

Social Design

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When machine learning
can not help,
try incentives

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Outline

- 1 Stories
- 2 Patterns
- 3 Ideas
- 4 Research Agenda

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1 Stories

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Putin Press Conference



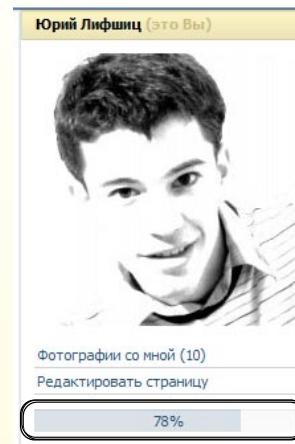
Top voted questions:

- 28424 PREVED, Vladimir Vladimirovich! How do you regard MEDVED?
- 26602 Whether Russian Federation is going to use huge humanoid robots to protect our borders?
- 18527 Please explain, what was your motivation to kiss a little boy in the stoma?
- 16682 How do you regard Cthulhu resurrection?

<http://president.yandex.ru/>

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Vkontakte Reputation Crash



Some night in December 2007 all user reputations lost 20%.

What happened?

A new section **Places** appeared in user profiles: Fill it to get your reputation back!

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Yahoo SearchMonkey



- Web site owners:** use microformats
- Third party databases:** provide some properties about results
- Yahoo! Search:** render results using semantic data

http://l.yimg.com/a/i/us/sch/gr3/sm_infobar_online_example_v2.png

Tech Lead: Paul Tarjan (Stanford'07)

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Other Stories

- Twitter: 140 limit
- Livejournal visibility rule
- Last album of Radiohead
- Blog ranking: Yandex Top 30
- AdWords: price dependence on CTR
- Wikipedia: frontpage, voting
- Maskas.ru
- VKontakte real name forcing
- Habr.ru: immediate self-comments
- Photosight.ru: frequency rule

twitter



Yandex
Google
AdWords



МАСКАС

контакте



ФОТО.САЙТ
www.photosight.ru

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Social Design Failures

- HTML meta keywords
- Amazon recommendation attack
- Facebook beacon
- Wikipedia volapük attack
- Livejournal users strike
- MySpace adult content
- Findory (personalized news)
- Firefox adBlock

amazon.com



LIVEJOURNAL

myspace.com
a place for friends

Findory



<http://wikipedia.org/>

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Patterns

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Instruments for Social Design

- Money: business model, pricing
- Social: statuses, reputation, toplists, visibility

Information architecture:

- Entrance rules
- Privacy policy
- Rights: data access, contact, post
- Limits: invitations, connections, messages
- Information dynamics, promotion rules

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Patterns

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Exchange (Trade)

- Visibility of surfing in Livejournal
- Yahoo! Buzz button for Yahoo frontpage chance
- AdSense spot for ad revenue sharing
- Content contribution for status, access
- Paid SMS for dating database promotion
- Invitations for visibility (VKontakte)



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Auction

- Mozilla Firefox searchbox
- Adwords / AdSense
- eBay
- Freelance marketplaces
- Digg, Yahoo! Buzz



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Bundling and Unbundling

- Loyalty programmes alliances
- Microsoft researchchannel.org (IE only)
- rel=nofollow
- SSN: banking, retirement and tax payments

Microsoft

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Human computation

- ESP Game
- Utility computing
- AdSense adjustment
- Google sitemaps
- Del.icio.us and Flickr tagging
- Report spam button
- Digg: news filtering and prioritization



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Reputation Utilization

- Celebrity-featured ads
- Umbrella brands
- Digg paid votes
- Product placement in blogs



Image source: <http://www.sonyericsson.com/sharapova/>

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Ideas

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Standardization

- robots.txt, sitemaps
- RSS
- FOAF, microformats (hReview, hCalendar)
- OpenID
- OpenSocial, Facebook platform
- OAuth



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Data Market

Business-models:

- Promotion-based: AdWords, Yellowpages
- Paid access: CARFAX, Credit check
- Licensing: Maps, Spinnr
- Alternatives?

Issues:

- Open databases? Reliability? Micro-contribution?
- Simplifying semantic publishing
- Why there is no market for SQL datasets?

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Market Graph

Relations between people, businesses and products:

- Transactions (I bought, I order)
- Evaluation (I like, I hate, product rating)
- Demand (wishlists, problem list)
- Authorship and employment

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Curiosity Rule

Give the data about yourself if you are interested to learn about others

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Open Advertising

- Open targeting: Agent-mediated auctions
- Open ad presentation
- Editable ad profiles
- Widget ads
- Public database of advertisers, targets and bids
- Standard for opportunity language

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Reputation-Based Messaging

- Every product can buy 10 reputation points on the start
- Every advertising message costs a point
- A positive response (vote up) brings 10 new reputation points

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Research Agenda

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Wishlists

- Putin press conference: Russia's wishlist
- Merges and acquisitions wishlists?
- Open problems garden
- "My problems"
- Feature requests (e.g. Firefox)
- Editable ad profiles

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Fighting Spam

- Messages, invitations, comments
- Click fraud, impression fraud
- Fake reviews
- Sybill attack on reputation systems
- Low quality content

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Domain-Specific Social Design

- Dating
- Digital content
- Shopping
- Cars, Real Estate
- Hiring
- Freelance
- Health care

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New Business Models

- Applications for social networks and mobile platforms
- Enterprise web soft
- Data market

In the past, entrepreneurs started businesses. Today they invent new business models.

John Doerr

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Incentives for Semantic Web

- Success stories
- Pushing semantic markup and open APIs
- Microformats crawling
- Encourage publishing remixable data
- Freebase is too closed!

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Social Design for Academia

- Reviewing (Yoav Freund proposal)
- Open publishing
- Hiring
- Funding
- Prizes
- Open problems
- Comments to papers
- Research blogs
- Teaching
- Video

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Behavioral Data

- Is there a market for it?
- Authorization to remix and resell?
- Anonymity of web surfing
- Merging behavioral datasets?

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Reputations and Reviews

- Universal reputations, reputation exchange
- Sybill attack
- Can anonymity and responsibility be combined?
- Inflation of positive reviews
- Social capital
- Increasing rewards and punishments

Prioritize:

- Fighting spam
- New business models
- Domain-specific social design
- Wishlists
- Reputation and reviews
- Incentives in Semantic Web
- Social design for academic community
- Behavioral data

- 8 Social design for academic community
- 7 Fighting spam
- 6 Behavioral data
- 5 Reputation and reviews
- 4 New business models
- 3 Domain-specific social design
- 2 Wishlists
- 1 Incentives in Semantic Web

Applications

- Search
- Reviewing systems
- Recommendations
- Motivating openness & contribution
- Keeping users engaged
- Loyalty programs
- Advertising
- Copyright and patent law
- Question answering

Understanding

- Understand privacy concerns
- Are people programmable?
- Limitations of Social Design?
- Understand culture and generation based differences
- Why personalization fails?
- Why people do not use Adblock? Why people tolerate SPAM?

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To Do

- Library of social designs
- Glossary
- Patterns
- Justification framework for social designs?

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Call for Feedback

- Your favorite story in Social Design?
- Which idea you like the most?
- Which research direction you like the most?
- Relevant research?

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Links

Homepage <http://yury.name>

<http://businessconsumer.net/files/marketing-agenda.pdf>
Research Agenda in Online Marketing [Working paper]

<http://yury.name/newweb.html>
Tutorial "The New Web"

<http://yury.name/reputation.html>
Tutorial "Reputation Systems"

<http://businessconsumer.net>
Our research project in online marketing

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Pointers

Michigan U Group “Incentive-Centered Design”

<http://www.socialcomputingresearch.net/twiki/bin/view/ICD/WebHome>

Al Roth papers on Market Design

<http://kuznets.fas.harvard.edu/~aroth/alroth.html>

John Doyle: A Unified Theory of Complex Systems

<http://www.hot.caltech.edu>

Stanford Reputation Systems Group

<http://www.stanford.edu/group/reputation/>

TED: Larry Lessig, Seth Godin, Mena Trott, Jimmy Wales

<http://www.ted.com>

Problem to think about:
Overcoming the incentives barrier
in Semantic Web

Thanks for your attention!
Questions?