

# ICT-mediated information sharing in public spaces

Panayotis Antoniadis, Ileana Apostol, Karmen Guevarra, Sascha Trifunovic

ETH Zurich

Department of Information Systems and Electrical Engineering

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# Outline (1)

- Information sharing **with strangers** in physical proximity is critical
  - Diversity, social cohesion, community identity, support, ...
- Can ICT help? **Yes ...**
  - Rich content, filtering, asynchronous communication, ...
- **BUT**
  - Privacy, surveillance, and control
  - Selective exposure, virtual interactions, and addiction
- What can we do?
  - Awareness, ownership, customization, experimentation

# Outline (2)

- Privacy & surveillance
  - Worse than we believe!
- But this is not the only problem
  - Power, manipulation, social engineering
- It is also our fault
  - Usability first, self-promotion, addiction
- What can we do?
  - Awareness, ownership, customization, experimentation

# Parenthesis on P&S

Main points made at the Congress on Privacy and Surveillance, EPFL, September 30th

- Legal framework very weak
- EVERYTHING is recorded and correlated
- Unimaginable storage and processing capabilities
- Technology (crypto) not powerful enough
- Long-term dangers not visible
  
- And the worst: People do not care!

*Do they record/care about the everyday interaction I have with my wife? YES!*



# NetHood: Bridging the virtual with the physical

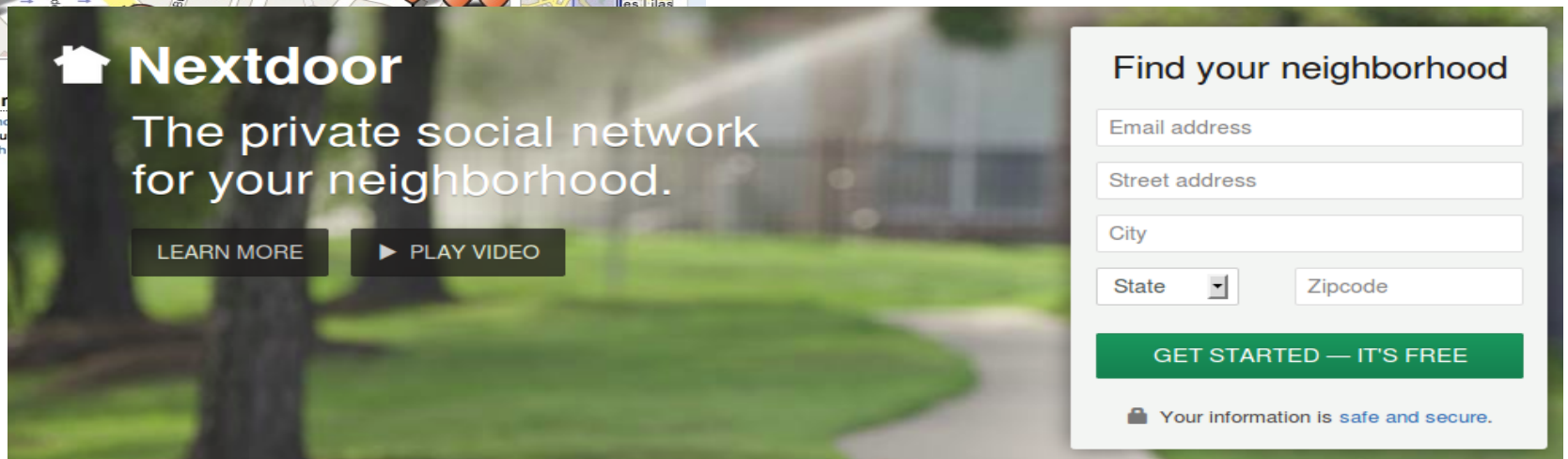
Facebook helps you connect and share with the people in your life.



**NetHood** helps you connect and share with the people in physical proximity



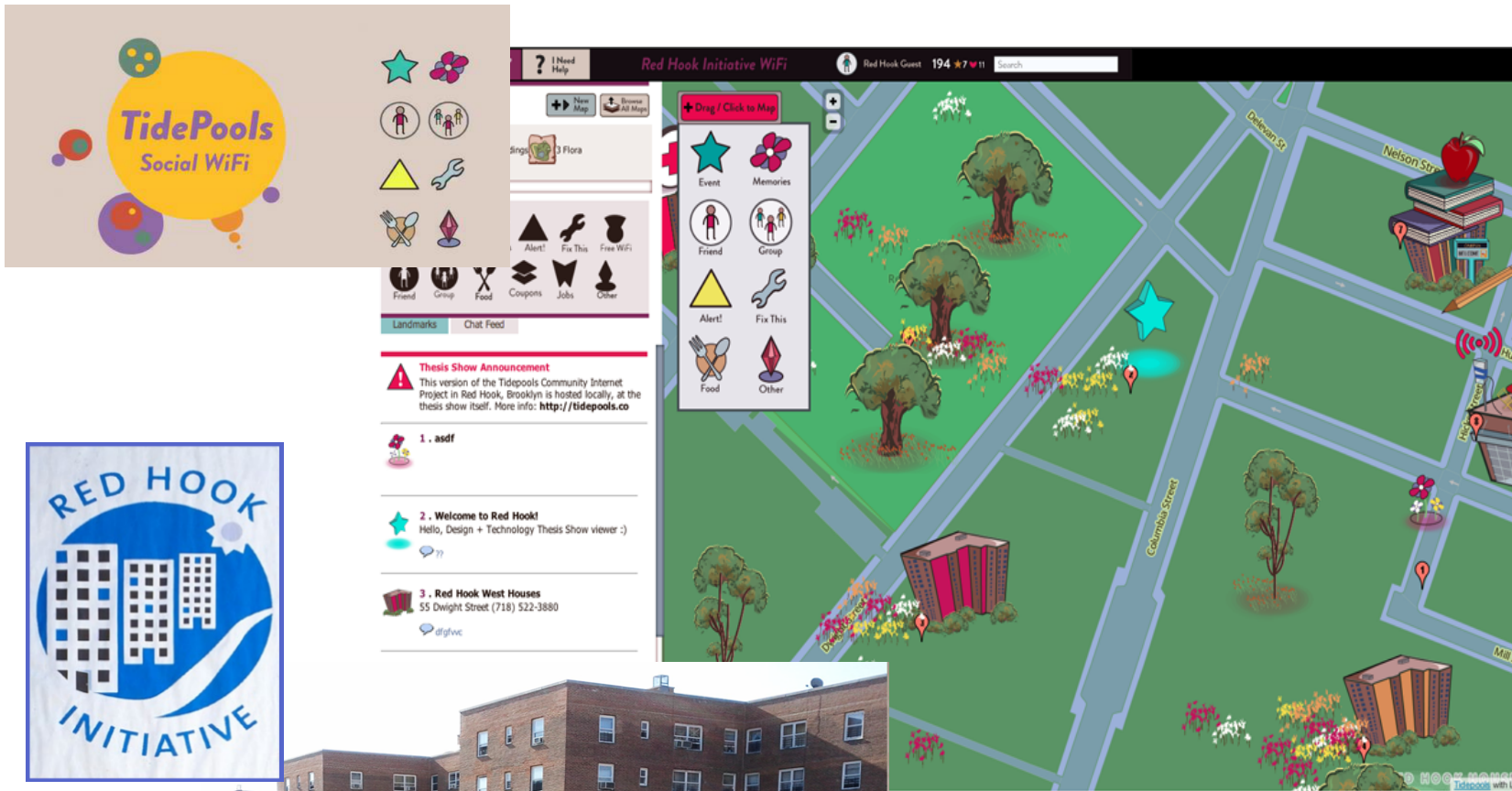
# Many online neighbourhood communities trying to bring neighbours together



NextDoor recently raised \$21.6 million



# Also community wireless networks



<http://tidepools.co>

# More complicated than this

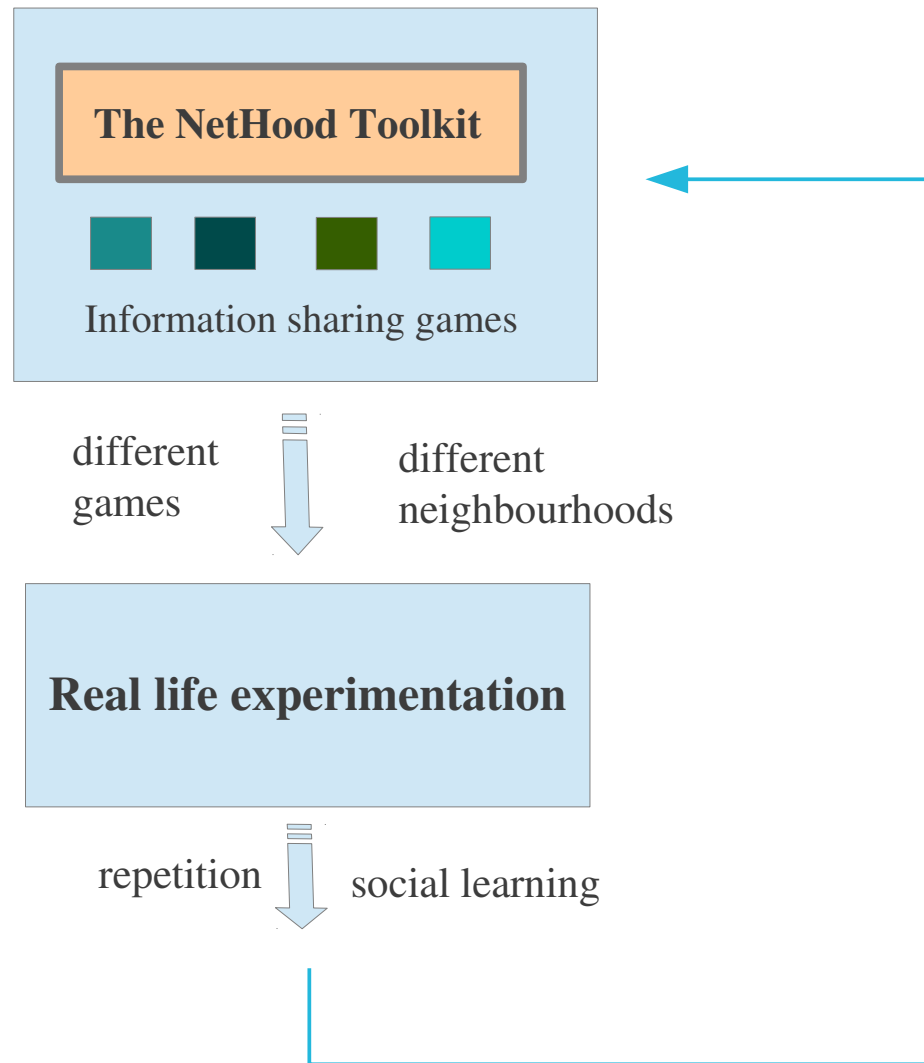
- People do not necessarily want to interact with their neighbours
  - Lack of common interests
  - Limited free time
  - Different cultures even languages
  - and more ...

*Living with people who differ—racially, ethnically, religiously, or economically—is the most urgent challenge facing civil society today. Richard Sennett*

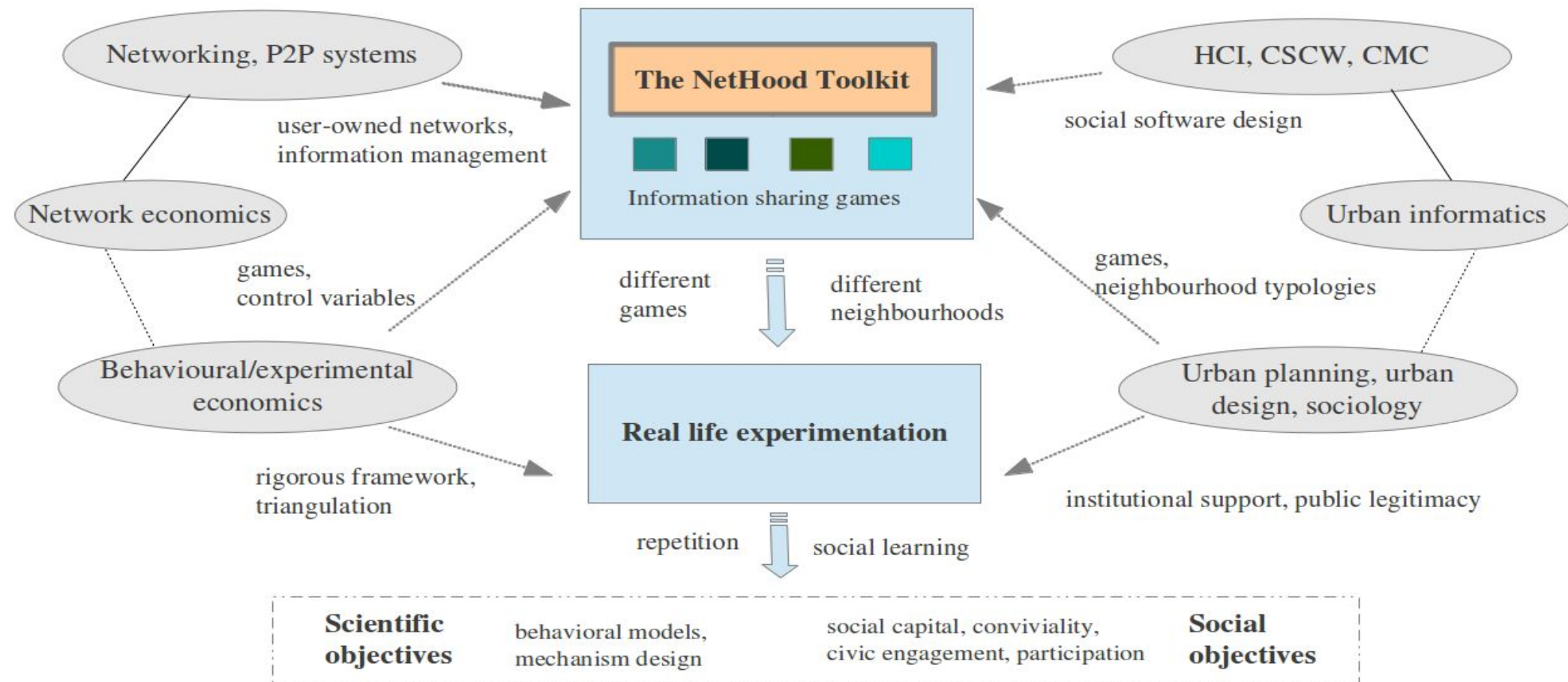
# Social learning approach

- Simple information sharing game
- Experiment with customization options
  - Anonymity level
  - Type of information shared
  - Statistics produced
  - Access rules
  - Memory and data sharing
- Trial and error + interdisciplinary research





A “lingua franca” between computer science, behavioural economics, and urban planning



**Figure 1.** The NetHood interdisciplinary research framework (simplified view)



# Related work



Figure 1. Envelop with information tokens.

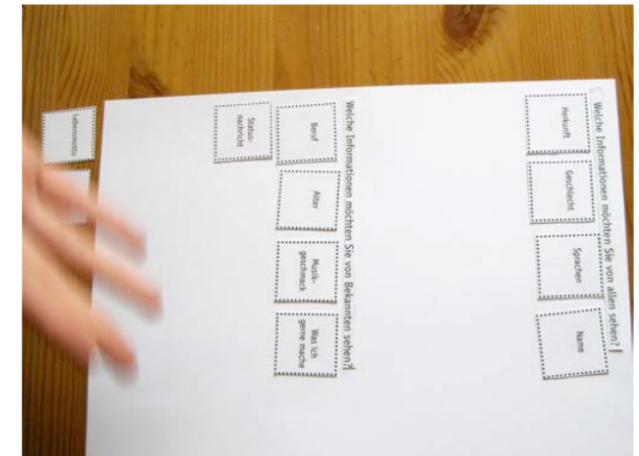


Figure 2. Requesting neighbour information.

Peter Conradie , Stephanie Neumann, and Jonas Breme. 2011. Trust Thy Neighbour: Exploring Information Sharing in Anonymous Urban Settings to Support Trust Generation. CHI Sparks Conference. Arnhem, Netherlands



# Related work

## Hybrid Letter Box

The letter box easily transforms analog input into digital data and is one of the first access points we designed for our neighborhood infrastructure. The ritualized act of posting a letter is used to bridge the gap between the physical with the digital space. This letter box mirrors our goal that neither prior knowledge nor specific digital devices should be needed in order to take part in the sociopolitical network we are designing in order to enable communities to develop resilient actions. The letter box transfers a hand-written message to a digital platform so the issue can be spread effectively and publics can form around the discourse possibly emerging around it. To see the issues posted during the box's first test run at the European Neighborhood Festival at the Fischerinsel Berlin, click [here](#).



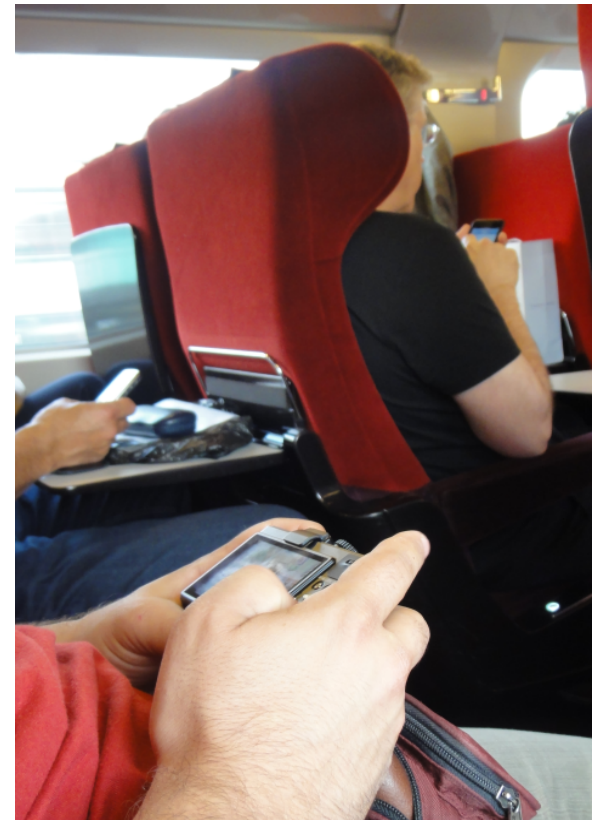
Unteidig, A. F. Sametinger, J. Schubert, and G. Joost. 2013. Neighborhood Labs: Building Urban Communities Through Civic Engagement. Participatory Innovation Conference 2013, Lahti, Finland.

# From neighbourhoods to public spaces

No need for immediate physical contact

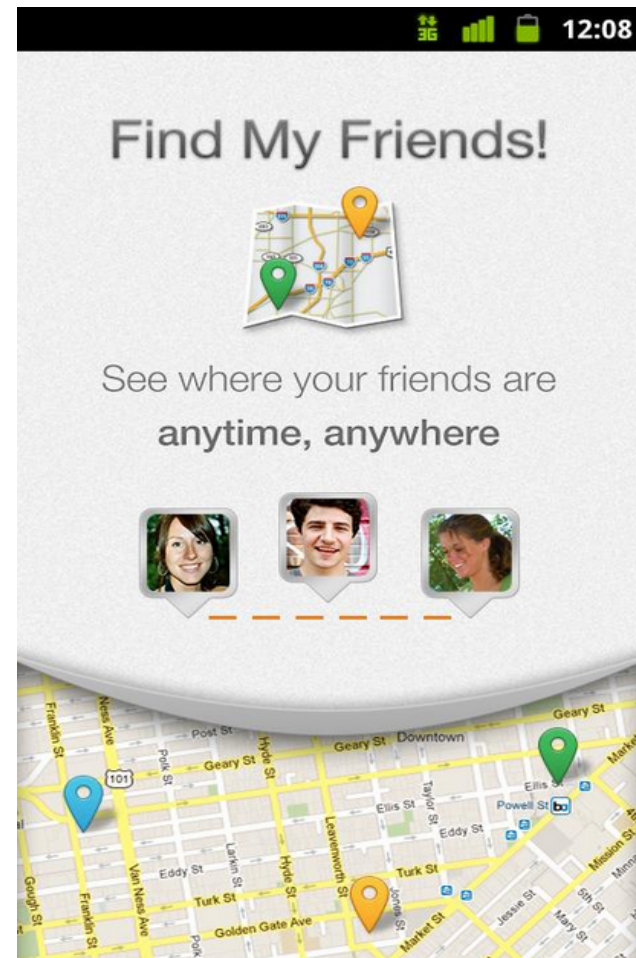
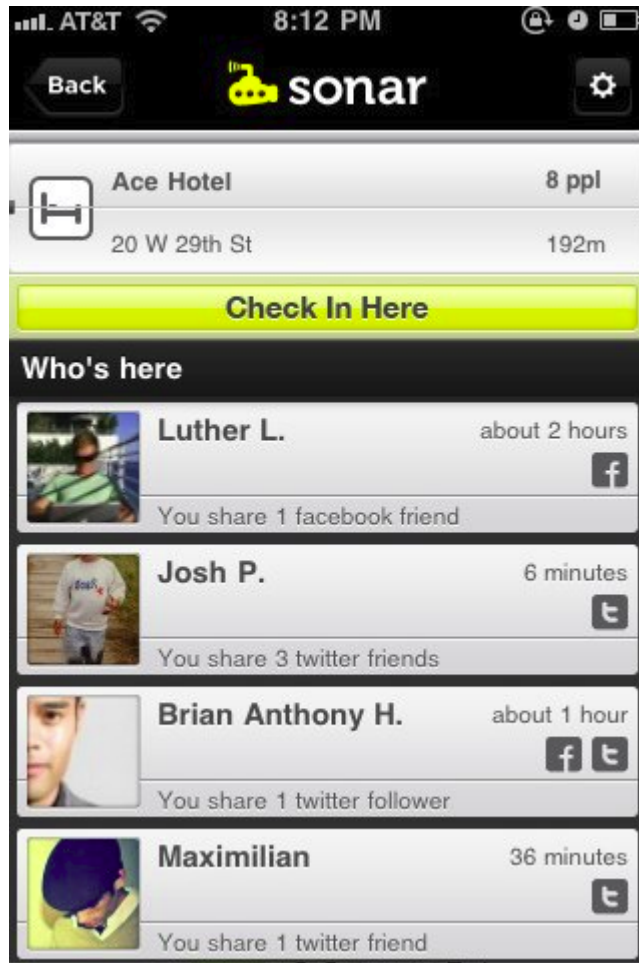


Plenty of free time



Attention and device availability

# Many related Internet-based apps



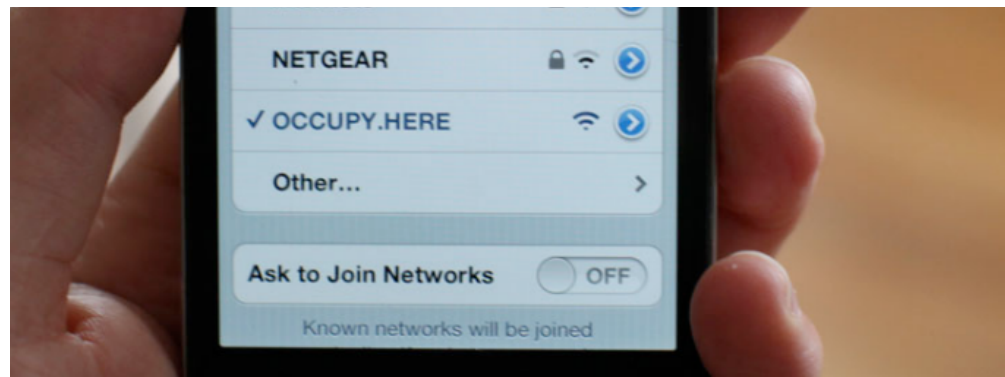


# Important missing details

- Inclusiveness
- Customization
- Locality
- Privacy and surveillance!



# The technology exists



# But the details matter



Pirate Box



NetHood information sharing game

# Let's start simple



- From Personal Computer to Personal Network
  - your laptop as a captive portal!
- We are building a plug&play and customizable social software
  - Where you are? What type of application do you want to host?
  - Choose the rules, data collection and aggregation options
  - Press “start my personal network”

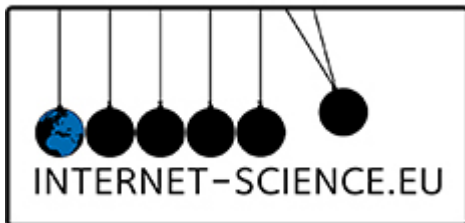
Join <http://nethood.local> WAP





# Thank you for your attention!

- We are searching for
  - Collaborators
    - For research, development, experimentation
  - Volunteers
    - For running local nethoods in their free time
  - Critics
    - For good questions :-)



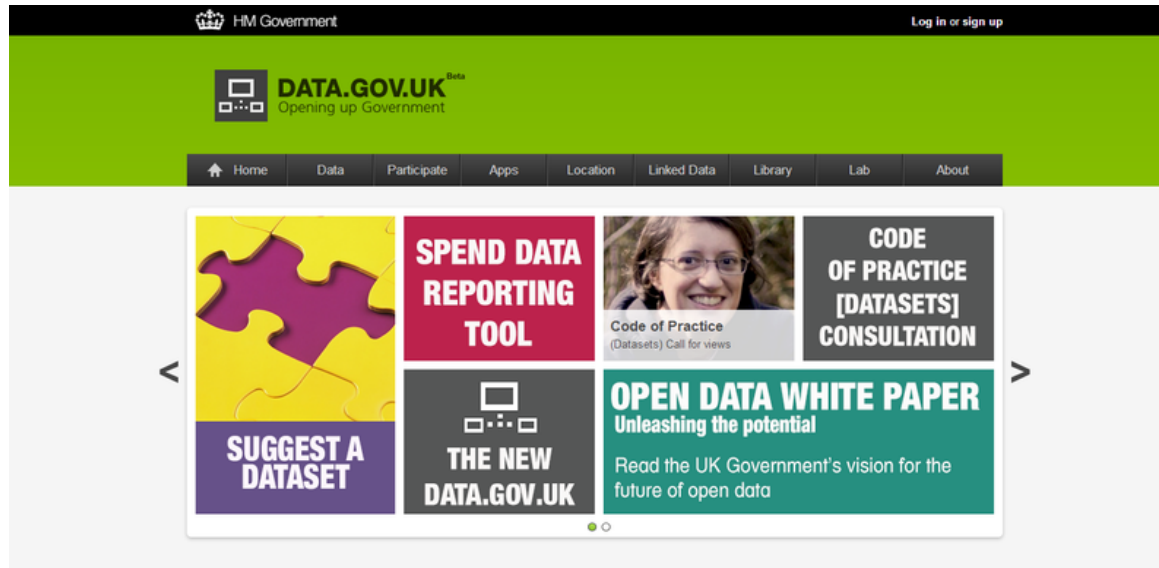
<http://nethood.org>



*As soon as public service ceases to be the main business of the citizens, and they prefer to serve with their pocketbooks rather than with their persons, the State is already close to its ruin. Is it necessary to march to battle? They pay troops and stay home. Is it necessary to attend the council? They name deputies and stay home. By dint of laziness and money, they finally have soldiers to enslave the country and representatives to sell it.*

—Jean-Jacques Rousseau

# Political life: information flows



From governments  
to citizens

From citizens  
to governments



# Can facebook do the job?



Photo by Tridib Banerjee