# Helping Hands - Small Repair Volunteer Coordination

What is the title of your vision statement?

Helping Hands – Small Repair Volunteer Coordination

What is your name?

John Watts

What is your ONID username?

wattsjo

What world problem are you concerned about?

Households affected by low income, disabilities, or disasters often have limited ability to repair their own home, and can often not afford to pay others for the repairs. This often results in unsafe and/or unhealthy conditions for households and families across the United States and worldwide, including those with small children and elderly individuals.

What is one statistic or quote showing that this is a major problem? (Be sure to cite your source.)

“About 35 million metropolitan homes in the U.S. have one or more health and safety hazards.” [1]

What is one anecdote about how this problem might possibly play out in real life for somebody?

A low-income single-parent household might have a leaky roof, brought on simply by the age of the house, or perhaps an errant tree branch after a windy night. Between a full-time job and taking care of the children, the parent may not have the time nor the money to fix the issue themselves. Because of this, the drywall in the ceiling rots and develops mold, making the children sick with respiratory infections or worse. This, in turn, creates greater expenses, allowing the house to fall into further disrepair while the family suffers in sickness.

Within this world problem, what is one subproblem that bothers you?

There are resources available to get help with these repairs, but it’s often difficult to locate or coordinate with these resources. Groups such as Rebuilding Together offer larger-scale housing rehabilitation services, but small, basic repairs often fall through the cracks. Also, some people in need may be too shy or embarrassed to ask for help, thinking it a judgment on themselves for not being able to take care of their own house. On the other hand, people who are willing and able to assist with these repairs often don’t know where to go to lend a hand, and may find it difficult to coordinate with a larger team like Habitat for Humanity.

What is one quote illustrating that this subproblem is important?

“Some people, especially older folks, just don’t like asking for help,” said Charlie Foushee, a veteran Rebuilding Together volunteer. [2]

What is one anecdote about how this subproblem might possibly play out in real life for somebody?

A movement-challenged individual has a leaky sink, but feels guilty calling a large national organization such as Habitat for Humanity for help with such a simple problem. This powerless feeling, which already pervades this individual’s life, is further aggravated by a sense that there is no one out there to help them. Furthermore, their disability checks barely provide enough to take care of everyday expenses, let alone incidentals such as plumbing repairs. This person has nowhere to turn for help, and thus lets their sink drip on and on, keeping them awake at night.

What is a second anecdote about how this subproblem might possibly play out in real life?

Meanwhile, a recently-retired plumber across town finishes mowing their lawn for the third time in a week, and wonders what they should do with their time now. They know everyone on their block, and everyone’s plumbing is up to snuff - so why do they still keep all these tools around, waiting to be used? This plumber’s time and energy could be put to good use by helping others in their broader community with their home repairs, if they could only find a way to connect with others who might need their help...

What is one possible software system that could help to solve this problem?

One solution is to develop an app and/or website which connects households in need of basic repairs with volunteer handypersons who can help with basic repairs. In this system, a person in need of a home repair, who could not otherwise reasonably pay for the repair or perform it themselves, sends a request through the system for a handyperson to come and assist them. As a volunteer would like to help out in their community, the system would then allow them to search for tasks which are within their capabilities, and connect with the individuals requesting the tasks. After the task is performed, both the volunteer and the requester would get the opportunity to rate the other person for helpfulness, politeness, etc.

What are the three most important features that this helpful software system should have?

- The system should have a simple interface which is accessible to individuals of all different abilities, so that the system is accessible to all who would want to use it.

- Those requesting assistance should be able to verify their eligibility simply, securely, and as anonymously as possible. While it’s important that those in most need of help receive it, it’s also critical that those who would request help feel safe and confident in doing so.

- Participants in this system - requesters and volunteers alike - should be able to rate their counterparts, to maintain safety and accountability for all involved. Knowing something beforehand about another person, usually a complete stranger, who you invite into your home, or whose home you are visiting, provides some additional comfort to both parties, and helps identify troublesome characters.

For the 1 st of these three features, why is this feature important?

Having a simple interface is important because it allows all individuals access to these services, especially those which may already have difficulties using a computer or modern cellular phone. Everyone should be able to request help; that’s the whole point! Those who have difficulties navigating the Internet are already at a disadvantage when it comes to seeking and finding help for repairs around the house, and phone books are not always easy to come by anymore! With a simple web address and basic webpage, anyone with an Internet connection, even with an old computer, should be able to access the system.

What is some sort of hypothetical example about how a person would use the 1 st feature?

A person with low vision has difficulty with most websites, as the flashy graphics so prevalent these days don’t translate well in large-print mode, or through a text-to-speech reader. To make matters worse, their computer is old and slow, and dense websites are painfully slow to load. In contrast, this website is simple, not dense, and designed to work well in large-print mode, and has text written and placed appropriately so that a text-to-speech reader is helpful. Because of this feature, this person would be able to seek help through this system, where other resources were simply not accessible due to flashy design choices.

For the 2 nd of these three features, why is this feature important?

Since volunteer time is limited, requests should be verified for legitimacy; e.g., someone who is capable of performing or paying for the repair should not be eligible. On the other hand, those in need of volunteers to repair their home may be reluctant to make their status or request widely known. Of course, this is a potentially sticky situation, as one should not be made to feel discriminated against. Additionally, it is often difficult and costly to fact-check each applicant for help. However, with what information is provided in order to verify eligibility, the system should handle it with care and security, as even qualitative information about a person’s life can be considered sensitive and potentially embarrassing.

What is some sort of hypothetical example about how a person would use the 2 nd feature?

A low-income man needs a light fixture replaced, but is embarrassed that he neither knows how to fix it, nor can he afford to hire an electrician. Perhaps, due to previous traumatic experiences with electricity, this man is even afraid to perform such tasks in his own home. The anonymous eligibility verification gives him peace of mind that no one, including the volunteer, knows his financial status or reasons for requesting help, and that his personal information is secure in the system, guarded from hackers and other unwanted investigators.

For the 3 rd of these three features, why is this feature important?

Most volunteers mean well, and most have solid skills, but this is not always the case. Similarly, most who would request help do so because they genuinely need it, but it’s often impossible to filter out those with malicious intent. Because of these factors, it’s important to track both volunteers who may be providing sub-standard service on a regular basis, as well as requesters with frivolous requests, or who were in no need of help at all. This again becomes a sticky situation, due to the nature of the qualifications for requesting help, as one does not want to act in a discriminatory fashion without necessity. It should be made clear to all parties that ratings are not to be used lightly, and specific feedback should be made privately to support staff of this system. For instance, if a volunteer suspects that a requester is ineligible to receive aid, perhaps due to sufficient funds or ability, this information should be given in private to support staff, who can investigate as necessary and able. Depending on the exact legal circumstances of the system, it may be illegal to deny aid or treat a requester unfairly based on the mere appearance of capability and/or wealth.

What is some sort of hypothetical example about how a person would use the 3 rd feature?

A volunteer claims to be an experienced carpenter, but the last five doors hung by this person have been askew. A history of poor ratings suggests that this volunteer should lend their talents in other ways. Alternately, someone makes multiple requests for household repairs, but when volunteers arrive at their house, there is no repair to be had: just a talkative, lonely elderly person. While there’s nothing wrong with wanting company, there are other services which might be better suited to address these needs.

Which of these three features is most important? Which is least important/optional? Why?

The simple interface is the most important, as it allows the greatest user base possible to access the system (part of the original subproblem). Without this feature strongly and correctly implemented, the most critical user base - those with limited ability to perform basic tasks - would be excluded from the system unnecessarily.

Arguably, the least important is eligibility verification, as this can be done on a good-faith basis. In other words, one does not necessarily need to present their qualifications in order to request help. Depending on the specific legal circumstances of this system, this could be simply verified by the volunteer who responds to a request, though this circumstance is unlikely (due to privacy concerns, etc.) However, anonymity is still very important if such verification takes place through the system, especially if such information is stored in a database of any kind..

How would you ensure that your system is economically viable?

The system would be volunteer-run as much as possible. The server and other operational costs would be funded by a non-profit organization, in turn funded by donations from volunteers and other community members.. As a decentralized system, the total overhead can be very low, since there are few ongoing costs to be met by the system or supporting organization.

How would the world be a better place if the system was actually implemented?

In a world where this system is implemented, homeowners wouldn’t have to skimp on grocery shopping to afford to fix a window, or sit at home not knowing who to call about their rotting porch steps. Children won’t become sick from moldy ceilings, and the elderly won’t live in squalor during what should be the happiest part of their lives. The quality of life would improve for many people; it’s the small things that make a big difference in a home.

What are your references?

[1] National Center for Healthy Housing, 2013 State of Healthy Housing,<http://www.nchh.org/Policy/2013StateofHealthyHousing.aspx>

[2] “Free home repair for low-income homeowners”, inman.com, <http://www.inman.com/2012/05/09/free-home-repair-low-income-homeowners/>