agenda

1. privacy in social networks

2. quality of information on web 2.0
privacy & social networks
social factors
it’s the architecture, stupid
meanwhile…

Facebook User Growth
(In Millions)

PrimeLife inception
project start
Clique
our challenge

privacy

data protection

and

or

data disclosure

sociability
privacy no longer a social norm

Mark Zuckerberg

the issues
Teen sacked for 'boring' job Facebook comment

TheRegister, 26 Feb 2009

NDP candidate in B.C. election quits over racy photos in Facebook

An NDP candidate has withdrawn from the B.C. election over racy photos that surfaced on the social networking site Facebook.

Ray Lam, the New Democrat candidate for Vancouver-False Creek, announced his decision Sunday night.

One of the photos showed Lam grabbing a woman’s chest, while another depicted two people clutching at his underwear.

"An issue was made regarding inappropriate material on my private Facebook page," Lam said in an email statement. "I regret this material and the associated comments that have now
Hayley Jones had described herself as 'married' to Brian Lewis

A mother-of-four was murdered by her partner days after she changed her Facebook status from "married" to "single", a court has heard.

http://news.bbc.co.uk/2/hi/uk_news/wales/8232250.stm
SNS aggravates
1 invisible audiences

2 persistence
3 replicability

too much information
too many ‘friends’
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search for me on Facebook</td>
<td>This lets friends find you on Facebook. If you're visible to fewer people, it may prevent you from connecting with your real-world friends.</td>
</tr>
<tr>
<td>Send me friend requests</td>
<td>This lets real-world friends send you friend requests. If not set to everyone, it could prevent you from connecting with your friends.</td>
</tr>
<tr>
<td>Send me messages</td>
<td>This lets friends you haven't connected with yet send you a message before adding you as a friend.</td>
</tr>
<tr>
<td>See my friend list</td>
<td>This helps real-world friends identify you by friends you have in common. Your friend list is always available to applications and your connections to friends may be visible elsewhere.</td>
</tr>
<tr>
<td>See my education and work</td>
<td>This helps classmates and coworkers find you.</td>
</tr>
<tr>
<td>See my current city and hometown</td>
<td>This helps friends you grew up with and friends near you confirm it's really you.</td>
</tr>
<tr>
<td>See my interests and other Pages</td>
<td>This lets you connect with people with common interests based on things you like on and off Facebook.</td>
</tr>
</tbody>
</table>
Clique & Scramble! to the rescue
design matters™
“friends”

“collections”
Ronald

family

runners

colleagues

family

runners

colleagues
trust the platform
To support users of social networking sites we created the first tool called Scramble! that allows encryption of texts on users’ profile sites. Clique, an extension of the popular social networking site software Elgg is the second tool. It enables users to segregate between different audiences for their data. For users and providers of phpBB forums we developed a phpBB extension as the third tool. The extension upgrades the access control features of the forum software so that users instead of administrators can define who should have access to their own contributions.
2 quality of data

experiment 1: author and her credentials
fake medical wiki

Task: answer questions about 5-HT using information in wiki

Search term ->

[search results <-> read info]

-> answer questions

Complete survey
Serotonin, also known as 5-HT or (5-hydroxytryptamine) is a neurotransmitter. It is produced in the brain, where it performs its primary functions, and thus is implicated in the control of numerous physiological and psychological functions. A decreased level of serotonin in the brain has been associated with neurological and psychological disorders such as depression. The concentration of synaptic serotonin is controlled directly by its reuptake into the presynaptic terminal, and, thus, drugs blocking serotonin transport have been successfully used for the treatment of depression. In addition to tricyclic antidepressants which block noradrenaline reuptake, highly specific serotonin reuptake inhibitors (SSRIs) such as fluoxetine and paroxetine have been developed, which are indicated for depressed patients. The mode of action of these antidepressant drugs on their direct target, the serotonin transport protein, and possible regulators with respect to long-term alleviation of depression, although having been investigated both neurobiologically and clinically over the last years, are not yet fully understood. The function of SSRIs lies in their inhibition of serotonin reuptake which increases the amount of serotonin in the synaptic cleft and at the postsynaptic membrane, resulting in greater postsynaptic serotonin stimulation.

By Dr. Elizabeth Williams

Please answer the following questions:

What does 5-HT stand for?

In which part of the body can 5-HT be found?

What happens if 5-HT levels are too low?
first experiment: conclusions

- test subjects by and large pick first search result
- … occupational title is strongest indicator
- name (and title) weak indicator
  - good from a privacy point of view

- in general, source of information was not deemed important
conclusions continued

- test subjects believe they base their choice on information quality
  - in practice they pick the first search result

- indicators reported as important are
  - professional writing
  - perceived text relevance
  - lack of spelling mistakes

experiment 2: using ratings
fake medical wiki

task: answer questions about 5-HT using information in wiki

read a lemma

[observe rating, explore individual reviews]

-> answer questions

complete survey
second experiment: conclusions

- test subjects do notice the stars
  - they report correct number
- test subjects did not inspect the reviews
  - may be design related
- text quality is appreciated in accordance with match of rating and actual text quality
  - neg rating for low quality text → lower perceived quality
  - pos rating for high quality text → higher perceived quality
conclusions

- technology is part of the problem & solution:
  - context matters, architecture too
- demonstrators
  - simple, user friendly tool embedded in workflow: Clique
  - general tool using PKI: Scramble!

- determining information quality ill understood
  - lessons incorporated in architecture for reputation system

June 7, 2011
thank you

backup

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search result selection preferences

- first result pickers
  - role of indicator vs preference for spot 1 is unknown

- other result pickers
  - preference for indicator, but unknown # of subjects missing due to preferred option being in spot 1
  - shows same pattern as first result pickers

<table>
<thead>
<tr>
<th>rating</th>
<th>text quality</th>
<th>reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental</td>
<td>stars</td>
<td>low</td>
</tr>
<tr>
<td># reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>none</td>
<td>low</td>
</tr>
<tr>
<td>condition</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>experimental 1a low pos</td>
<td>20</td>
<td>16,1</td>
</tr>
<tr>
<td>experimental 1b high neg</td>
<td>16</td>
<td>12,9</td>
</tr>
<tr>
<td>experimental 1c low neg</td>
<td>20</td>
<td>16,1</td>
</tr>
<tr>
<td>experimental 1d high pos</td>
<td>25</td>
<td>20,2</td>
</tr>
<tr>
<td>control 1a high</td>
<td>38</td>
<td>30,6</td>
</tr>
<tr>
<td>control 1b low</td>
<td>5</td>
<td>40,0</td>
</tr>
<tr>
<td>Total</td>
<td>124</td>
<td>100</td>
</tr>
</tbody>
</table>

| condition * How many stars did the text about 5-HT receive? |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| How many stars did the text about 5-HT receive? | 1 | 3 | 4 | 5 | Total |
| condition       | experimental 1a low pos | 0 | 1 | 1 | 12 | 14 |
|                 | experimental 1b high neg | 11 | 2 | 1 | 0 | 14 |
|                 | experimental 1c low neg | 13 | 2 | 0 | 0 | 15 |
|                 | experimental 1d high pos | 0 | 1 | 3 | 14 | 18 |
|                 | control 1a high | 2 | 2 | 0 | 1 | 5 |
| Total            | 26 | 8 | 5 | 27 | 66 |
do people care?

- do people use audience segregation on Facebook and Hyves?
- if so, who, what and why?
- control for age, gender, personality (introvert/extravert)
- 1163 (Dutch) participants (906 complete), avg age 25, 65% female

- awareness of technical access control measures, but …

- hardly any use in practice (18%)
  - reasons: hassle (22%), how? (19%), never bothered (57%)

- AC users: females, privacy concerned, older