

Understanding Online Reputation Information -

Kristiina Karvonen, HIIT/Aalto
with credits to: Sanna Shibasaki, Sofia
Nunes, Puneet Kaur
(Helsinki Institute for Information
Technology) &
Olli Immonen (Nokia)



Example of usability work within Future Internet SHOK

**Originally presented at the User-Centric
Evaluation of Recommender Systems and
Their Interfaces**

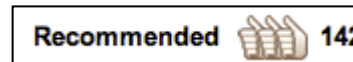
**Workshop of the 4th ACM Recommender
Systems conference (RecSys 2010),
Barcelona**

**([http://ucersti.ieis.tue.nl/2010/
program.html](http://ucersti.ieis.tue.nl/2010/program.html))**

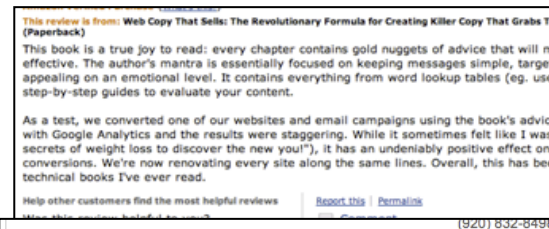
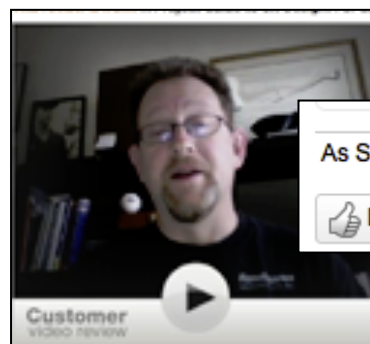
Paper deals with

- Usability of reputation information
-as communicated through recommendations

Reputation Information



Can be presented by
visual or textual means
- or both.



Criteria	Average rating	
Item as described	★★★★★	824
Communication	★★★★★	823
Shipping time	★★★★★	825

★	10,000 to 24,999 ratings
★	25,000 to 49,999 ratings
★	50,000 to 99,999 ratings
★	100,000 to 499,999 ratings
★	500,000 to 999,999 ratings

amazon.com

Don't Make Me Think: A Common Sense Approach to Web Usability, 2nd Edition (Paperback)

Price: \$26.40 & this item ships for FREE with Super Saver Shipping.

Want it delivered Thursday, May 27? Order it in the next 10 hours and 16 minutes, and choose One-Day Shipping at checkout.

Formats: Kindle Edition \$22.94, Paperback \$26.40

tripadvisor

BEST DESTINATIONS OF 2010

Hermitage Bay

Check Rates and Availability

Reviews you can trust

digg

Technology World & Business Science Gaming Lifestyle Entertainment

Announcing Digg TV

YouTube

The Game

Search Browse Upload

The Game - Let's Ride

TheGameVEVO 21 videos

Next in your recommendations

JD GERSHBEIN

Public profile powered by LinkedIn

View JD GERSHBEIN's full profile:

Name Search:

News, Images, Videos

86 diggs

130 diggs

Probably the dumbest vampire ever

NowPublic

Crowd Powered Media

World

Featured Tags: Afghanistan

iTunes Preview

Jobs - Time Sheet + Tracking By Bjango

Description

Obama orders 1,200 Guard troops to border

by stvalentine | May 26, 2010 at 01:21 am

36 views | 4 Recommendations | 2 comments



Research Question

”Why is the reputation information underutilised?”



WidSets Study

User interviews + Web based questionnaire (mobile + PC use)

Results:

Visually prominent UI elements act as main source of information for decision making.

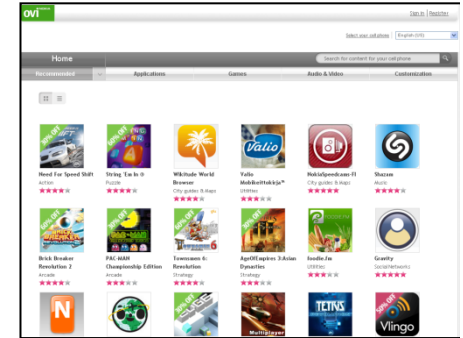
Less prominent information was overlooked.



Karvonen, K, Kilinkaridis, T, Immonen, O: [WidSets: A Usability Study of Widget Sharing](#), in: T. Gross et al. (Eds.): INTERACT 2009, Part II, LNCS 5727, pp. 461-464, 2009. The Proceedings of INTERACT 2009, 12th IFIP TC13 Conference in Human-Computer Interaction, August 24-28, 2009, Uppsala, Sweden

Nokia Ovi Store Study

www.ovi.com →
store.ovi.com



Semi formal usability tests (following think aloud protocol) + User interviews

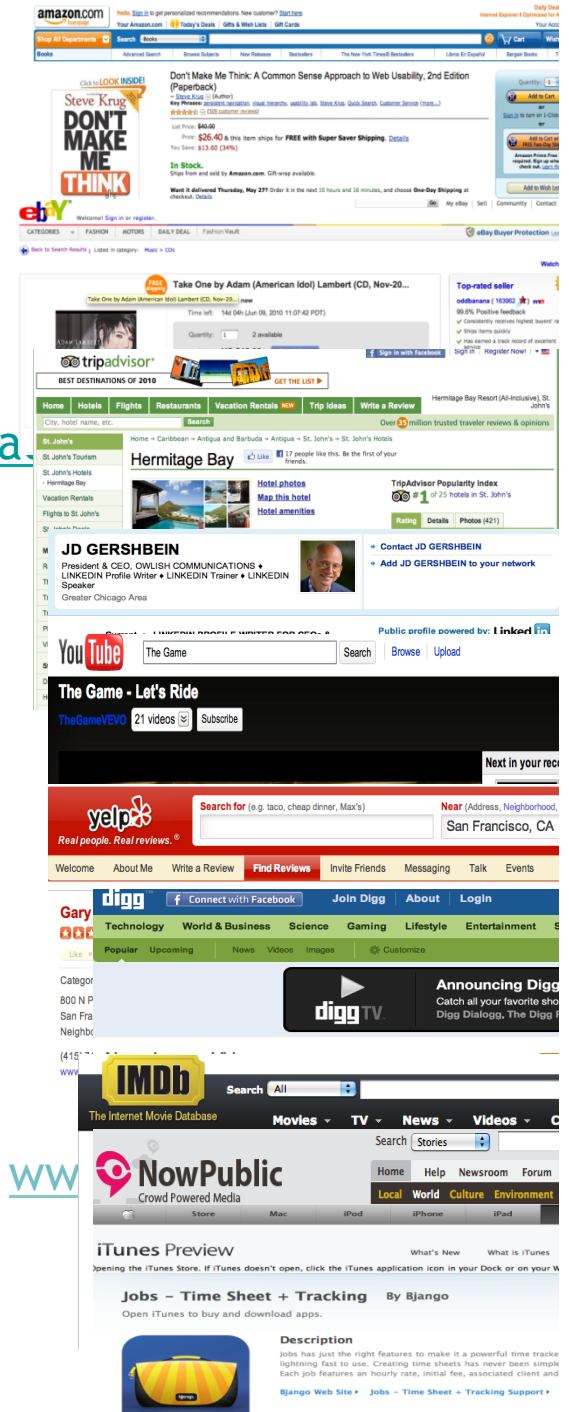
Results:

Lack of cohesion between different reputation elements.

Users found quality & credibility of the reputation information questionable.

Heuristic + Expert evaluations

- Amazon (shopping), www.amazon.com
- eBay (shopping), www.ebay.com
- TripAdvisor (hotel & vacation reviews), www.tripadvisor.com
- LinkedIn (networking tool), www.linkedin.com
- YouTube (video sharing), www.youtube.com
- Yelp (reviews & recommendations for local business), www.yelp.com
- Digg (social news), www.digg.com
- NowPublic (social news), www.nowpublic.com
- IMDb (serial & movie reviews), www.imdb.com
- AppStore (Apple's store for iPhone applications), www.apple.com/iphone/apps-for-iphone/



Hypotheses

- H1. Websites offering reputation information have problems with overall usability that may affect usage of the reputation information.
- H2. More specifically, reputation information provided has additional problems with usability.
- H3. Visual prominence of reputation elements is guiding the decision making process. The visually prominent elements on the recommender websites are wrong.

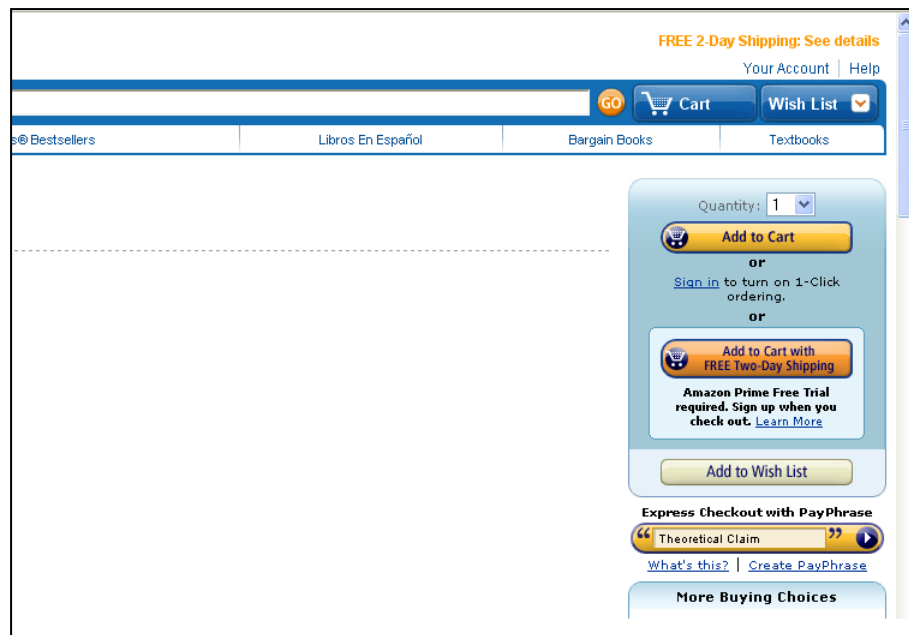
Heuristics

1. Visibility of system status.
2. Match between system and real world.
3. User control and freedom.
4. Consistency and standards.
5. Error prevention.
6. Recognition rather than recall.
7. Flexibility and efficiency of use.
8. Aesthetic & minimalistic design.
9. Help users recognize, diagnose and recover from errors.
10. Help & documentation.

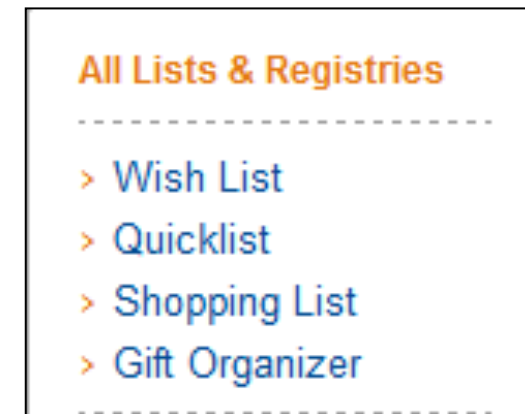
(Jacob Nielsen)

Heur 2: Match Between System & Real World

Amazon

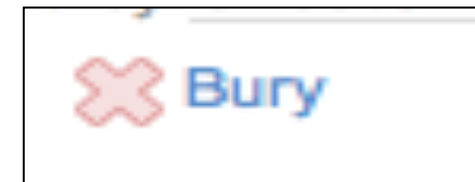


Amazon



eBay

Positive Feedback: 100%
Feedback score: 10890
[\[How is Feedback calculated?\]](#)



Digg

Heur 4: Consistency & standards

TripAdvisor

Rating Details Photos (50)

TripAdvisor Traveler Rating
○○○○○ 41 Reviews
👍 90% | Write a review

"Life threatening experience"
May 10, 2010 - MichaelB007

"a great experience of safari life!!"
Apr 27, 2010 - fogf

Yelp

Price range is simply a relative indication of cost.
\$ = Inexpensive
\$\$ = Moderate
\$\$\$ = Pricey
\$\$\$\$ = Ultra High-End

Price Range: \$

Price range is the approximate cost per person for a meal including one drink, tax, and tip.
We're going for averages here, folks.

\$ = Cheap, Under \$10
\$\$ = Moderate, \$11 - \$30
\$\$\$ = Spendy, \$31 - \$60
\$\$\$\$ = Splurge, Above \$60

Price Range: \$\$\$\$

Heur 5: Error Prevention

Amazon

Post a comment

[Insert a product link](#) (What's this?)

☐ Receive e-mail when new posts are made

[Sign in and post](#) [Cancel](#)

Prompts for sign-in

Digg

top stories. Choose favorites by clicking on the star favorite icon after Digging

OS

The page at <http://digg.com> says:

Are you sure you want to undigg this? This action cannot be undone.

[OK](#) [Cancel](#)

[undigg](#)

[undigg](#)

YouTube

Hometown: Vancouver


Country: Canada

Thank you. This user has been reported.

Heur 8: Aesthetic & Minimalistic Design

eBay

eBay My World: dutchman1953 (127 ☆)





Feedback earned for transactions on eBay[View your eBay My World page](#)

Positive feedback: 100% | Feedback score: 127[See All Feedback](#)

[Learn about](#) what these numbers mean.

Latest Feedback[See all](#)



 Great transaction! Jan-01-10 08:48

Seller: [andreastoys \(25509 ☆\)](#)

Item #: 3101856935

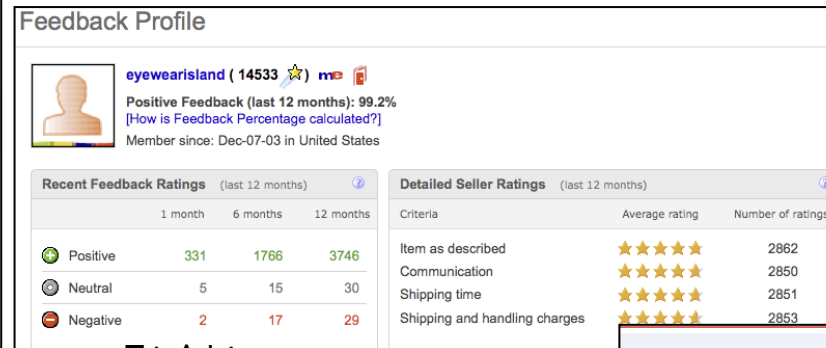
Member since: Jun-13-06
Location: United States
Views: 118 total

Visual Elements Representing Reputation Information: "an estranged and large family"

Amazon



eBay



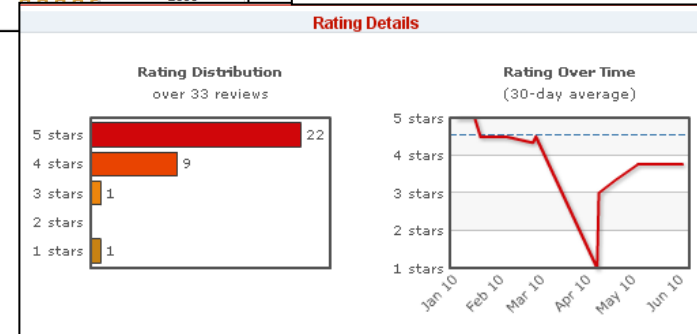
Digg



TripAdvisor



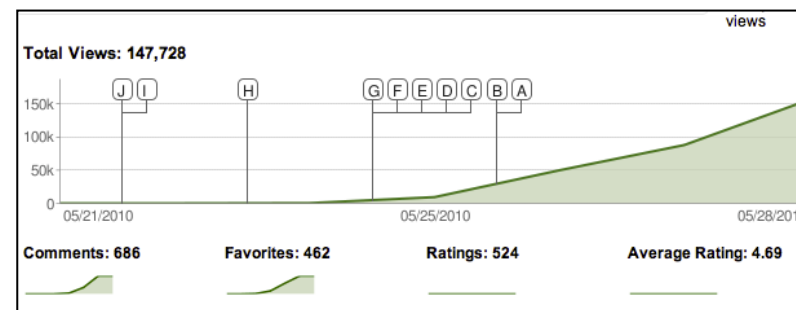
Rating Details



Yelp



YouTube



Results vs. Hypotheses

H1. Websites offering reputation information have problems with overall usability that can affect usage of the reputation information.

→ Yes. The sites did mostly poorly in the evaluations.

H2. More specifically, reputation information provided has additional problems with usability.

→ Yes. Reputation information was disconnected, cluttered, hard to understand.

H3. Visual prominence of reputation elements is guiding decision making process. Visually prominent elements on the recommender websites are wrong.

→ Probably yes. Reputation information is not visually connected; it has different representations on different sites; visually presented information does not pop up on the sites offering it.

A user study should be run to confirm or reject the findings.