

## Social Microvolunteering: Donating Access to your Friends for Charitable Microwork

**Erin Brady**  
brady@cs.rochester.edu  
University of Rochester  
Rochester, NY USA

**Meredith Ringel Morris**  
merrie@microsoft.com  
Microsoft Research  
Bellevue, WA USA

**Jeffrey P. Bigham**  
jbigham@cs.cmu.edu  
Carnegie Mellon University  
Pittsburgh, PA USA

### Abstract

We propose *social microvolunteering*, in which people can do charitable microwork themselves for free, but also grant access to their Facebook friends as additional volunteers to magnify their effort. Social microvolunteering lets people volunteer despite temporal, financial, or physical limitations.

### Introduction

While people may wish to volunteer and make a positive impact on the world, many lack the time and financial resources to participate in volunteering. Microvolunteering (Bernstein et al. ), where people can perform small online tasks to do social good, provides people with a low-impact way to contribute from their homes; however, there is a limited pool of workers to draw from (unlike in traditional microwork).

Our proposed alternative is **social microvolunteering**, in which volunteers can install a Facebook application that will automatically post microvolunteering tasks with a charitable component to their Newsfeed. Posted tasks can be completed by the volunteer themselves if they are available, or by any of their friends who are currently online. This form of microvolunteering widely expands the pool of available volunteers, scaling each individuals' potential impact by the number of Facebook friends they have, and allows the volunteer to publicly support a cause they care about, raising awareness and gaining self-presentation benefits.

In this paper, we discuss the results of a 350-person survey on social microvolunteering, a pilot of a social microvolunteering application, and reactions from 61 pilot users.

### Responses to Social Microvolunteering

Social microvolunteering combines the benefits of friend-sourcing (free, trustworthy answers) and crowdsourcing (anonymity, speed) to complete tasks with an altruistic component. Small tasks benefiting charitable causes (in this example, answering visual questions for blind people) can be posted to a volunteer's Facebook feed, so that the volunteer or their friends can answer. This variant of friendsourcing allows disabled users to get free answers without expending their own social capital (Brady et al. 2013), and lets volunteers publicly exhibit an interest in disability issues.

Copyright © 2014, Association for the Advancement of Artificial Intelligence (www.aaai.org). All rights reserved.

To learn how people perceived social microvolunteering, we conducted a survey about their previous experiences with online and offline volunteering, and their initial responses to the concept of social microvolunteering. The survey was advertised via Facebook ads in May 2014 to people interested in "charity", "volunteering", or "visual impairments", and respondents were offered a \$5 gift card upon completion. 350 people (all 18+ and based in the US) completed the survey. Respondents were primarily female (63%), with a median age of 44 (minimum 18, maximum 83).

### Volunteering and Online Activism

Most were experienced and active Facebook users, having used Facebook for at least a year (95%) and logging in once a day or more (93%). Posting behavior was less frequent, with 40% posting once a day or more, and 35% posting once a month or less, and only 24% had ever installed a Facebook application that automatically posted to their walls (as our proposed social microvolunteering application would).

As reported in Table 1, many were actively engaged in online activism, either on social networking sites or via other digital venues. However, engagement in real-world and online volunteering was lower, with most participants volunteering less than once a month or never. Many of their obstacles related to lack of resources (free time, money) or the ability to find organizations, either nearby or at all. Others

Participation in online activism	
On social networking sites	81%
In places besides social networking sites	77%
Frequency of volunteering	
Never volunteered in the real world	34%
Volunteered in the real world 1/month or less	20%
Never volunteered online	59%
Volunteered online 1/month or less	16%
Reasons for volunteering less than desired	
Lack of free time	52%
Lack of money	42%
Couldn't find an organization to meet their needs	42%
No organization nearby	15%

Table 1: Responses to preliminary survey gauging interest in social microvolunteering.

reported physical constraints to volunteering (a write-in answer cited “*limited opportunities for moms with babies*” as a barrier), and 11 of the participants self-indicated a disability or medical issue that prevented them from volunteering.

### Perceptions of Social Microvolunteering

After asking about participants’ involvement in volunteering, we described our proposed social microvolunteering application, Visual Answers. Visual Answers connects blind people with visual questions to sighted answerers by posting the blind users’ photograph to the volunteer’s Facebook wall. Drawing on the crowdsourced accessibility model of VizWiz (Bigham et al. 2010), Visual Answers leverages the availability of human workers to answer questions which may be too complex for existing automated tools.

We described Visual Answers to the participants, and then asked for their initial reactions. Participants were split randomly into two conditions, either asked about their **personal** reactions to Visual Answers, or what they thought **other Facebook users** would think of the application.

Respondents were generally positive about the application (55%), though significantly more respondents thought that other Facebook users would want to use the application (66%) than those that would want to use it personally (44%),  $\chi^2(1, N=350) = 16.746, p < 0.001$ . Reasons for wanting to install were primarily altruistic in nature, wanting to help people (88%), or raise awareness of disability issues (69%), though many respondents also wanted to participate to feel good about their own volunteering (48%).

### Application Pilot

After the survey was completed, participants were offered the opportunity to install the Visual Answers application (as described above) for themselves for a pilot test. Participants were offered **compensation** (a \$20 Amazon gift card) or **no compensation** alternatively to balance conditions.

91 participants installed the application, and 77 left it installed throughout the 12-day pilot. The same set 24 questions were posted to different participants’ walls in a randomized order, with posting frequencies of twice a day, once a day, or every other day. 42.4% of the questions that were posted got 1 or more comments, and 81.7% of those comments were in “good-faith” (either answers to the question, or responses like “*I don’t know*” or photography advice if the question was unanswerable). 91.0% of the first comments posted to any question were good-faith responses.

While the average time for a first comment on any individual post was 58.5 minutes (median 26.7), the average time to a first comment for any of the 24 questions (aggregating comments on posts by all 91 installers) was only 105.1 seconds, and 49.8 seconds for answerable questions.

### Responses after the study

When the 12-day study was completed, we asked all participants to take a survey speaking about their experiences with the application. 61 participants responded to the survey.

Nearly all participants liked the application, feeling very (29) or somewhat (28) positive about using it. As shown in

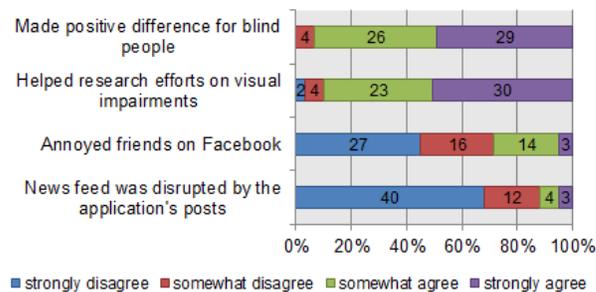


Figure 1: Opinions about Visual Answers from installers.

Figure 1, participants appreciated the positive benefits of the system (making a difference and helping research efforts), while not noticing a major impact on their Facebook use (by annoying their friends or interrupting their Newsfeed).

While 60% of respondents received questions about the application (mostly on the purpose of the application or the source of the questions), others found it was a natural extension of their current use of Facebook:

*I am involved with many health and progressive issues, I was never asked.*

Despite questions, people thought this was a positive use of Facebook, with 90% saying they thought Facebook was a good platform for microvolunteering, and 83.3% personally wanting to use Facebook to do microvolunteering.

Besides offering self-presentation and altruistic benefits, the application provided at least one participant with a new perspective on disability issues:

*I had a really hard time identifying some of the things [in the photographs]. My mom is blind in one eye, and it made me realize how hard it is on her.*

### Discussion

Social microvolunteering presents a way to leverage the benefits of friendsourcing without requiring a disabled user to post questions to their own network (which may result in slow response times or fear of stigmatization). Facebook users responded positively to the experience of participating in social microvolunteering, and thought Facebook was a good venue for these tasks.

### References

Bernstein, M.; Bright, M.; Cutrell, E.; Dow, S.; Gerber, E.; Jain, A.; and Kulkarni, A. Micro-volunteering: helping the helpers in development. In *CSCW 2013*.

Bigham, J. P.; Jayant, C.; Ji, H.; Little, G.; Miller, A.; Miller, R. C.; Miller, R.; Tatarowicz, A.; White, B.; White, S.; and Yeh, T. 2010. Vizwiz: Nearly real-time answers to visual questions. In *UIST 2010*.

Brady, E.; Zhong, Y.; Morris, M. R.; and Bigham, J. P. 2013. Investigating the appropriateness of social network question asking as a resource for blind users. In *CSCW 2013*.