. | TECH

WHAT THEY KNOW | JULY 30, 2010

Sites Feed Personal Details To New Tracking Industry

WHAT THEY KNOW | JULY 30, 2010

The Web's New Gold Mine: Your Secrets

A Journal investigation finds that one of the fastest-growing businesses on the Internet is the business of spying on consumers. First in a series.

http://online.wsj.com/article/SB10001424052748703940904575395073512989404.html http://online.wsj.com/article/SB10001424052748703977004575393173432219064.html

The New Hork Times

Media & Advertising

Stage Set for Showdown on Online Privacy

By EDWARD WYATT and TANZINA VEGA Published: November 9, 2010

http://www.nytimes.com/2010/11/10/business/media/10privacy.html



Facebook and Google in data sharing spat

http://www.bbc.co.uk/news/technology-11717448



Let's explore... How does a design respect its users?

Humility

- · Know thy limitations
- Ask

Provenance & transparency

- Trust as a user interaction challenge
- Tracing data history... more possible than ever... and more important than ever

Conscious sharing

- Building on the strength of Web 2.0
- Stronger relationships... between each other... between our data "selves"

Privacy

- Who's in charge?
- Informed consent: How to we know what we've given permission for?
 - In future, we're not just giving permission for data... we could be empowering agents with responsibility for *action* on our behalf

How do we think about, model, and research social experience? You might want to take a look at Dana Chisnell's IA Summit 2011 talk: Rethinking User Research for Social Design (http://www.slideshare.net/danachisnell/rethinking-user-research-for-social-design)



Participant discussion: social media, data sharing and reuse

> What are the implications of "ownership"?

- · Content ownership and control:
 - Social sites that declare "ownership" of user content
 - Reuse of content
- Data (particularly personal data) ownership and control:
 - Informed consent, and providing some understanding to users of how their data may be used in an increasingly networked world
 - Controlling or expressing preferences to your "friends" so their posting of images, comments, data are informed by your expectations when it involves you
- Carrying policy expressions:
 - Data use and re-use is hard to monitor
 - Is there a way to express personal and organizational policies in ways that it can be carried with data, or referenced as part of the process of using data?
 - W3C had been exploring this as part of their Policy-Aware Web?

> Data out of context - how and when should it be used?

- Scientific data is sometimes published with the written articles about the research, but the release of such research assets may cause problems for researchers
- The assumptions and limitations of data are currently difficult or impossible to provide alongside the data itself, so secondary uses are compromised





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