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opendoor

## What's Inside

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# 01

## Our Topic

Creating sustainable local communities through the exchange of goods and services.

# 02

## Investigation

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## Exposure

Community resource sharing has had a large upswing and popularity and media attention in the past year or so. Below are only a few examples of this trend appearing in leading organizations known for pushing sustainability.

### GOOD Magazine

Spring 2010 Issue is titled The Neighborhood Issue. The creative director says, "The neighborhoods issue as a response to globalization—not as a means of rejecting it outright, but certainly as an opportunity to challenge to the dominant cultural assumptions about what it means to be a citizen of the world. The questions of what constitutes a home/community and how we relate to each other feature prominently. Many people's conceptions of identity are thoroughly intertwined with the neighborhoods they call home—almost to the extent of how specific species come from specific ecosystems, and there's something fascinating (and timeless) about that"

Read more: <http://www.good.is/post/help-make-our-next-magazine-the-neighborhoods-issue/#ixzz0iY9G04DJ>

### Worldchanging

Community Resource Sharing listed as the Next Decades Top Sustainability trends. Editor Alex Steffan quotes, "Resiliency is about making a system or one's self stronger and more able to survive adversity. As the previous items portend, there will no shortage of adversity during the coming decade from climate change and energy supply instability."

<http://www.worldchanging.com/archives/010922.html>

### New York Times

References a self-sufficient mixed-use neighborhood system. <http://opinionator.blogs.nytimes.com/2009/01/11/what-will-save-the-suburbs/>

### Seattle Metropolitan Magazine

Speaks to the idea of a "neighborhood identity" that may or may not be attractive to certain individuals depending on their needs/wants (i.e. family-friendly neighborhood). <http://www.seattlemet.com/real-estate/articles/0508-wheretolive/>

## Existing Services

We looked at many services that already existed for inspiration and guidance and found that many of the services were too central around goods, and the ones that weren't lacked in a easy to use design.

### Product Driven Models

#### Craigslist

Local classifieds and forums - community moderated, and largely free focused around the selling and purchasing of goods.

#### eBay

Online auctions are a framework that provide examples of nested listings, seller profiles, and feedback systems.

#### Amazon

The Customer Review pages on Amazon give users a place to rate the product they bought. Customers rate the product and provide meaningful feedback.

### Social Service Programs

#### Time Banks

References the social aspect, we aspire that our site can bring forth these kind of social changes within communities.

#### Better Together

A pattern of reciprocal service exchange which uses units of time as currency and is an example of an alternative economic system.

#### MyStreet.com

Provides every neighborhood with a free tool they can use to improve communication and safety.

#### Bright Neighbor

### Community Exchange Programs

Helps communities and local governments thrive through community organizing and Internet-based tools, community involvement and social tools.

#### Neighborgoods

Online community resource where the user can save and earn money by sharing stuff with your friends!

#### Swap treasures

A platform that users can trade goods for things that they want. Instead of buying additional goods, trading unused goods that others find appealing can save both parties time and money.

#### The Needle

Open-source application to help encourage young people to become more involved and connected to their local communities, through sharing both items and ideas with their local networks.

## Related Articles

### “Greenburbia”

In a similar vein, this article references the emergence of “greenburbia” as they put it: <http://www.american.com/archive/2010/january/the-war-against-suburbia>

### “Intelligent Materials Pooling”

Evolving a Profitable Technical Metabolism, by Michael Braungart  
 “...If materials are used in a system that echoes catch-and-release fishing, they can be used for a defined period and then returned to a common pool, providing resources for the next...”  
 “create material banks for nearly every valuable commodity, from chemicals to steel to advanced polymers. To do so, the goal of materials pooling can be nothing less than eliminating the concept of waste”

### “No Impact Project”

Focused on environmental impact  
 Mission: To empower citizens to make choices which better their lives and lower their environmental impact through lifestyle change, community action, and participation in environmental politics. Goals: Promote behavioral change; Enable the public to experience their own No Impact Experiment; Engage people who are not already tree-hugging, bicycle-riding, canvas-bag-toting, eco-warriors.

### “Intentional Communities”

<http://www.ic.org/pnp/myths.php>  
 Members live “communally” in an economic sense—operating with a common treasury and sharing ownership of their property. Slight more ownership and accountability for belongings than in commune.

### “P-Patch”

Community Gardens <http://www.seattle.gov/Neighborhoods/ppatch/>  
 “Community food security”- It is when all community members obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.

## Relevant Concepts

<b>Cradle-to-Cradle</b>	Systems that are efficient and essentially waste free. Resources circulate in an endless cycle of production, recovery and reuse.
<b>Eco-Efficiency</b>	Minimizing waste, pollution, and natural resource depletion As members find common cause and provide support for one another, the separate elements of the community begin to gel, forming a shared identity grounded in mutual trust.
<b>Opportunity Match-making</b>	Cities could host a technology platform and monthly meeting to enable people with ideas to share and get feedback from the community. Members of the community could voice their opinions and the city would seek to make connections between citizen entrepreneurs, neighborhoods, and investors. The city would earn a percentage—like a talent-agency would—for these connections.
<b>Product Service System</b>	Transforming one’s relationship with objects from one of ownership to one of use offers perhaps the greatest immediately available leverage point for greening our lives.
<b>Conscious Consumption</b>	Seeks to increase awareness of the impact of buying decisions on our health, happiness, and environment. Through education and discussion we encourage people to live in line with their values by better prioritizing time, money, and material things.
<b>Interdependence In Nature</b>	Interdisciplinary scientific study of the interactions between organisms and their environment. (Ex: Even though the cherry blossoms flowers fall to the ground, the tree’s abundance of blossoms is both safe and useful, contributing to the health of a thriving, interdependent system. The tree spreads multiple positive effects-making oxygen, transpiring water, creating habitat, and more.)



# 03

## Conceptualization

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# Concept Mapping

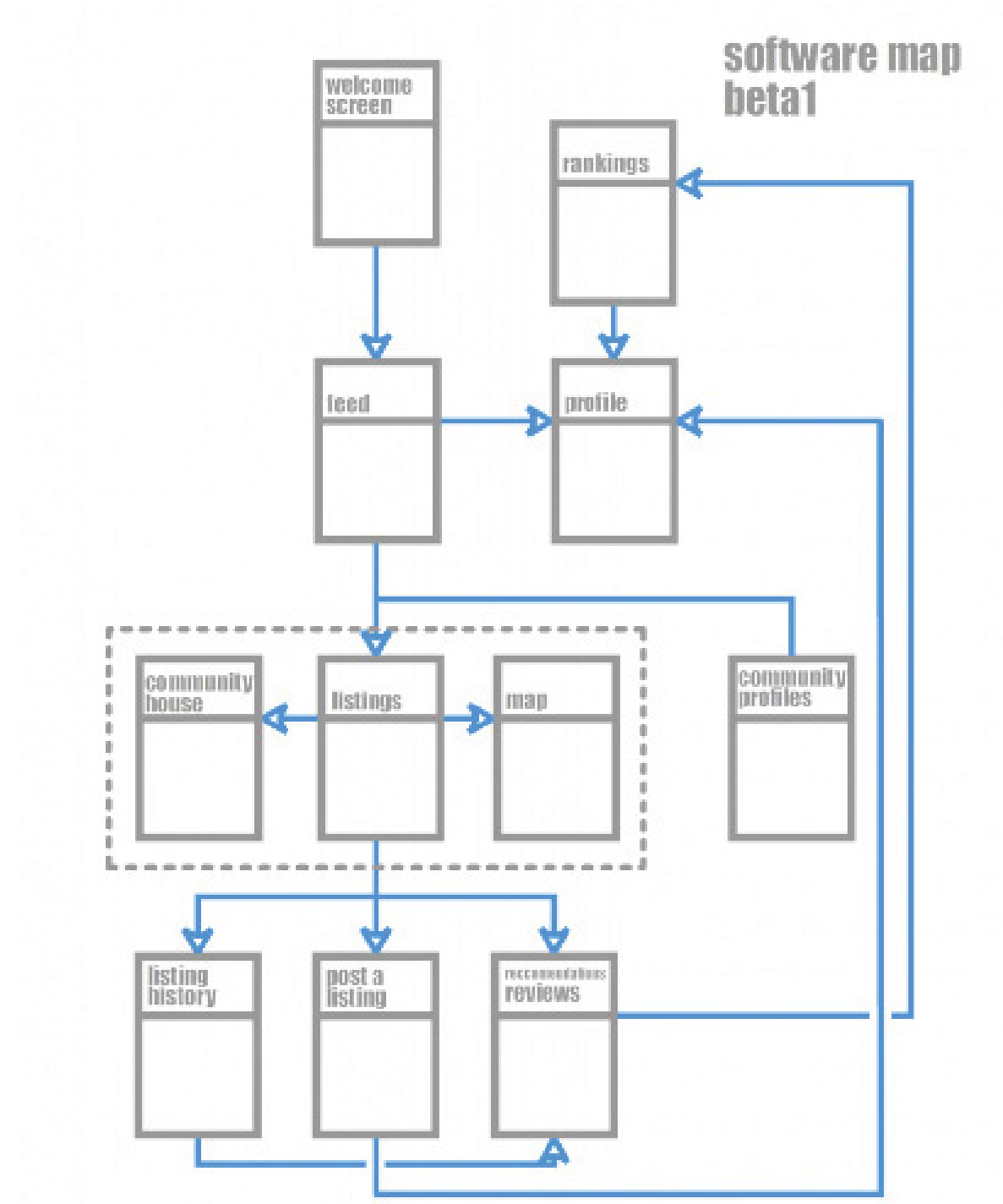
**Initial Concepts** Model of a communal house (within in each neighborhood).  
 Visuals of missing objects like in garage (can use dotted outline to show that something is checked out).  
 Request button or 'Library check out' of belongs & service.  
 Physical cards or stickers that are used to facilitate social interactions or perhaps work as a loaning system.  
 Community events based around seasons changing, new neighbors, etc.

**Pages and Systems** Profile for each individual with good that they have and are willing to share.  
 Profile for each neighborhood as a whole (ie: Fremont, Ballard, etc)  
 Keep it within a specific community (potentially easier to deal with the goods that you rent/loan out).

**User Classification** Proximity  
 Rating (how much they share).  
 Other user feedback.

**Metaphor** Virtual yard sales  
 Move in / out day  
 Badge or merit  
 Timebank (hour for hour).  
 "Keeping up with the Jones"

**Question and Limitations** How do you regulate what favors being exchanged?  
 Does money keeps you free of any obligations?  
 Is there anything to regulate how many goods one borrows?  
 What is the liability if something breaks is mistreated?  
 How do you get a broad demographic interested ( young people, the elderly, etc.)



**Initial Software Map**  
 First draft of the concept map for the software. Arrows show a relationship between views. The dotted box around the Listings, Community House, and Map page is to show a clumping of similar data. The Map and Community House are both powered by the Listings engine, they just are manifested in a different visual way.



## The Problem Defined

### Social Isolation

The age-old adage “know thy neighbor” has become a thing of the past. After conducting interviews about neighborhood relationships, many people seem to know of their neighbors but don't have personal relationships with them.



## Interviews

*Well my neighbors have a dog that smiles and we never see them. They're always in and out of the house. Only one car stays there and never any lights on...*

### **Stacey**

*I met my neighbor once, but I often use his internet. And I can keep an eye on his house while I'm in the shower, but I rarely see anything.*

### **Elaine**

*My 50 some year old neighbor Ned makes house mash-ups and plays the jazz bass for what seems like 12 hours a day 1-3 days a week.*

### **Tristan**

*The lady next door who made us cookies when we first moved in died alone in her house. Since then, the gardens that bloomed in her yard which she had taken care of so carefully has faded into grass. Other people with more than enough cars live there now.*

### **Grace**

*The walls in my apartment building are paper thin. I'm constantly hearing my middle-aged neighbors talking to one another in some sort of creepy baby talk. They stay up until 3 or 4 AM and the husband's laugh is loud and slightly high-pitched.*

### **Jacob**

*After living with no neighbors for 16 years, I now have a great street of wonderful neighbors. We have all different ages (4 months to 90 years old) and we wave and talk to each other. I love to see the kids playing with each other. We have been invited over for dinner (summer bbq) to baby showers, to go walking and more. We have also looked after the neighbors animals while they were gone and they have taken care of ours too. I also love to ask my uphill neighbors for gardening advice since they have a really neat garden/yard and I am new at the gardening thing. Yeah, I love my neighbors!!*

### **Tina**

## The Problem Defined

### Waste

In the past, resources were scarce and sharing of tools was much more commonplace. Today, consumerism has changed the definition of ownership. Things are cheaper and more readily available to buy; people buy things that they may only really use once or twice before being shoved in a drawer, never to be used again.



**“The average power drill, over its entire lifespan, gets only about ten minutes of use.”**

John Thackara

## Our Vision

Create a platform that fulfills service needs like Craigslist, as well as facilitate social relationships like Facebook.

## Existing Services



## Conceptualization

## Platform Goals

1. Identify needs
  2. Share goods & services
  3. Build personal relationships
  4. Build a community network
- } service  
} social

1

**Identify Needs**  
 People are driven to use the service because they have a need (i.e. a ladder)

2

**Share goods & services**  
 The service enables people to contact and meet neighbors who can answer these needs.

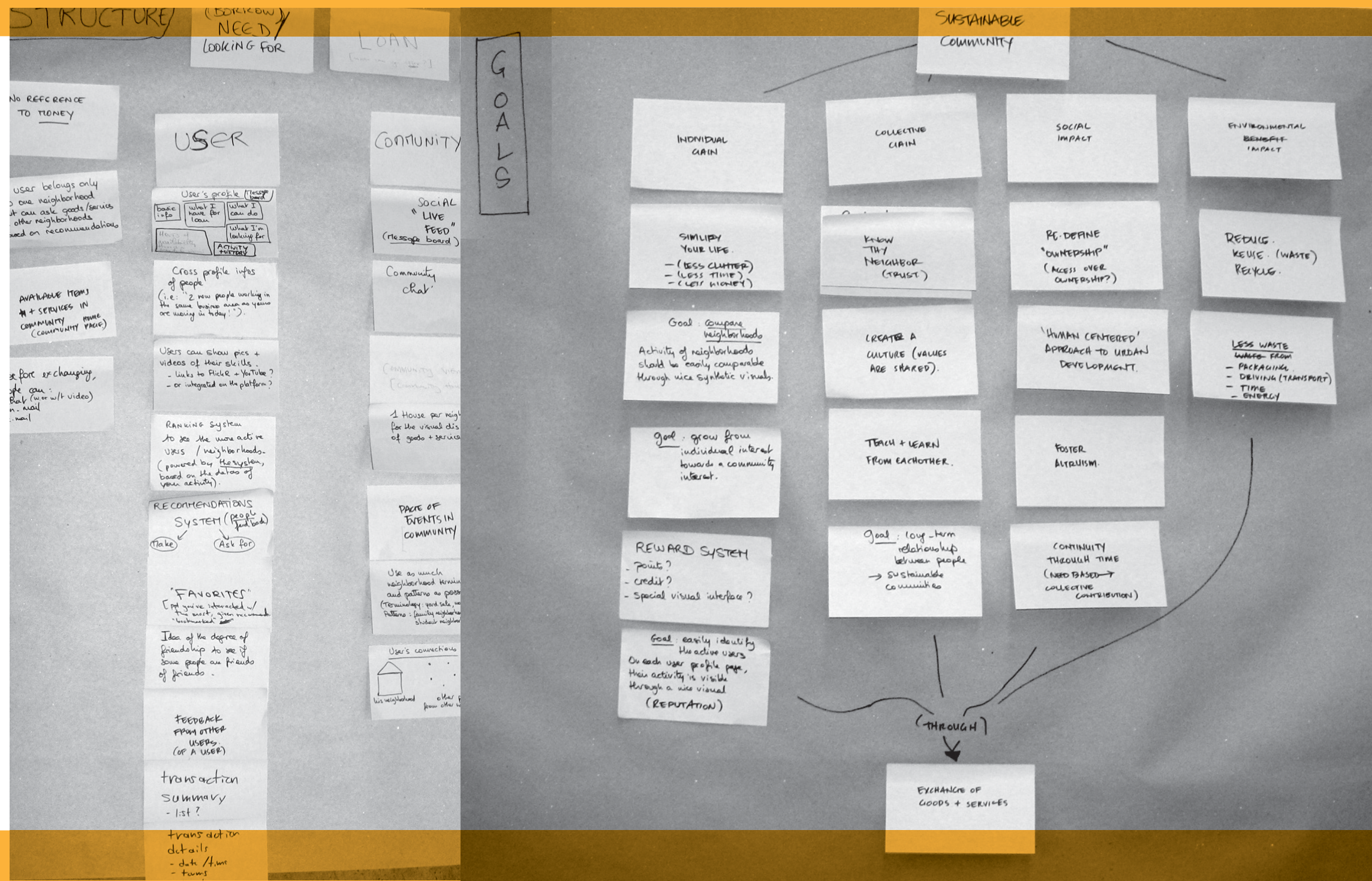
3

**Build personal relationships**  
 Contact through the service will implicitly encourage relationship development among neighbors.

4

**Build a community neighborhood**  
 Through time and use of the service, people will get to know their neighbors. These friendships will promote further lending and borrowing activity in a community of trust.

# Platform Structure and Goals Brainstorm



# 04

## Implementation

26 Benefits: Service vs. Social

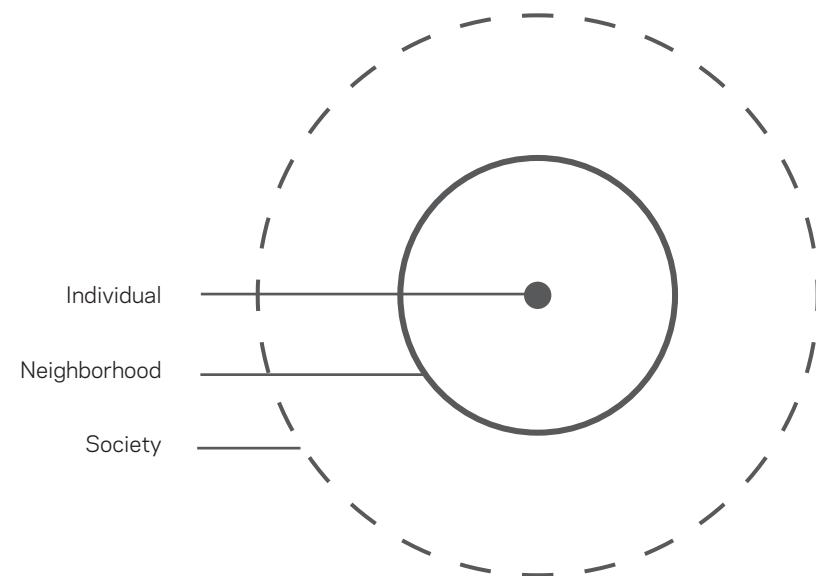
27 Definition of Our Model

Implementation

## Benefits

- Service**
  - Caters to individual needs
  - Accessibility over ownership
  - Reduces waste (objects, money, time, energy)
  - Efficient resource sharing
  
- Social**
  - Awareness and open communication
  - 'Co-op'eration
  - A network of trust and collaboration
  - Lasting relationships outside of online networking

Who does the service benefit?



Implementation

## Definition of our model

**Feedback from first presentation** The risk of your service is to be perceived against the American Dream. How do you motivate people to take part into it ?

**Our arguments** With our service of exchanging goods and services, people will still consume and buy goods and services but higher quality ones and new ones that they couldn't afford before exchanging. It's actually the revised version of the American Dream: it's the new American Dream that allows you to have access to more goods & services of better quality.

Thanks to the service, people will change their relationship to things (quality over quantity), and as a consequence of the service they will also change their relationship to people: the final reward for the users of the service is being together with new people.

**Our service also has an important emotional benefit:**

1. somebody who buys a rarely used object that is expensive (i.e. a sewing machine), is satisfied not only to own the machine but also to now have the ability to help other people in his neighborhood with this object.
  
2. when you lend an object of yours, it's a story about yourself that you lend as well

Implementation

# Definition of our model

## Our business model

1. A user borrows a good / service
2. The money this good / service is worth is shown as saved in a virtual saving box
3. With the money saved, the user can buy new goods/services of better quality
4. Consequence: as the quality of the goods in the community increases:
  - each good borrowed will have more usage and more users, so they will need to be of greater quality
  - all the poor-quality objects will disappear (the ones that are in public storages, in storage rooms or in yard sales)

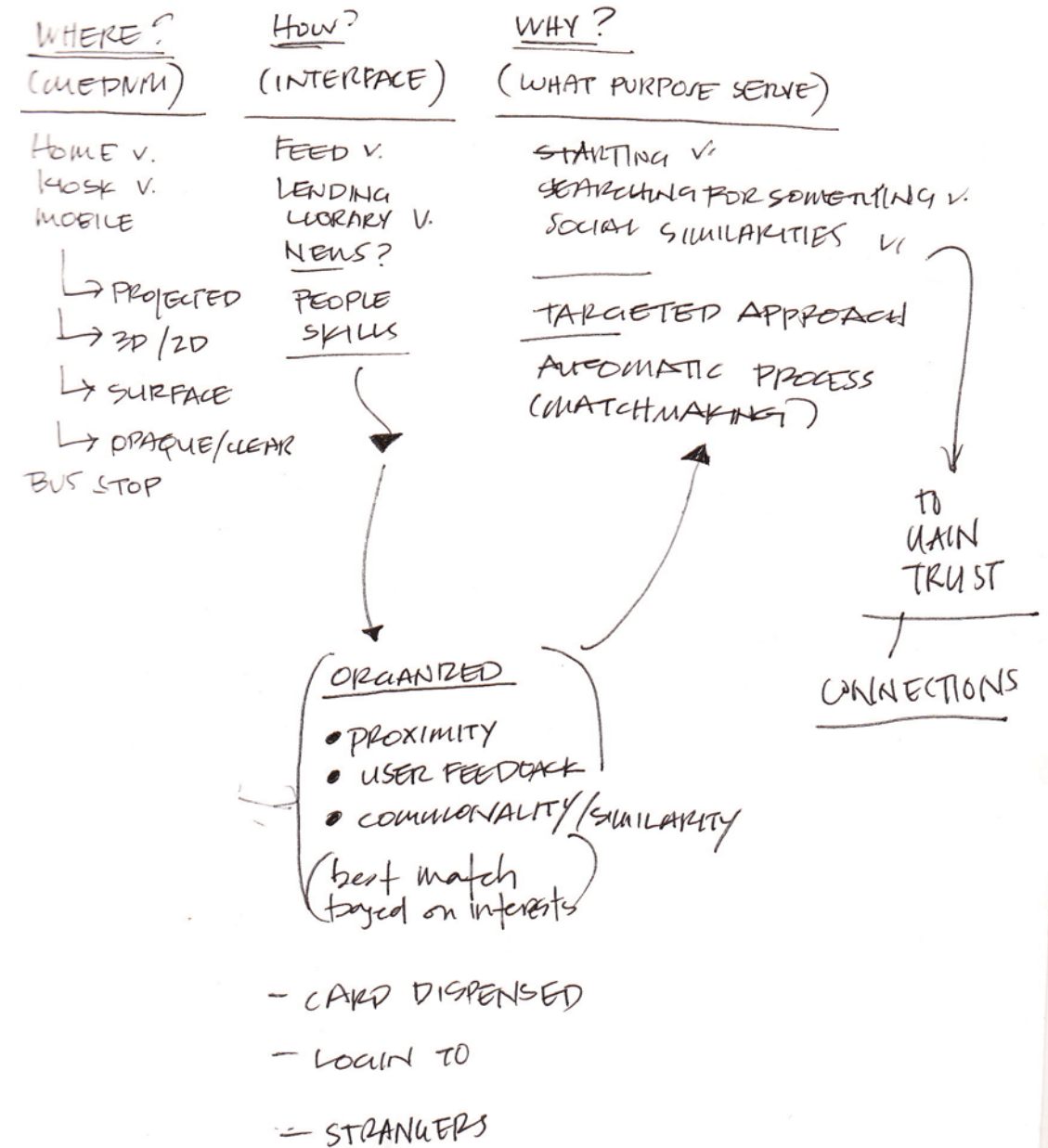
## Motivation for using the service

### Benefits/Rewards for the borrower

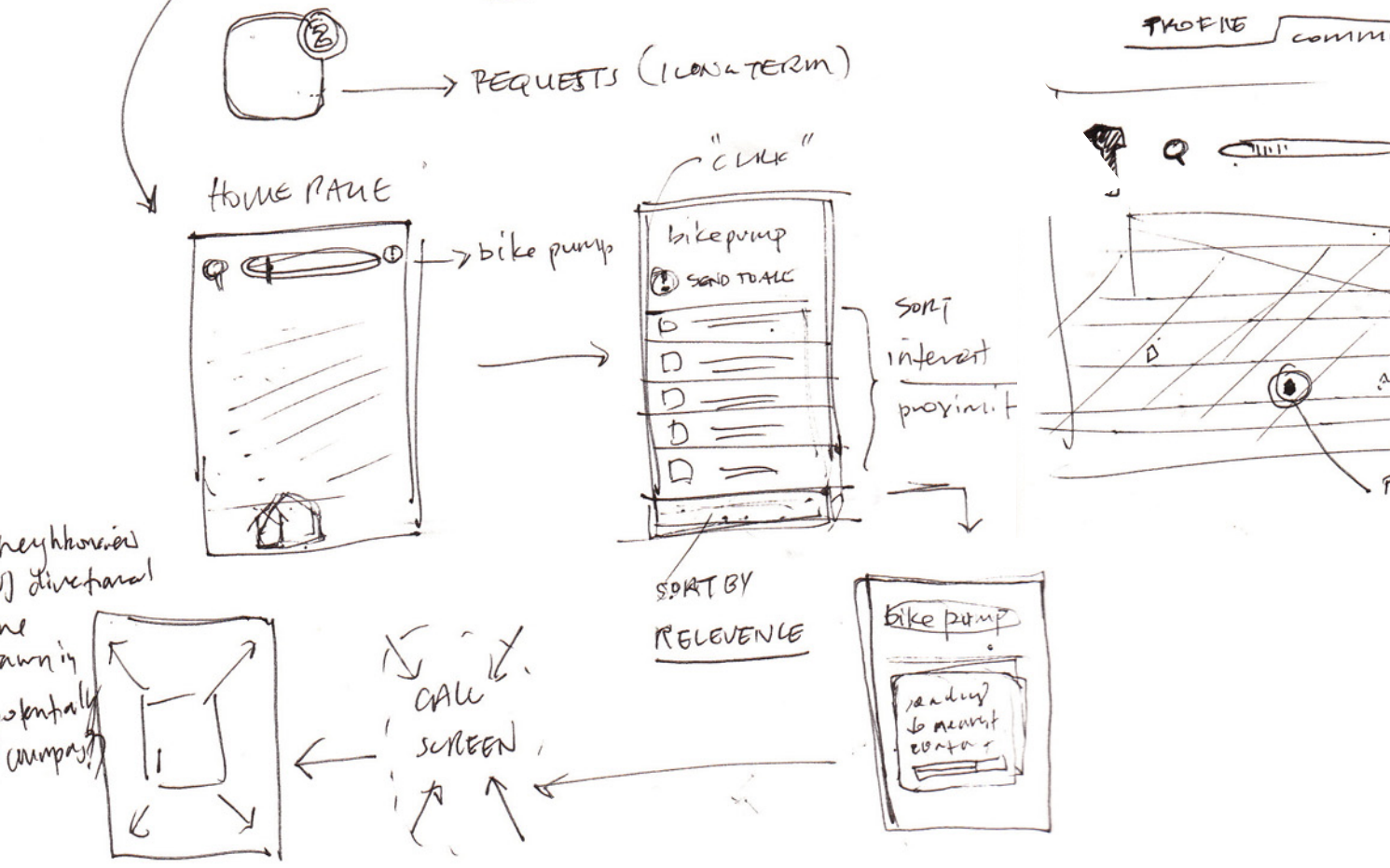
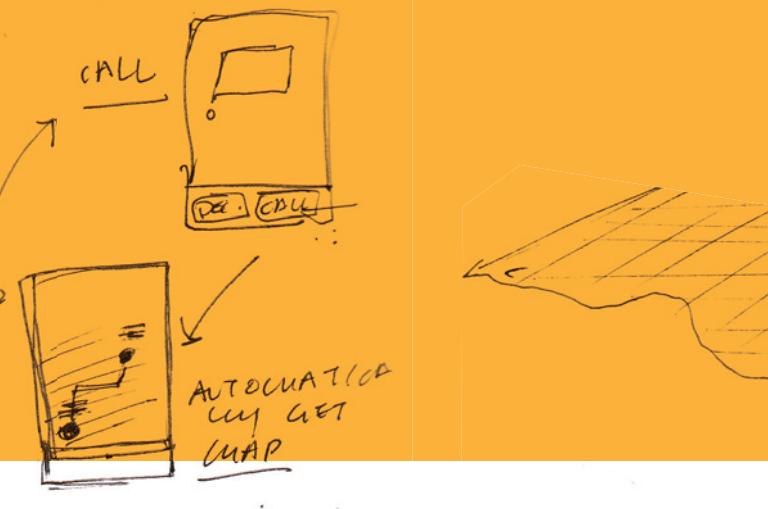
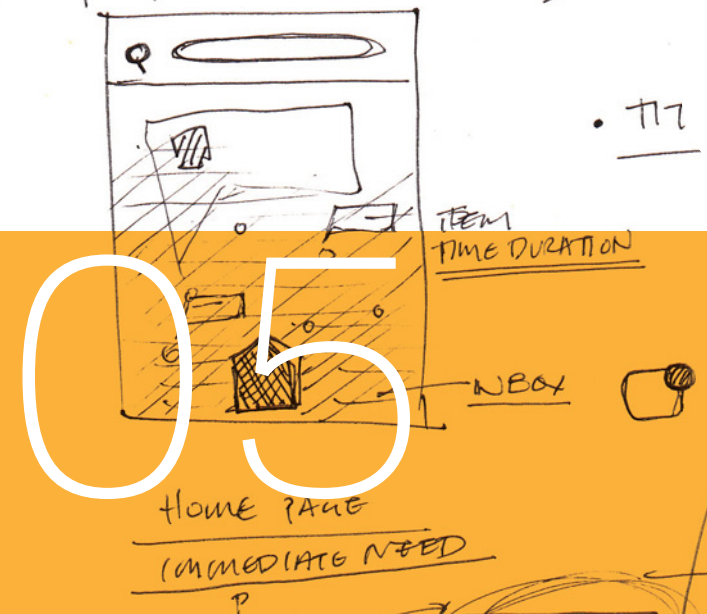
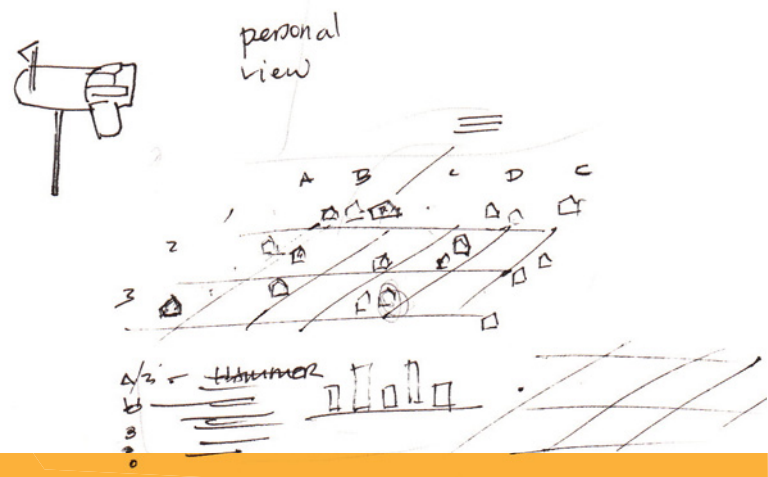
THE MORE YOU USE, THE MORE YOU SAVE!  
 THE MORE YOU BORROW, THE MORE YOU CAN BORROW  
 (as relationships form, so does credibility and trustworthiness)

### Benefits/Rewards for the lender

THE MORE YOU LEND, THE MORE YOU CAN BORROW  
 There is a strong emotional benefit for lenders:  
 the idea of helping out people in their community.  
 When they lend an object, it's a story about themselves that they lend as well.



IMMEDIATE NEED =  
bike pump



Design Prototyping

- 32 Tasks and Userflow
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## Tasks and Userflow

Our platform would have the following six main functions

### I. Signing Up

### II. Searching (for a need)

- a. Proximity
- b. Feedback
- c. Interests
- d. Timeframes

### III. Browsing

- a. Neighborhoods (map)
- b. Community House (items)
- c. Individuals (profile)

### IV. Communicating

- a. Computer
  - Send a Request (email, skype, phone)
  - Answer Request
- b. Phone
  - Alert (map/proximity)
  - Send a Request
  - Answer a Request
- c. Recommendations
  - Make v. Ask

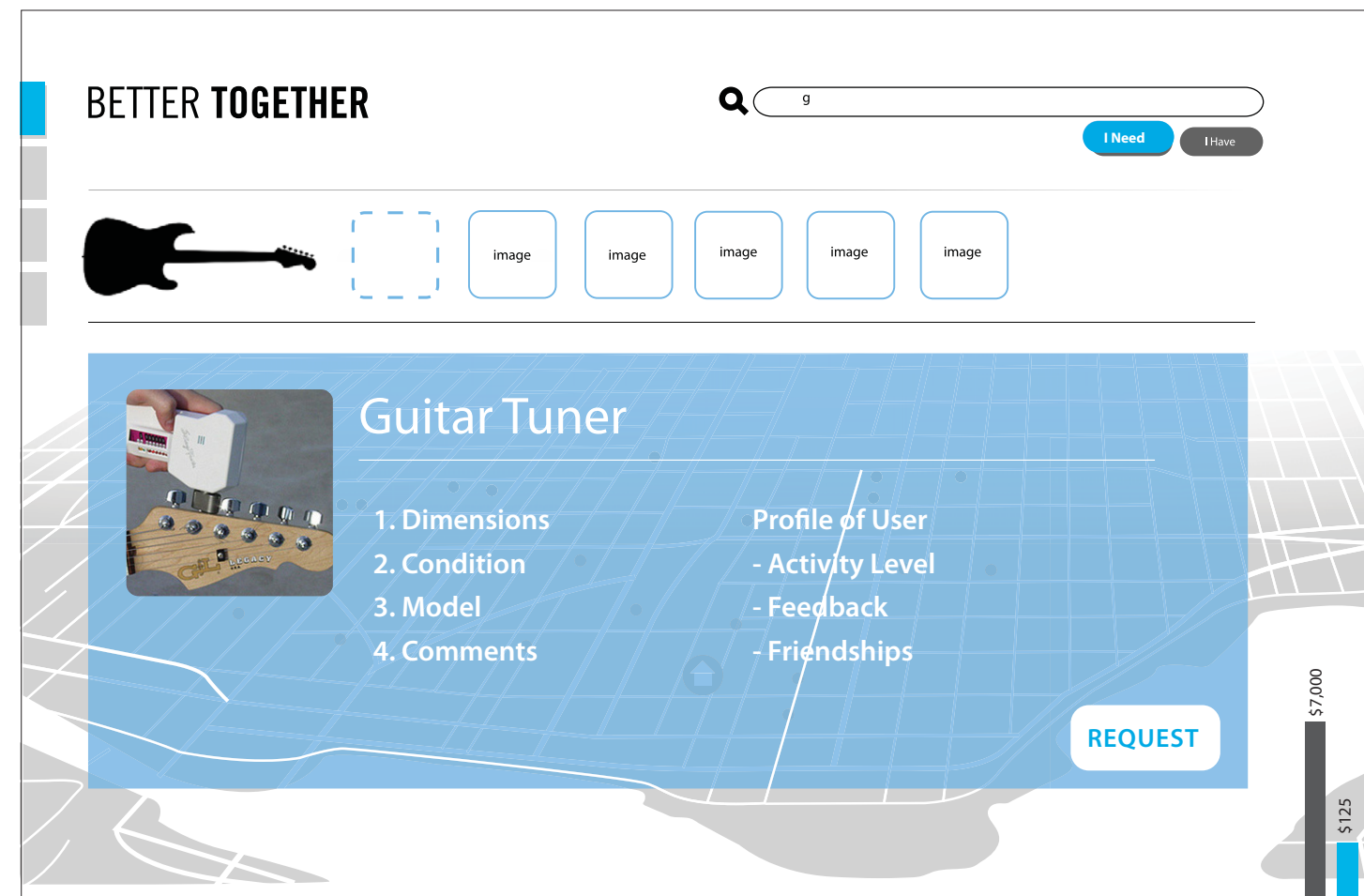
### V. Profiling Individuals

- a. Needs
- b. Haves
- c. Feeds
  - Record history
  - Connections (matchmaking)
  - Feedback
  - Bulletins

### VI. Reviewing History + Stats

- a. Between Individuals
- b. Between Neighborhoods
- c. Over Time

## Initial Visuals



Design Prototyping

## Interface Design

### Phone interface and GPS technology

Having the service on the mobile phone would allow users to recognize people from their neighborhood having the goods and services needed, and to meet them directly in person to set up the exchange.

#### How it works:

1. first we need to define physical neighborhoods limits with GPS coordinates
2. each user registers for a specific neighborhood
3. when two users from the same neighborhood have matching Want / Have and are in close geographical proximity inside the neighborhood, the system will recognize them and give them the info (match making between people, based on the information contained in the phones AND the GPS area coordinates of where the two people are now).The system would also be able to give feedback about who is an outsider.

### Other technologies we thought about:

#### Projection technology into the mobile phone

- the user can project the information contained in your phone on any type of surface, which means different locations and different sizes (in the bus, you can project on a white page of your notebook, at home on your wall or on the ground, etc...)
- the user can exchange info with people by projecting information from both phones
- idea of a community shared display (to have a presence of the service in the physical environment)

#### Movements recognition technologies

when people want to move things on the interface, they can use real physical movements.

#### 3D images

Use of a software that can re-create the visualization of the object in 3D, based on 2D pictures.

Design Prototyping

## Interface Design

### General thoughts about the interface

At the user individual level: visualization of the savings made thanks to the borrowed goods / services

At the neighborhood level: visualization of the number of goods saved (i.e: "we saved 10 hammers this month!")

At the neighborhood level: visualization of the goods / services that are missing in the neighborhood (i.e: goods / services that people need but nobody has to offer)

When people fill in their profile info, avoid the long lists to pick from or the numerous boxes to check. Let them type in what they need, and according to what they type, the system proposes them 3 or 4 categories to chose from.

Unify the appearance of goods / services with vector icons (and then users can look at people's pics of their objects)

Use of infographics rather than maps

# 06



## Revisions

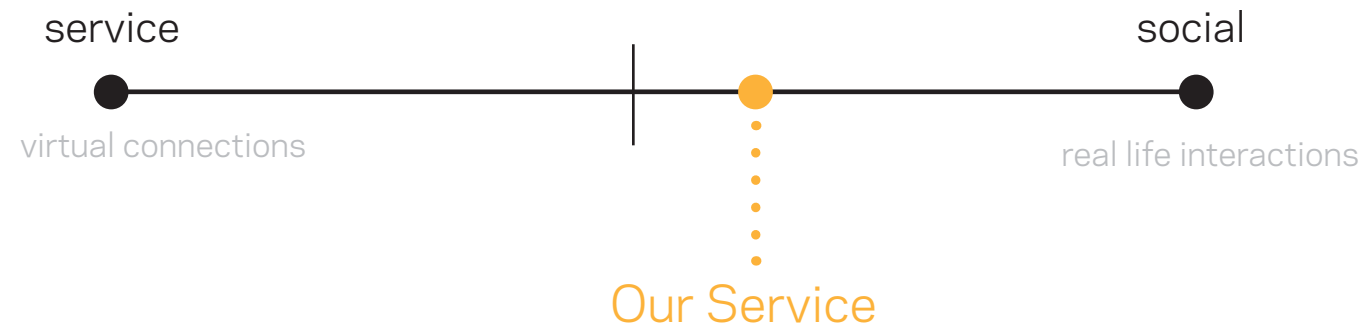
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## Goals

Less virtual

### Service in favor of more real-life interactions

We realized that we designed a highly functional service, but the fact we made this service so functional made us somehow forget about the real interactions between people. To solve this, we simplified the service, and transferred some of the actions into real life interactions (for instance, the request of the good/service and the scheduling for the appointment).



## Implementation

### Three Part Service

The Service: exchange of goods and services

The Social: make good contacts / friends

The secondary services: compare yourself to others (statistics); save money (savings);

### Benefits re-thought

The more you use, the more you save

Track savings

Access a wide range of objects

Promotes quality products

service

Improves quality of life

Improving the American dream

New relationship with objects

= new relationship with people

Friendly and frugal comparison between people

social

## Design

### Go Mobile

We agreed to drop the website application in favor of a mobile application, using the GPS technology to make people interact.

### Simplify

Make the interface itself less complex from a usability standpoint and pair down the number of features.

### Communication

Make it easier for the users to communicate directly with others using the service – at it stood, the process was convoluted and required too many steps before the actual exchange occurred.

## Final Concept

3 new concepts to chose from before finalizing

- 01 **Concept 1:** For this concept, the intent is that people enter into the system what they have and what they need. Then, with this database and with the GPS technology, the system is able to create matches between 2 persons who are at the same location at a specific moment and based on both persons Haves and Needs. This means that a person will get a good /service that he needs, only if he can offer something in exchange to the other person.
- 02 **Concept 2:** In this mobile system, users will not have to input what they have/can offer. The system will be able to understand patterns in user activity ( i.e. buying habits, places of interest, hobbies) based on geolocation or through keeping track of what you buy. From this information, the system creates “profiles” for each user (i.e. user A buys a lot of dog food, they must have a dog, or know something about dogs.) When someone has a need, the system draws from these profiles and gives the user recommendations for who to contact. There is no guarantee that the people retcommended by the system have the tool, but the likelihood is high based on “user activity profiles.”
- 03 **Concept 3:** Start by entering interests / areas of expertise. When a user prompts the system he has several options; he could ask for a hammer or send out a request for help with a leaky faucet. The system would find top matches based on expertise level or areas of interest / knowledge vs. distance. The system might send a request starting with with best possible match. If the person is willing to help, they contact the user and all interactions in the social realm happen outside of the system.

# 07

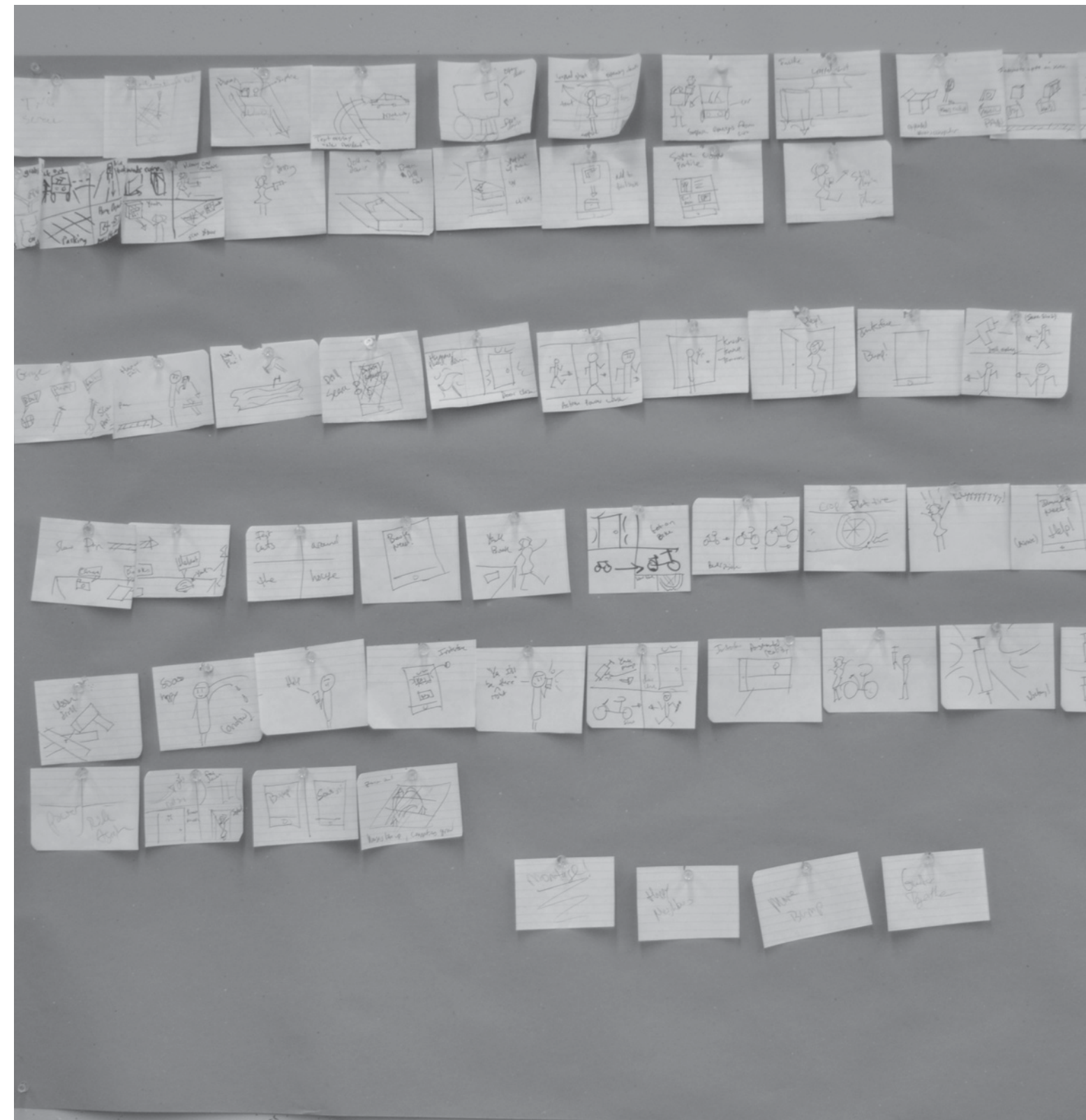
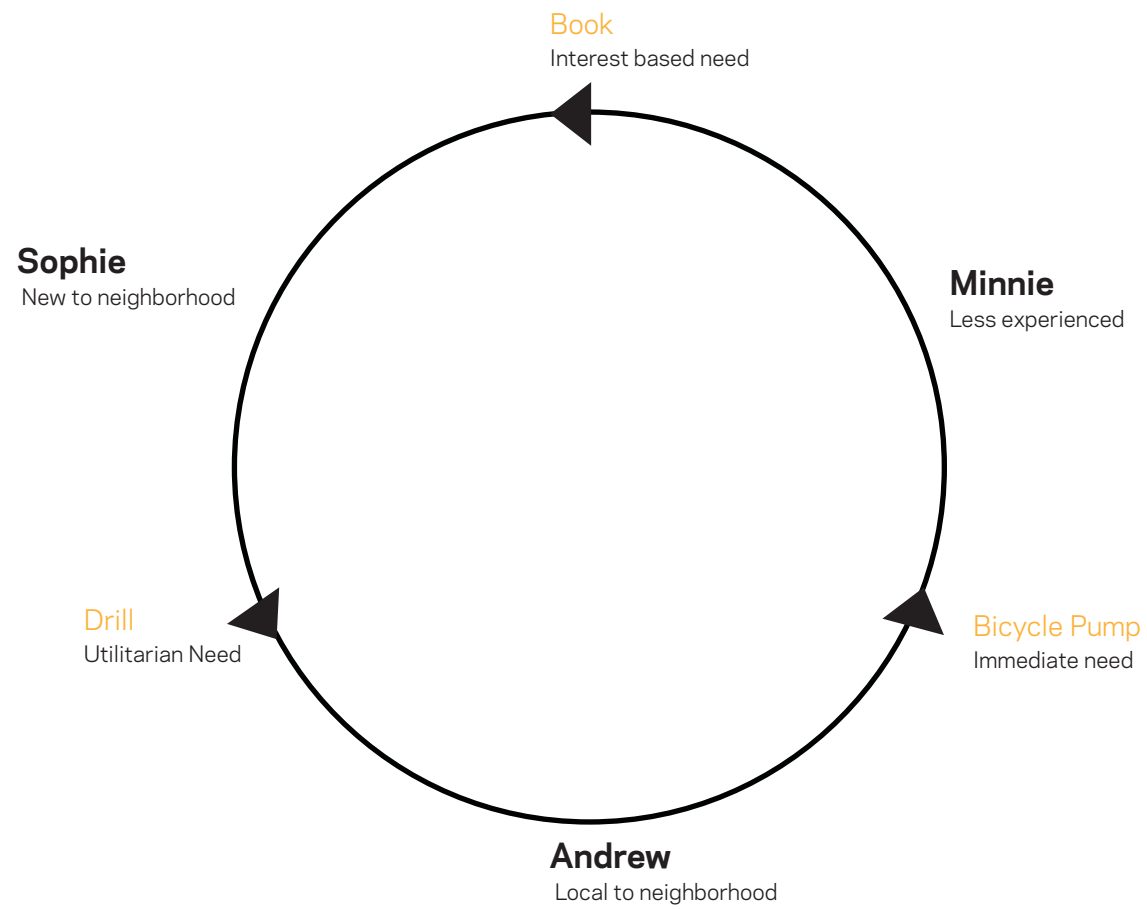
## Film Documentation

44 Storyboarding

46 Production

# Storyboarding

We had initially wanted to make a more complex storyline than we ultimately finished with. It went from six individual stories to three. We based our story line around three key points in our application and interface - searching for an interest based need, a utilitarian need, and an immediate need.







# Filming

We based our filming on primarily the social aspect of our product, but made sure to include a few crucial interfaces to define how the system would facilitate and ultimately promote these exchanges. -

### References to Interfaces within Film

- Profile**
  - 1 Interests ( items + proficiency )
  - 2 Toolbox ( animate drill photos in toolbox )
  
- Search**
  - 1 Searching for drill
  - 2 Viewing request
  
- Immediate Need**
  - 1 Search
  - 2 Feedback
  - 3 Andrew's Interface
  
- Bump**
  - 1 Beginning ( split screen )
  - 2 End ( friend request )
  - 3 End ( savings )
  
- Stats**
  - 1 Calculating Connection (Minnie's profile)



# 08

## Final Design

51 Interfaces

46 Production



Final Design

## Revised Vision

**Components**

**Mobile-based**

facilitates the most direct form of contact between individuals

**Based on geolocation technology**

location-based data helps to inform user of availability and accessibility of their desired need

**Non-intrusive and self-directed**

the revised system directs and recommends users to individuals who best fit the requested need

**Guided by common interests**

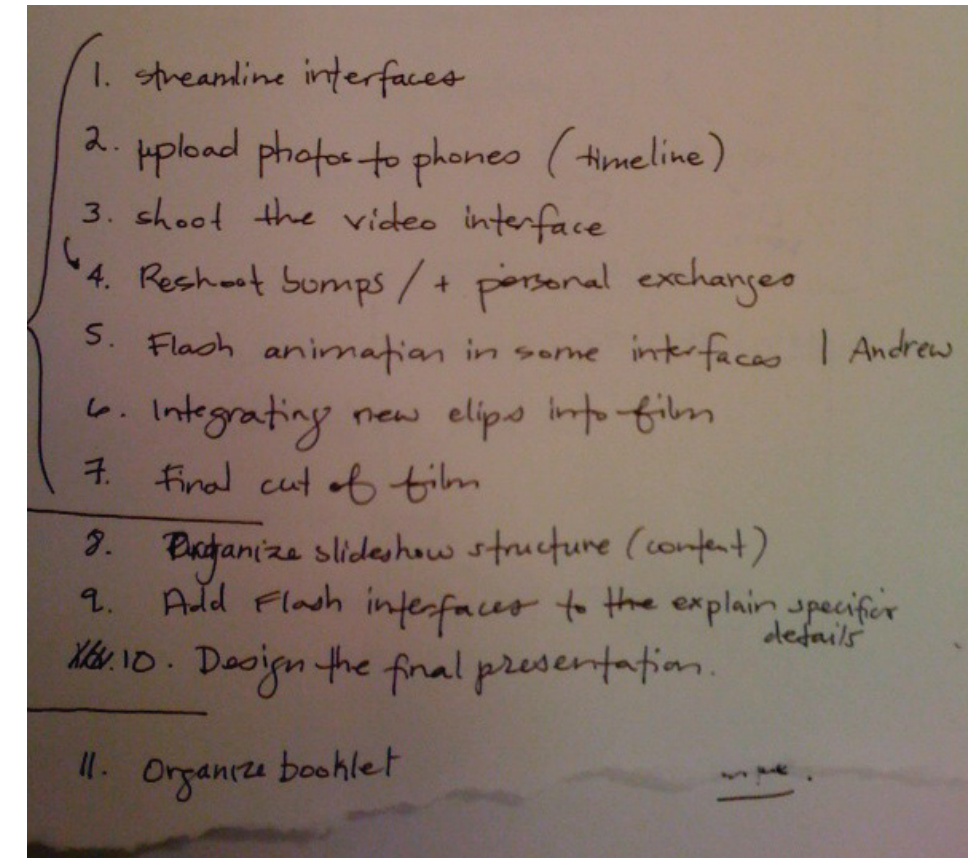
the revised service is guided by personal interests. We were inspired by the idea that there is a connection between what people have and what they know and like. People first enter interests (i.e. gardening) and are then prompted to list items within that category that they have and wouldn't mind lending to others.

We hope that the system will naturally unfold from being service-driven to one that facilitates social connections based on common interest.

Final Design

## Last Work Plan

Visual plan to communicate our vision



**Presentation slides** to introduce our topic

**Movie** to communicate the feeling of how the service would work and benefit neighbors

**Flash animations** to show how the interface would be animated

**Presentation slides** to zoom in specific interface features

Final Design

## Interface Features Profile



### Interests

After joining a neighborhood, one enters their interests. Within each interest, users can specify items that they would like to share with the community.

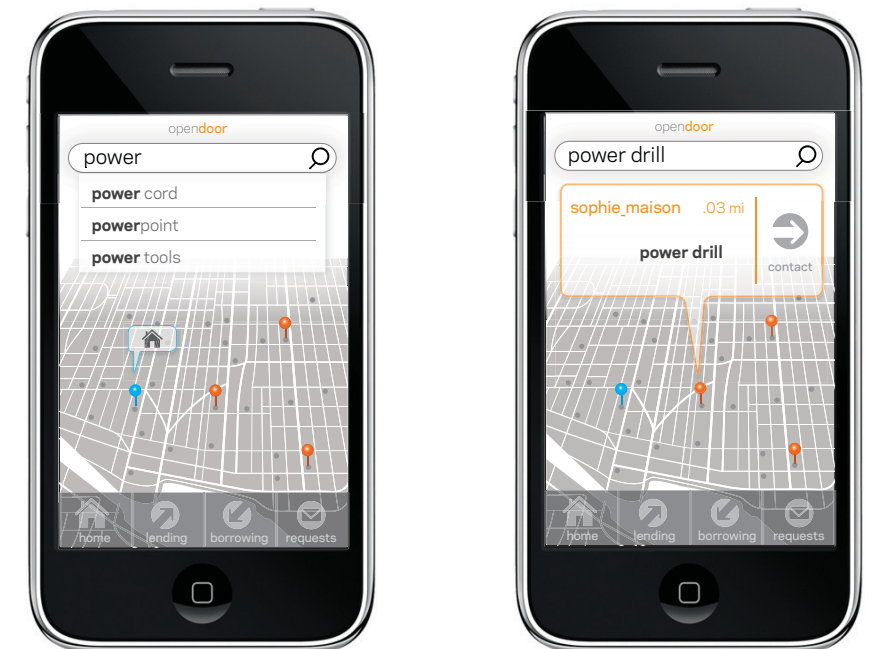
Users can also indicate their level of proficiency in these interests, from novice to expert. This feature can provide better match-making when someone searches for a service.

### Toolbox

There is also a section for items that are less interest-based but serve a more utilitarian role (i.e. power drill).

Final Design

## Interface Features Searching



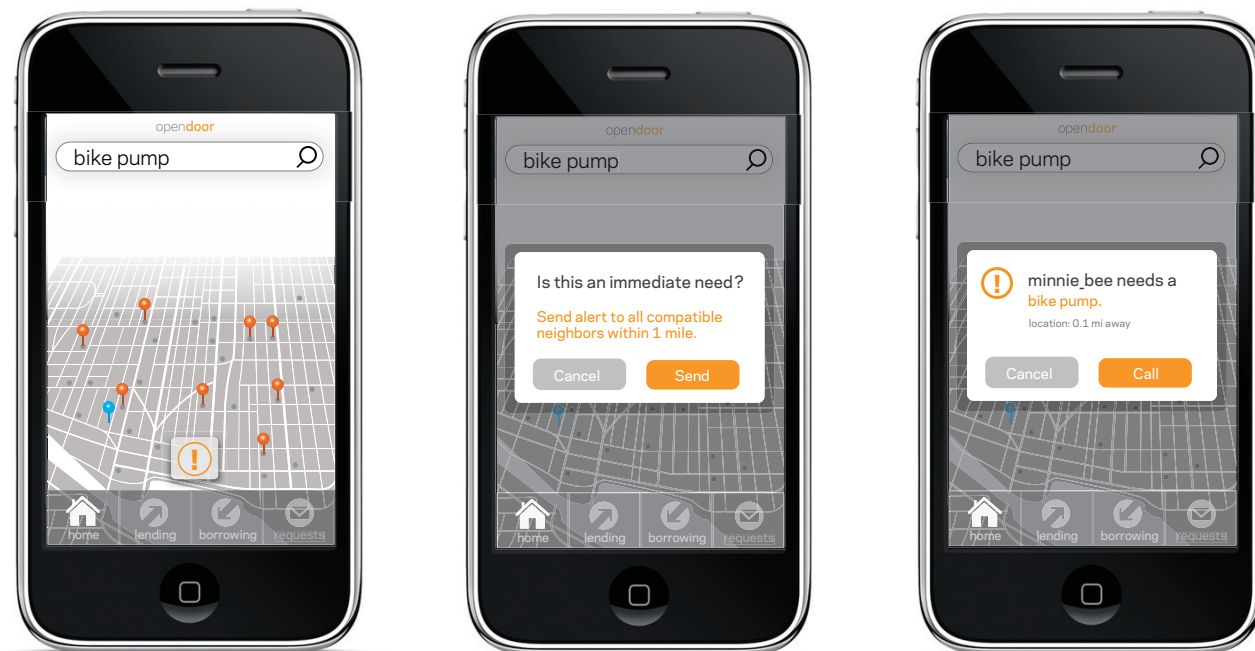
### Search bar

Serves as a primary function available at all times.

After searching for an item, the interface displays a map view of people who have it.

If no one has listed that specific item, then it recommends neighbors who have relevant interests in the subject.

## Interface Features Immediate Need



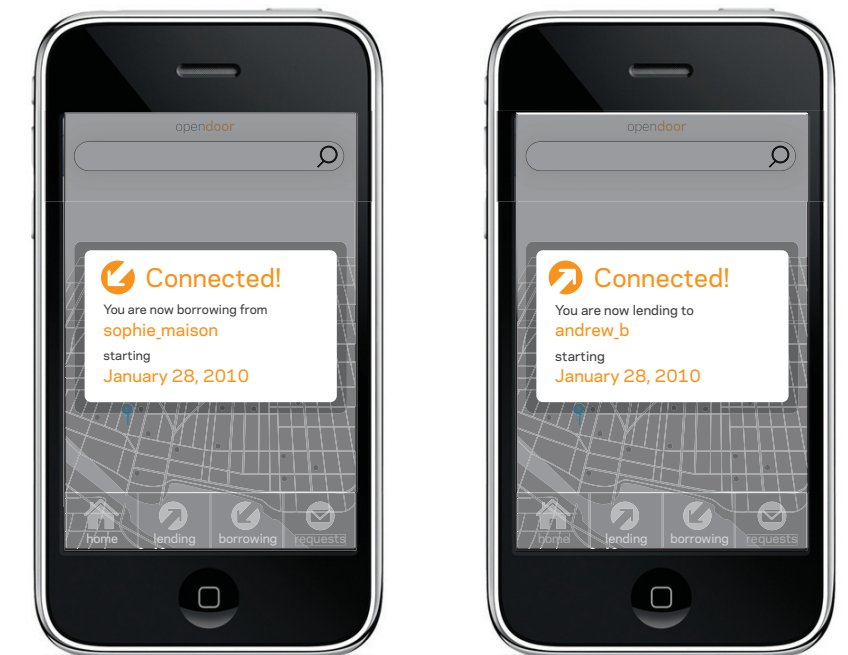
### Search: Immediate Need

If there is an urgent need that is time sensitive, one can send out an immediate need which will notify anyone within a mile radius

The system makes sure this is an immediate need. If it is, the system will send a message alert (like a text message) to those close by.

Upon sending out this request, the user allows those with the bike pump to contact them via phone for a quicker transaction (dialogue). After 30 minutes, the message disappears.

## Interface Features Bump to Lend

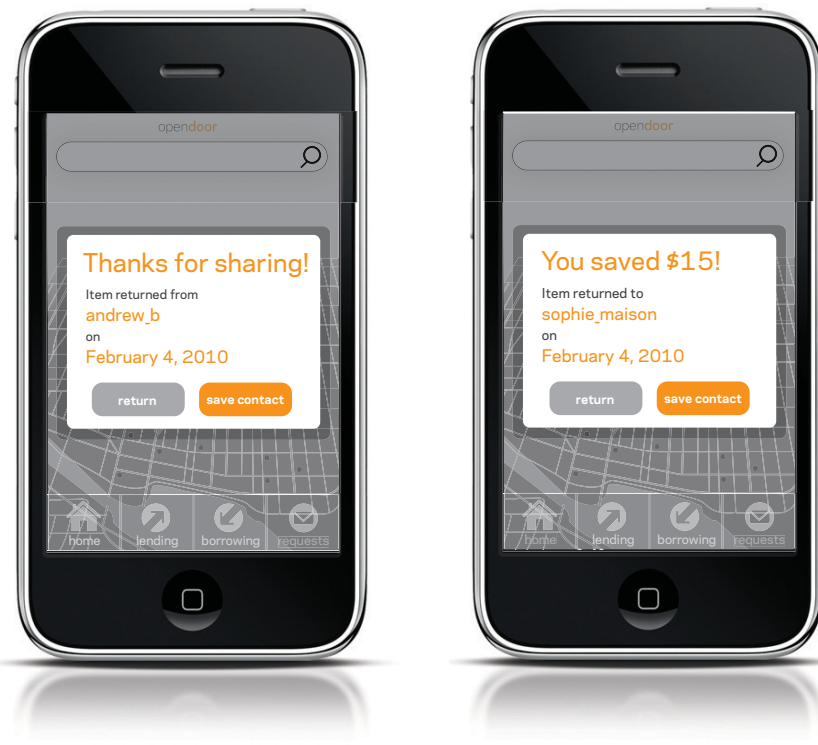


### Initial Bump

Sets the date of exchange and contact information.

A reminder tag is saved within lending and borrowing categories within navigation bar for both users.

## Interface Features Bump to Return



### Return Bump

Adds the exchange to the transaction history between users as well as evaluates savings from the trade.

For first time exchanges, the system prompts the neighbor to add the other person as a contact.

Final Design

## Interface Features Savings and Statistics



### Savings

These features are used primarily to provide positive reinforcement for their activity in the neighborhood. Virtual savings can be accessed through the profile. This is calculated after the return bump, based on average value of the item logged and duration of use. Users can compare personal savings to community savings.

### Statistics

Represents visual transaction history of borrowing and lending with other neighbors through time.