Personal vs. Social

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First, there were personalized recommender systems...

- Initially based on user's own preferences
  - Content-based approach

- Then using collective intelligence
  - Similar user behavior => similar interests
  - Collaborative filtering

- "Personal" element became highly important in web interactions
  - Improve user's experience
  - Increase customer satisfaction and retention

Then, there were social networks…

- People connect with friends, colleagues, acquaintances forming virtual social networks

- More generic forms: people sharing similar interests (blogging, file/bookmark sharing, collaborative tagging etc.)

- Highly interactive media
  - Users as authors/annotators
  - Users as commentators/reviewers

Can personal & social co-exist?

- **INTUITION:** A recommendation is more valued if it comes from a trusted party

- **PROBLEM:** How do we infer trust?

- **SOLUTION:** Social networks can provide us with this knowledge!

Trust in social networks

- **How can we infer trust?**

- Implicitly
  - Connectivity in social networks
  - Interaction in social networks
    - Comments, tagging, ratings, ...
  - Trust propagation
  - ...

- Explicitly
 - User ratings (e.g. epinions.com)

Trust in recommender systems

- It has been shown that trust enhances the accuracy of recommendations in a collaborative-filtering setting [Ma et. al. CIKM'08; Guy et. al. RecSys'09; Konstas et. al. SIGIR'09] .

- Recommendations
  - Products
  - Blogs
  - Communities
  - New friends
  - ….

Other issues to be considered...

- Global vs. local (personalized) trust
  - Influential users (e.g. bloggers, reviewers)
  - Reputation within the community (e.g. within my extended friends' network)
- Context-aware trust
  - "I trust this user for movie but not for restaurant recommendations"
- Transitivity of trust (decaying)
  - "the friend of my friend is my friend too"
  - "the enemy of my friend is my enemy"
  - "the friend of my enemy is my enemy"
  - "the enemy of my enemy is ???"

Is Big Brother watching us?
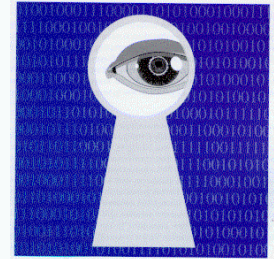
Trade-off

- Use of personal information
  - Demographics, click-throughs, shopping carts, and recently opinions, sentiments, and social network connectivity

- Personalized service
  - Recommendations, search rankings, advertisements

Private vs. Personal

- Need to set boundaries between personal and private, especially in social networking environments
  - It's up to us to decide what goes public…

- … and then enjoy the personalized experience and services!