

# Social Design

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**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.

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

# Outline

- 1 Defining a New Field

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- 2 Notable Social Mechanisms

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- 3 New Ideas

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- 3 New Ideas
- 4 Thoughts on Future

# 1

## Social Design: Defining a New Field

# Social Design vs. Machine Learning

## Machine learning methodology:

- 1 Collect available data
- 2 Create training examples
- 3 Learn a “magic formula”

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## Social design:

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

# Applications

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

# 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

# 2

## 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

# Advertising Systems

## Event



Person  
Media  
Action

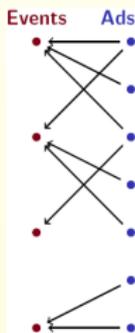
## Advertiser

Ad  
\$\$\$  
Targeting



FOR  
SALE  
[www.home.org](http://www.home.org)

## Advertising Engine



Choosing  
procedure

Pricing  
mechanism

# Sponsored Search

UEFA Cup final

Search  
Engine

Advertisement

Advertisement

1

Algorithmic

Advertisement

2

results

Advertisement

3

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UEFA Cup final

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The higher click-through rate is the cheaper is advertising

# Vkontakte Reputations

- 1 First 100 points: real name and photo, profile completeness
- 2 Then: paid points (via SMS) gifted by your supporters
- 3 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.

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## Rating benefits:

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



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

# 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)

# Offline Social Mechanisms

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

# 3

## 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

# 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

# 4

## Thoughts on Future

# 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

# 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?

# 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

# References

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

# Summary

Thanks for your attention!  
Questions?