Social Design

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St.Petersburg, May 2008 CS Club at Steklov Institute of Mathematics **Wikipedia:** mechanism design is the study of designing rules of a game or system to achieve a specific outcome, even though each agent may be self-interested.

Social design is an art and science of setting rules in social systems.

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Outline

- Defining a New Field
- Notable Social Mechanisms
- New Ideas
- 4 Thoughts on Future

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Social Design:
Defining a New Field

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Social Design vs. Machine Learning

Machine learning methodology:

- Collect available data
- Create training examples
- Learn a "magic formula"

Social design:

- Motivate users give more and better data
- Motivate feedback
- Motivate creating training examples

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Instruments for Social Design

- Rules for system entrance
- Virtual statuses
- Business model: costs and rewards
- Privacy policy
- Information dynamics
- Rights: data access, contact, post
- Limits: invitations, connections, messages

Applications

- Search
- Trust and recommendations
- Motivating openness & contribution
- Keeping users engaged
- Spam protection
- Loyalty programs
- Advertising targeting and wishlist extraction

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Notable Social Mechanisms

eBay Feedback

- Buyers and sellers
- Bidirectional feedback evaluation after every transaction
- eBay Feedback: +/-, four criteria-specific ratings, text comment
- Total score: sum of +/- Feedback points
- 1, 6, 12, months and lifetime versions

UEFA Cup final

Search Engine

Advertisement

Sponsored Search

Advertisement

Advertisement

1

Algorithmic

2

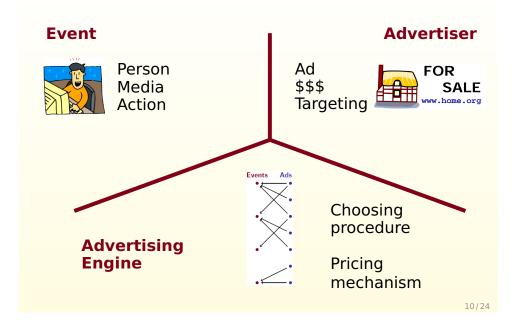
results

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Advertisement

The higher click-through rate is the cheaper is advertising

Advertising Systems



VKontakte Reputations

- First 100 points: real name and photo, profile completeness
- Then: paid points (via SMS) gifted by your supporters
- Any person has 1 free reference link, initially pointing to a person who invited him to VKontakte. Bonus points (acquired by rules 2 and 3) are propagating with 1/4 factor by reference links.

Rating benefits:

- Basis for sorting: friends lists, group members, event attendees
- Bias for "random six friends" selection

Digg



- News sorted by user votes
- Two streams: top news and upcoming
- Votes are inflating with time
- Votes of reputable users counts more

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Other Stories

- Yahoo! Buzz
- Amazon spam
- Twitter limit of 140 characters
- Last.FM
- Last album of Radiohead
- rel=nofollow
- Attention Trust movement
- Blog ranking (Technorati, Yandex)

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Offline Social Mechanisms

- Political elections
- Transportation: carpool rule, traffic lights
- Taxation law
- Immigration law

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New Ideas

Frontpage Auctions

What content/apps to promote to frontpage?

- Owner choice
- Latest content (like in any blog)
- Paid placement (spot for advertisement)
- Random (like six random friends box in any Facebook profile)
- User voted (like in Digg.com)
- Personalization

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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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Technology Challenges

- Viral distribution (apps, information)
- Motivating openness and contribution
- Cross-platform reputations
- Business reputations
- Social spam, sybill attack (reputations can help)
- Revenue sharing, new business models
- Innovations in copyright and patent law
- Wishlist extraction
- Employee lists
- Anonymity of web surfing

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Thoughts on Future

Research Challenges

- General theory, taxonomy of existing systems
- Openness of rules
- How to resolve the problem of control and independence of business profile?
- Best way for collecting social capital for businesses in the Web?
- Implementing attention economy ideas?
- How a new product starts in the information space?

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Rules for developer revenue sharing?
 Corresponding metrics?

References

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

Links

Homepage http://yury.name

Minicourse page: http://yury.name/newweb.html

http://businessconsumer.net/files/marketing-agenda.pdf

Research Agenda in Online Marketing [Working paper]

http://yury.name/reputation.html
Tutorial on Reputation Systems

http://businessconsumer.net

Our research project in online marketing

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Summary

Thanks for your attention! Questions?