OSU CS 361 - Vision Statement: Hometown Heroes

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The TL;DR version: A multiplatform app that leverages the social media habits of young adults to get them to volunteer in their communities

1   PROBLEM DESCRIPTION

Figure 1 https:///bgcmasonvalley.org

1.1   Evidence

To solve big problems, we need to start by solving the small problems right outside our doorstep. The great recession had a significant impact on charitable groups, "as people need more help but volunteers have less time and resources to give [1]." In 2003, the volunteer rate in the US was about 29%. It declined to 25.4% in 2015 and this downward trend is expected to continue [2]. The age group least likely to volunteer is young 20-something year olds. People between the ages of 19-24 are far less likely to volunteer than people between 16-18 and those older than 25 [3].
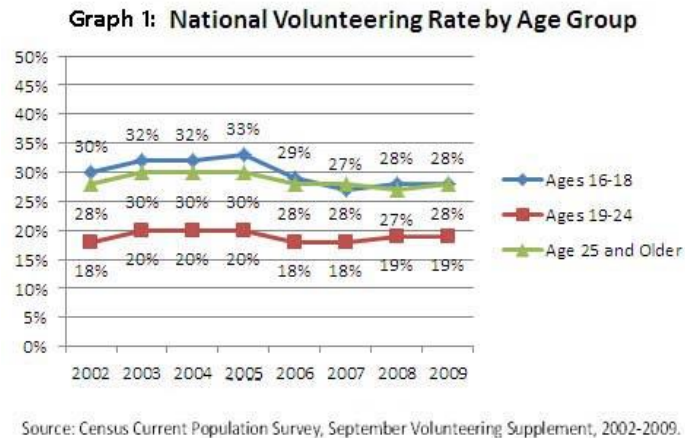
Graph 1: National Volunteering Rate by Age Group

Source: Census Current Population Survey, September Volunteering Supplement, 2002-2009.

Figure 2. civicyouth.org

This data suggests two things. The first is that whatever systems are currently in place to facilitate and motivate people to participate in volunteering opportunities are no longer working as well as they used to. The second thing this data suggests is that those systems are especially ineffective for people between the ages of 19-24, they simply aren't engaged. What engages young-adult users? The data plainly states that the answer to this question is: social media. Close to 90% of people between the 18-29 (who are online) use Facebook. In addition: 59% use Instagram, 36% use Twitter, 34% use LinkedIn, and 36% use Pinterest. It is worth noting that for all social media platforms, adults between the ages of 18-29 have the highest use rate [4], [5].

1.2 Users

Based on the data, it seems plausible that a system which is delivered on web/mobile and utilizes social media will be most likely to be successful at attracting young-adult volunteers. The question now is, why is this a problem worth solving? The benefit to the community is straight forward. Community centers get cleaned up, affordable housing gets built, at-risk youth receive tutoring and other opportunities to enrich their education. If local causes can't attract volunteers, people in need will have to go without. The benefits to the volunteers are numerous as well, especially to young-adult volunteers. The job market is still quite difficult to navigate and volunteering is a great way to gain experience, make connections, and improve a resume. In addition, volunteering is a great way to learn about your community and make a difference [2].

Before I outline the Hometown Heroes app, I want to describe what current systems are like that are meant to facilitate volunteering. If I google "volunteering opportunities." I get a list which includes a lot big organizations that I have heard of such as "Make a Wish." I am not sure what sort of volunteer work I want to do but I also want to make sure that whatever I do is relatively local so I won't have to commute a long way. If I try and find local opportunities using a site like volunteermatch.org, I am presented with a very outdated website that does is not usable on mobile. I can try to look for opportunities near me, but getting more info requires me to create an account with volunteermatch.org. After I do that, if I want more info I get redirected to that organization's homepage and must make another account. At this point I still don't know where this volunteer opportunity might take place. This process is too cumbersome and furthermore, what about people in my community who need help but don't have the funds to build an organization to attract volunteers? I am already discouraged in my search to find a volunteer opportunity, and I started with the intention of finding one! How do we get young adults to want to volunteer and how do we make it easy for them to do find local opportunities?

2 SOLUTION DESCRIPTION

Hometown Heroes is a hybrid web/mobile social-media and volunteering app. It aims to leverage young-adults' social media habits to motivate them to volunteer and then it facilitates finding local volunteering opportunities. The system is composed of three main components, which although might not necessarily be implemented separately, serve distinct purposes. The following is a description of these components and the types of things users should be able to accomplish.

2.1 Front-End: Volunteer

Figure 3. www.sundance.org

The purpose of this component is to help users find local opportunities to volunteer, especially opportunities in which their particular skills will make a real impact. New users should be presented with a simple and fast sign up system that allows them to sign in with Facebook/Twitter/Google+ and select which social media accounts they would like to link to Hometown Heroes.

The first task for a new user would be to create a Hometown Hero profile for themselves. This is a simple profile which allows the user to specify what kinds of volunteering opportunities they are most interested in and what kinds of causes they feel most strongly about. In addition, users can specify their skillset. For example, somebody that is good at teaching would make a great tutor, and guiding such a user to a tutoring opportunity would make for an impactful contribution to the community. Some other example skills would be things such as construction/tradespeople (for build-a-home type events or repairing community centers), artists (for murals and design work), cooks (for hot-food type events).

The main information that should be presented to users during day-to-day use is opportunities around them that match their interests/skills and their Hometown Hero level. Users can visually see volunteer opportunities on a map of their city. If they tap on an event marker it will bring up more info about the event and allow them to quickly sign up to attend. When a user attends a volunteering opportunity, they can easily be registered via the app thanks to GPS. If a user attends the event and completes it they will receive Hometown Hero points. The amount of points correlates to the duration of the event, and bonus points are awarded for keeping a "streak" (attending and completing at least 1 event per week). As a user gains points, they will increase their Hometown Hero level and these level-ups will be automatically pushed onto their social media accounts in order to encourage others to join in as well.

2.2 Front-End: Organizer

The purpose of this component is to allow event organizers to setup their events and have them approved for publication within Hometown Heroes. The exact requirements which must be met in order to have an event on Hometown Heroes needs to be explored, in general the events should center around helping those who don't have the means to help themselves and doing so in some impactful and lasting way. Obvious examples of events that would be okay include things such as community cleanups, youth tutoring, youth events, community beautification, repairing and maintaining community spaces, etc. Mowing an individual's lawn would likely not count, but repairing an elderly person's roof before the rainy months

would. The approval process will need to flesh out requirements and depend on real people (more volunteers) to approve them.

Figure 4. www. mladiinfo.edu

Organizers should be able to easily submit the details of their event and a brief statement on the kind of positive impact it will have on the community. Once the event is approved, the organizer can keep track of how many people have pledged to show up. This allows the organizer to be better prepared to manage the event. On the day of the event, the organizer can use their app to keep track of how many pledges have shown up via automatic GPS-based "sign in" to the event. The organizer starts the event which begins point accumulation for the Hometown Hero volunteers that are onsite. When the event is over the organizer can end the event.

The organizer should be able to post updates and photos from the event which will automatically tag the Hometown Hero volunteers in whatever social media apps they have linked to their Hometown Hero profile.

2.3 Back-End: Data and Social Media Integration

This component encompasses the implementation of persistent data storage system and integration with social media apps that are necessary for the front-end components to function. First of all, there must be some database system in place which stores user profiles and stats as well as event information and keeps track of pledges to attend, Hero points earned, levels, linked social media accounts, etc. In addition, this component is responsible for pushing updates from the app to the user's social media accounts. For example, if a user

has linked their Facebook account, then this component should push an update to their timeline when they arrive at an event and finally push another one when they leave the event that shows how many points they earned and their progress towards the next Hometown Hero level.

2.4 Does This System Solve The Problem?

For the users who are already inclined to volunteer, Hometown Heroes will help them to easily find and sign up for local volunteer opportunities that match their interests and skills. This allows regular volunteers to quickly find where they will make the greatest positive impact on their community. For the communities who need more volunteers, Hometown Heroes will help tap into a demographic that volunteers at a much lower rate (young adults). This means that communities will have access to more volunteers which in turn allows them to tackle larger problems. For users who aren't already inclined to volunteer, Hometown Heroes will motivate them to do some real good in their communities. The positive impact of volunteer work is impossible to overstate for both the volunteer and the community. In addition, due to the social media integration, volunteers also benefit by distinguishing themselves as civic minded community members. Our social media identity is becoming increasingly more important to our careers, and therefore Hometown Heroes allows users to build up their communities and build up themselves at the same time.

3 METRICS FOR SUCCESS

At the implementation level, we will know if this app is successful if it can provide users with the functionality described in the previous section. Furthermore, we should expect user studies to reveal that users find our app easy to setup and use. The most important metric for this app is whether the app attracts users (both volunteers and organizers) and those users are setting up lots of events and attending them as well. The Hometown Hero level system allows us to track these metrics from a very high level by simply looking at number of users and average hero level. A more specific metric is how widely used the app is within our targeted demographic, young adults. If this app helps to motivate people who have never volunteered to become regular volunteers, then it is successful.

On a much larger scale, what would this app's success mean? It would mean communities successfully undertaking huge efforts to build up those who are most in need. The success of this app would mean easily accessible and high quality tutoring for all kids, and not just those who have parents that can afford private tutors. It means fully realized sports programs with knowledgeable coaches. The success of this app would mean community centers, libraries, and parks that are staffed with helpers and maintained in pristine condition for the community. It would also mean communities that are more connected.

4 CONCLUSION

We depend on volunteers to create the kind of positive change that elevates those most in need and in turn builds up entire communities. Free and high quality after school tutoring, made possible by volunteers, can make the difference between a child who grows up and becomes a doctor, and a child who ends up stuck in the criminal justice system. Volunteers can provide a lot of benefits for a community and even for the volunteer themselves, but volunteering rates are declining. In addition, young adults are much less likely to volunteer than any other age group. Hometown heroes is an app that aims to help communities find more volunteers, help volunteers find opportunities more easily, and help young people make a positive impact on their community.

REFERENCES

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