

Story-telling Spaces: Fostering Empathy Through Crowdsourcing

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

## **Introduction**

As humans have evolved over time, engagement with others in the community has always been a vital part of establishing trust and building connections. While this has not changed, its mode of delivery has taken various forms from pictures to novels and now the internet and smartphones. Many of us take to social media such as Facebook, Twitter, and Instagram to share our stories and we are lucky enough to have the platform and tools to make our voice heard. Throughout history, without a medium in which to speak, write, or share their stories, the experiences of underprivileged and underserved communities have been constantly forgotten. This lack of inclusive story-telling spaces has halted our government, leadership, and our society more generally from having the opportunity to learn from the mistakes of the past. In a vibrant and growing city like Charlottesville and with the technology available to us, we should be encouraging the sharing of people's stories and backgrounds, especially those that may have been forgotten or erased.

In order to remedy this, it is crucial that the community strives to provide safe, inclusive, story-telling spaces. However story-telling is not enough, and so my technical project will explore ways to uplift Charlottesville's homeless population by bridging the technological gap between local homeless individuals and the larger Charlottesville population, and to provide a platform for them to receive the resources and support they need in order to empower themselves. This paper will analyze such a platform from the perspective of the STS Framework called Social Construction of Technology (SCOT), dissecting the major arguments for and against as well as understanding the stakeholders and their values. By the end of this paper, I aim to answer whether the interaction of technology and story-telling methods are able to form a

more empathetic and interconnected community space that supports and uplifts and gives an active voice to Charlottesville's homeless population.

## **Background**

To ensure that we are solving the right problem, we need to first understand all of our stakeholders and their values, then assess if we meet their needs. While there are a plethora of features that I would like to incorporate, it is also important to remember that the project should first and foremost provide crucial services to those in need. In our research and discovery of the challenge space, my team and I identified three key groups of stakeholders: (1) homeless individuals/panhandlers, (2) the surrounding community/givers and (3) local businesses and organizations. Each of these groups plays an important role in how we expect our platform to work so let's take a look at each of their values and needs.

Homeless individuals using our application will primarily be looking to increase the amount they make from panhandling. Additionally, they may require more assistance and guidance in becoming financially stable or receiving medical and mental health support over the long run. Due to the variety of these individual situations, there are many areas in which one could need aid including housing and medical needs. As the homeless come from a variety of different backgrounds, the Charlottesville housing crisis and the lack of a living wage policy causes even the most "normal" of everyday Americans to become homeless. Oftentimes, it is not that people do not want to help the homeless, it's that people get caught in their own privileged bubbles and are not informed about the struggles of others within their own community. Therefore, platforms such as our technical project Tap2Change give others in the larger community an opportunity to learn of the stories and struggles of the homeless population and

support their community members through financial, medical, educational, and mental health resources that will allow for them to improve their situations and feel empowered.

The surrounding community or potential givers play an especially vital role in our project as we expect the convenience created by our application to encourage them to give more often. While this hypothesis is yet to be tested with the platform, we found in our initial research that the two biggest reasons for people not donating when asked were (1) They didn't have cash, and (2) They were concerned what the money would be used for. Our initial idea aims to remove the first issue by enabling quick and easy cashless transactions. While we are unsure how to address the second issue, it raises an important question about building trust and empathy. One way we can appease the givers is by providing an option to donate in the form of a resource such as a meal voucher, however, we risk losing the trust of the very people we are trying to help.

The last stakeholder group my group identified was local businesses and charity organizations. As UVA students, we are not as in touch with the lives of locals in Charlottesville as we'd like to be. Further, this makes it difficult for us to reach homeless individuals as they may not share the same avenues of media or information. By using the existing infrastructure built by local charities, we can gain access to our target population and further build upon the relationships already formed. Additionally, financial success of local businesses is often based on the support of local community members. For example, efforts by local businesses to participate in charitable causes within their local community such as supporting and empowering the homeless population also allows for increased and positive people-first focused marketing that will ultimately allow them to have support from the local community and therefore have increased traffic and sales. Lastly, businesses like to engage in philanthropy work as it not only gives them a better social image within the community but also qualifies them for tax breaks and

write-offs. This can be a major incentive in convincing partner organizations to work with us as they may initially be reluctant.

My technical project, Tap2Change, is a platform where homeless individuals can share their stories, access resources such as vocational/ educational training or other mental health resources, and easily receive donations through more seamless and cashless transactions. It takes into account the above stakeholder analysis and attempts 1) give the homeless population a platform and voice 2) connect the homeless population with the larger Charlottesville community in order to provide financial, educational, mental health support 3) ultimately uplift homeless community members and provide the medium by which they can work to move above the poverty line.

There are some key features which make up the core functionality of the application, first being the ability for the homeless population to share stories. Story-telling is a vital component of our application Tap2Change as we want to provide the homeless population with a platform to share their stories and situations for which they need support and resources. It's easy to pass a panhandler on the street or while stopped at a red light and make assumptions about why they are in their current situation, however, by being able to read a short or long blurb about their story, community members will be more empathetic and more willing to provide different forms of support and resources. In addition to local community members feeling more empathetic and therefore being more likely to donate and support the homeless population, the story-telling feature of our application allows for homeless individuals to feel empowered and heard and therefore uplifted through sharing their own narratives. Ultimately, this feature decreases the disconnect that occurs between the larger community and the underprivileged and underserved communities. In addition to the ability to share their stories, users would have the option to post

stories anonymously as a study at NYU showed that this made individuals more comfortable to share personal experiences and drastically improved the quality of conversations (Lorenzo, 2018).

The second feature is access to a variety of resources ranging from education to medical. One example of a resource Tap2Change provides is educational courses or vocational training to promote financial literacy and stability. In a study conducted by the “New Leaf Project” a group of homeless individuals were given \$7500 of financial support and their lives were studied over the next couple years and compared to a control group which did not receive the same support. The results of the study showed that the experimental group actually secured permanent housing almost a full year ahead of the control group and had overall much greater food security. There was also a 39% decrease in purchases of alcohol, cigarettes, or drugs. This showed that despite the stigma that surrounds them, homeless individuals are just as likely to work hard to correct their lives as the average person and are simply stuck in cycles of poverty by circumstance rather than choice. Another example is rehabilitation services for those suffering from prior conditions such as mental illness, domestic abuse, or drug abuse. These resources are especially important as 25% of the homeless in America suffer from mental illness (“Homelessness and Mental Illness”) and the leading cause for homeless in women (who make up 30% of the homeless population) is domestic abuse (“USC Department of Nursing”).

The last major feature is the ability to conduct cashless transactions and receive donations in the form of money or meal vouchers. Most homeless individuals make their livelihood from panhandling and while this was already an unstable income, COVID-19 has impacted this even further as people are less likely to come into contact with strangers such as the homeless. By providing a way to perform seamless and cashless transactions, those who are still able to gain

the attention of a passerby can still profit. Furthermore, while people in the field heavily debate whether the use of the money is the concern of the giver, it's human nature for this thought to cross their mind. As such, Tap2Change provides the option for people to donate in the form of a meal voucher or coupon for approved items at local stores. Although this requires us to collaborate and partner with local businesses, we decided to pursue this to act as a symbol or message of support from the community.

## **Analysis**

The Social construction of technology (SCOT) is a theory that claims that technology does not determine human action, but that human action determines technology. Additionally, the theory argues that in order to understand the manner in which one uses technology, one must understand the *societal environment* in which the technology is embedded. The SCOT theory was introduced by two scholars, Wiebe Bijker and Trevor Pinch, in their article titled "The Social Construction of Facts and Artefacts: Or How the Sociology of Science and the Sociology of Technology Might Benefit Each Other". Bijker and Pinch argue that the key components to explain the theory that societal environments shape technology are: interpretative flexibility, relevant social groups, stabilization and closure mechanisms (Pinch & Bijker, 1).

The first key component of SCOT, interpretative flexibility, is the assumption that any technological artifact can have different interpretations and perceptions within varying societal environments. For example, Bijker and Pinch explain that while the invention of the air tire on a bicycle allowed some societies and individuals to have a more convenient form of transportation, for others the air tire meant less traction, technical nuisances, and a less aesthetically pleasing bicycle.

In the same way as Bijker and Pinch's air tire explanation, another application similar to Tap2Change that attempts to provide resources or uplift the homeless population may look very different if located in a city other than Charlottesville, Virginia. As the developers of the app, we have defined what "uplifting the homeless population" means. For us, that includes financial support and educational and mental-health resources for them to have the tools to remedy their current situation. Our perception of the kind of help the homeless population needs comes from our educational background and more progressive belief surrounding homelessness that Charlottesville's significant homeless population has more to do with a lack of local or state living wage policies and high housing prices rather than something that the homeless inflicted on themselves to be in their current situation. However, someone from a different societal environment in more conservative parts of Virginia for example may feel that clothing drives and food pantries are enough, therefore shaping a very different kind of app. Simply how one community defines words like "resources" and "support" can be the difference between a technological innovation that facilitates a food pantry or clothing drive to one that facilitates monetary or mental health support. So, from the idea of interpretative flexibility it is clear that societal circumstances, in the process of inventing and developing a technology, play a vital role in the final product of that technology.

The second key component of SCOT, relevant social groups, are "all members of a certain social group [that] share the same set of meanings, attached to a specific artefact" (Pinch & Bijker, 414). For example, Pinch and Bijker call out "consumers" or "users" as a relevant social group in reference to the development of technology (414). Other relevant social groups include the developers of the technology, the stakeholders involved in marketing, advertising and selling particular technological developments. In the case of this analysis, relevant social groups



include: the homeless population who “share the same set of meanings” about Tap2Change through the financial, educational and other benefits they can receive through the app, the developers (my team) that share similar meaning of the app in terms of their *shared* goal to create an impactful medium of communication between the homeless population and the rest of the community, and lastly the community members who all generally share the desire to feel good about their own charity work and altruism through their support of the homeless in their local community.

The third component of SCOT, closure mechanisms and stabilization, explain that as technologies are developed, produced, and utilized by consumers, the interpretative flexibility diminishes. With rhetorical closure, when different societal environments perceive the “problem” that the technology was helping to remedy as being solved, the need for alternative formats of solving the problem are no longer necessary either. With “redefinition of [the] problem”, when a new technological innovation is at the center of critique from various societal environments, if that technological innovation is able to solve a completely different problem that society (and other stakeholders such as developers and users) did not intend or expect, then that technological innovation will be “stabilized”(425). For example, with Tap2Change, the problem the design of the application is attempting to solve is the low amount of support for the homeless in Charlottesville due to the lack of a medium for giving community members to comfortably send resources such as money or knowledge sharing. While some groups may benefit from our app, others may cause it to come in a conflict zone by sharing sentiments that the app is not inclusive by targeting homeless individuals that have internet access due to the nature of the technology. However, if in the process of trying to solve the issue of the minimizing the homeless population in Charlottesville and forming a more accessible and communicative way for the homeless

population and the larger community to interact, the elements and technological development behind Tap2Change begins to solve issues within other spheres such as Charlottesville social justice protest community by providing a more effective way to for protesters to communicate and receive donations and support for their various initiatives and movements.

One argument that critics of Tap2Change might have is that it's merely a fancy way for the underprivileged to beg for money and it further propagates the disparity between us and them. This argument, however, fails to consider some of the other features in the application, such as the educational resources, which aim to provide opportunities for people to better themselves rather than just being a money transfer application. Another major concern is that the target population may not have access to a phone so this solution is useless. However, contrary to popular belief and proven by a study of the Los Angeles area, 82% of the impoverished had access to a cell phone and 64% of those phones were smart phones (Harmony). While these numbers aren't as high as for the general population, it's an excellent indicator that the problem is not a lack of connectivity/hardware, but rather a lack of access to the right platforms and tools.

## **Conclusion**

While it is hard to ascertain the full extent to which Tap2Change can have a positive and meaningful impact on a community without putting it into testing, it is clear that it lays the foundation for doing so. Based on the research layed out in this paper, we can see that implementing an application that builds trust and empathy on both sides of the platform (donor and receiver) through storytelling and relationship building efforts can have a large impact in uplifting the homeless population of a community such as Charlottesville, VA. By providing food, medical, and educational resources in addition to enabling cashless transactions within the

application, not only are we able to increase the income of panhandlers but also help to empower them to break out of cycles of poverty. Furthermore, by enabling storytelling we should see an increase in the income of the users based on the interpersonal connections created through the application. Although the prototype in place serves as a minimum viable product, there are many ways in which it can be improved; for example through partnerships with local shelters and grocery stores or by improving the application itself to make it more widely accessible and fit the respective needs of both donors and receivers. In making these improvements, we aim to make a significant impact on reducing the homeless population within a community while providing the tools necessary to become financially stable and self-sufficient.

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