ActVirtual: Making Public Activism Accessible

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ABSTRACT

Technology-mediated public activism has grown popular in recent years with the high uptake of social media. Facebook and Twitter have become venues for activists to participate in online activism, or organize offline activism events. However, due to accessibility barriers in physical environments and accessibility issues in social media, people with disabilities continue to face challenges when they engage with such social movements. We interviewed 22 disabled activists about how they used technology to mediate civic engagement and barriers they faced. We present preliminary findings from these interviews and describe a potential solution named ActVirtual, a mobile platform for accessible activism. Our future work will include implementing and testing ActVirtual with users to make online and offline activism more accessible.

Keywords

Accessible activism, public protests, accessible technology.

1. INTRODUCTION

Accessibility is an imperative in social spaces (e.g., public transport, malls, and civic engagement activities like elections) [2]. Technological advancements have helped to make these everyday spaces accessible for people with disabilities to some extent, but accessibility in civic activities like rallies and protests has mostly been overlooked because of their transient nature. Inperson rallies can raise many environmental, physical, and social constraints for people with disabilities. Actions like protesting with a crowd, marching from one point to another, and handling noise can be challenging for people who need mobility assistance, have chronic illness or fatigue, or any other range of disabilities.

As an alternative, people with disabilities have started to use a variety of online platforms to educate and advocate about disability rights [2] and accessibility issues [3]. Existing forms of online activism include signing e-petitions, joining online advocacy groups, posting about social causes and even organizing entire movements [4]. Accessibility in public activism not only needs to consider the ongoing research on physical spaces [1] to address environmental and physical barriers [6], but also connect this to existing online forms of activism for accessibility.

In this poster, we identify and articulate design requirements from 22 interviews conducted with disabled activists. After identifying key findings, we present our ongoing design solution and development of ActVirtual, a mobile application that aims to make public activism more accessible.

2. ACCESSIBILITY IN ACTIVISM

Our research was inspired by a virtual 'march' carried out by an online group of disabled activists protesting for social rights in

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of the 2017 Women's March on Washington, DC. The Disability March included a website¹ created by some 20 volunteers inviting people with disabilities to post personal stories as a form of representation. The website further expanded to several social media channels including Facebook, Twitter, and Instagram.

January 2017 [5]. The Disability March was an online contingent

2.1 Methods

We recruited 22 activists with disabilities for semi-structured phone interviews which lasted around average of 45 minutes. Sixteen of these 22 respondents had participated in the Disability March, and the majority (18) were female owing to the nature of this march. The participants had disabilities like visual and mobility impairments, chronic illnesses, and mental illnesses, including a wide range of both physical and invisible disabilities.

In our interviews, participants identified the barriers faced while taking part in offline and online forms of activism. We then asked them about the role technology had played in supporting their activism. Three researchers interviewed, transcribed, and analyzed the key findings in the initial phase of the study and then brainstormed design solutions. The identified design requirements were sketched as low-fidelity design solutions by another researcher and then iterated in brainstorming sessions.

2.2 Key Findings

Our findings identified respondents' roles as both participants and organizers of activism, roles which were not mutually exclusive. All our interviewees shared their experiences with participating in activism online (e.g., social media) and in-person (e.g., physically attending protests). Participants had advocated for many causes, and many felt that their disability, which had first led them to disability advocacy, was an impetus to become more involved in a wider range of political and activist causes.

The respondents appreciated the ways they could contribute to the protest by uploading pictures, sharing posts, and descriptions online. One respondent who couldn't attend the march in-person due to her mobility issues mentioned how her friend who went live streamed a video of the march to her in her home, which made her feel involved. Due to the availability of social media and their online presence, activists found ways to communicate and organize the alternative Disability March event.

Our interviews highlighted physical and technological accessibility issues. Respondents listed barriers like transportation to the venue, no mobility aids, dealing with crowded spaces, and finding information about events as major concerns.

"If it's snowing then I won't be able to go. So, transportation issues. I have only used motorized scooter in last few years, so I need accessible transportation, [I] just can't get in anybody's car" – P16

Participants also reported experiencing exhaustion after marches.

¹ www.disabilitymarch.com

For online technological barriers, the respondents encountered web accessibility problems including untagged images, dizziness from auto playing videos, and scrolling feeds.

"Facebook is not accessible....People take screenshot and post it. That is not working for a screen reader" – P11

People who could not go to a march in-person mentioned using *proxies*, a physical representation of them at the offline marches. Our respondents who were unable to leave home (*e.g.*, due to mobility issues) appreciated the idea of a proxy person or an object taking part in the march with their name. This concept made them feel more involved in the march while they participated virtually through online activism.

"I have heard, my friend in Disability March carried a list of such people in her shoe, I thought that was cool" – P17

Four of our respondents had experiences with organizing marches and making them accessible. From our interviews, we understood that online technologies like email, Facebook groups, and Google Docs played a major role in facilitating the organizer's efforts to plan and coordinate the march. However, organizers identified challenges like coordinating the online and offline events, assigning roles, and accommodating a variety of disabilities.

Some of the suggestions proposed by respondents included improving information access about events and transportation methods; finding people to accompany them to the events; and participating in both online and offline activism simultaneously.

3. DESIGN CONSIDERATIONS

Building upon our interview findings, we are designing a mobile application called ActVirtual. The target users for this mobile application are activists and organizers with disabilities.

3.1 For Activists

The design incorporates and provides accessible solutions to activists who want to participate in offline or online activism. For offline, ActVirtual facilitates collaboration between activists, including arranging transportation or carpooling, connecting with nearby activists for physically marching, or setting up emergency contacts, to support the activists on the day of in-person marches.

The online barriers involved dealing with web accessibility failures with help of assistive technologies (for example, alternate text description for images), and designing a focused solution without involving the complexity of social media platforms. We concluded from our interviews that some members of the disability community preferred an online or virtual component for every offline march. ActVirtual has options for the online participants to choose ways by which they can participate in the march, either by posting images and protest messages or choosing an in-person proxy marcher to represent them in the march.

3.2 For Organizers

In ActVirtual, users can register as an organizer, then collaborate, plan, and update the march details easily. The respondents had reported that many times, there is not enough information provided in the first place about accessibility of the event. Our design solution combines simple and effective presentation of information, includes online chat and one click help options for easy mediation of the protest between the volunteers and organizers. Organizers can directly manage the roles assigned and moderate the protest messages, even assign special disability assistance service to volunteers through general chat screens. Such use of assistive online technology will serve the disability community to be more inclusive in the society at large.



Figure 1. ActVirtual sample designs. Activist design page (*left*), Organizer design page (*right*).

4. FUTURE WORK

The interview findings and brainstorming sessions gave us a lot of insights on how technology mediated activism can help people with disabilities take part in future protests and rallies. Our findings show that there is a lot of scope to improve the online community of activists for people with disabilities. The ActVirtual mobile application will be designed and developed to help bring public activism closer to home for people with disabilities while giving them accessible options to participate in online, offline, or both forms of activism. Future work involves developing a fully functional accessible application and testing it with people with disabilities for improving further. We aim to fundamentally make social events more accessible in nature.

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