Abstract
Local Vocal is a web application that uses design thinking and social media to foster collaborative civic engagement and social entrepreneurship to build stronger local communities. Local Vocal provides a platform for community members to create civic projects, share ideas, receive feedback and contribute to local projects through funding or time contribution. By using the five (5) modes of design thinking (empathy, define, ideate, prototype, test) created by the Hasso Plattner Institute of Design at Stanford, Local Vocal propels each project through a similar five-stage development process to mature the plan for funding. Local Vocal connects the community through commenting and rating mechanisms common in social media; with the help of Local Vocal, projects become more than ideas. The web application aims to support community engagement in the online space, encouraging citizens to take their opinions and views from ideation to creation with the goals of improving the communities in which they reside or operate. The purpose of this paper is to present a design exploration of Local Vocal which includes the five modes of design thinking and how they have been incorporated into the web application, the paper will also discuss related work from projects already being implemented in the area of civic engagement and crowdfunding, and will conclude with considerations for future work.

Keywords: design thinking, civic engagement, community engagement, crowdfunding, 5 modes of design thinking, Hasso Plattner Institute of Design at Stanford, social entrepreneurship

1. Introduction

Design thinking is a solution driven design process based on fundamental design methodologies. As an activity, design thinking aims to promote creativity, with the sole aim of addressing a real world problem. Put plainly, “Design thinking—in-herently optimistic, constructive, and experiential—addresses the needs of the people who will consume a product or service and the infrastructure that enables it” (Brown, 2010). Human centered innovation is at the heart of the design thinking process. Ethnographically observing environments, identifying problems, brainstorming ideas, rapid prototyping of feasible solutions and testing those innovative solutions is the foundation of the design thinking process (Ratcliffe, 2009). Design thinking as a concept was introduced to the team through our Entrepreneurial IT Design (Fall 2013) course taught by Professor Michael Twidale at the Graduate School of Library and Information Science (GSLIS) at the University of Illinois at Urbana-Champaign. The class presented workshops and tutorials focused on elements of design thinking such as the Hasso Plattner Institute of Design’s 5 modes of design thinking: empathy, define, ideate, prototype and test (Ratcliffe, 2009). Design methodologies such as: mind-mapping, personas, storyboarding, brainstorming, user-centered design and rapid prototyping were also covered in class (Harrison, 2006). As a result of the experience gained in the class, armed with design methods and processes, our team desired to create a web application that would create community design thinkers. Consequently Local Vocal was birthed.

Local Vocal is a web application that has design thinking as a member of its core fundamental elements. Local Vocal desires to turn every community member that uses the application into a creative, innovative design
thinker. By encompassing design thinking principles fused with social media, Local Vocal attempts to bring communities together as they identify needs and create feasible human centered social innovations for their community enjoyment. Using the design-thinking model, the team aspires to create a user experience that will thrust community members into the design process to collaboratively and ingeniously work towards solving problems they experience everyday.

2. Related Work

Although there are similar concepts already available for parts of Local Vocal, we have taken the best of these services and combined them with design thinking to build a system to help communities work together through the design process to create something of value to them. Websites such as Kickstarter and Spacehive focus on funding. There is no community interaction or debate on the formation of the project, online community members and visitors can only browse projects and support them with their money. At Local Vocal, the community is included on every step of the campaign process, from initial idea to funding and implementation. Local Vocal enables users who have an idea to share it within the community, gather feedback, and progress together with the community to test the best ideas possible using the design thinking method. After a concrete idea is elected, the Local Vocal community can pitch in and contribute by donating their time or money. Idea generation and matriculation within Local Vocal provides an inclusive user experience that rivals other web applications already in existence.

3. Example Usage Scenario

Our chosen scenario for the demo showcases how simple matters can spark change brought about within a community, and by the community. Our demo video offers a glimpse of a couple of studious citizens who are working on an independent project when they discover that their community is lacking a few public resources. They are in need of media workshop devices often found in a makerspace or advanced library lab. They then decide that instead of rallying people in the streets and passing out petitions to get a makerspace for adults built in their community, it would be better if they stirred people’s interests online with Local Vocal.

4. Design Thinking Focus in Local Vocal

Empathize
The Local Vocal social experience is to invite community members and media users into an opportunity to engage in the reasoning and development of their own communities. By following a design thinking guideline, users are empowered to express issues currently affecting their communities and then brainstorm throughout the process of building and funding collaborative solutions.

The Empathize stage begins this process in which a user may post a new topic or concern in their community. When this new issue is proposed, the user who created this new project / post is now the administrator. Their initial post could be as simple as stating, “I wish I had a place to build cool stuff.”

Empathy is then shared when the post continually gains followers who favor this initial idea. Followers can also not favor the idea. The empathy page will have day and time limits for how long this stage can remain online to gain followers and favor. Each Local Vocal page will direct a user to projects proposed in their area, as projected by the user profile’s set location.
A follower’s main goals in the empathy stage are to observe and engage. From these observations, one may analyze the problem(s), the place, and the people. Upon observation, their engagement takes form with forum posts, following, favoring, or not favoring proposed ideas.

Define
The Define Stage of Local Vocal’s design thinking process offers followers the opportunity to pin the obstacles believed to have caused their concern and desire for resolution. This stage is otherwise summed as ‘The Problem Statement.’

Followers may then consider:
(1) Who is the beneficiary?
(2) What are their needs?
(3) What insights have been gathered?

These three considerations lead to an actionable problem statement, which is very important if followers are to realistically see this project through to a further stage and gain more interest.

Ideate
The Ideate Stage borrows from momentum built from the Define stage. Now that the problem statement is actionable, invested followers in favor of a change driven project now may realize there is enough passionate minds in place to share their ideas and brainstorm. This phase incorporates mind-mapping, imagination, and rational sketching to seek alternative solutions. Each idea is a post that can be favored or not favored as well. Throughout this process the local project can still gain followers who can favor or not favor the project.

Prototype
After careful considerations, a progressive Local Vocal project will reach its Prototype Stage. The Prototype Stage will set forth a leading plan, budget, and timeline. Available images supporting the favored vision can help push the project forward. Followers may still provide comments to share about proposed prototypes.

The most favorable alternative(s) from the Ideate Stage will be used for the project plan. Administrator(s) must collaborate to set a budget and timeline. This stage is especially critical as it will be extremely important to retain project followers in preparation for the Test stage.
Figure 1: Screenshot of the Prototype Phase

**Test**
The Test Stage will provide an opportunity for followers to vote on the proposed leading alternative project plan (w/ budget and timeline). To move forward to the funding phase, the proposed project must earn at least an 80% approval from favor votes tallied.

Feedback for invested administrators is essential before moving beyond the Test stage. If a proposed project does not earn 80% approval, the process will be directed back to the Prototype. Administrators will need to review and re-tool to further consider needs, desires, and updates from followers before presenting a new prototype. This page will then showcase the next leading alternative project idea developed from ideas offered throughout the Ideate Stage and failed testing stage.

Figure 2: Screenshot of the Test Phase
Fund
After successful prototyping and testing, the Fund stage will allow invested administrators, followers, users, and others to donate toward the project. Donation goals will fulfill the favored plan budget and timeline. Any amount will be accepted, as well as time contributed toward completion of the project. In addition to citizens, organizations and corporations can follow, administer, contribute, structure and fund projects.

Fund Stage Contributions Accepted:
- Money
- Time and Effort
- Co-Administration
- Training / Partnership
- Branches (for copying – other Local Vocal communities)

All stages – in progress and after completion – can be shared via other social media outlets as well. Additional exposure can help gain project followers and Local Vocal users.

5. Future Considerations

An ‘Add Co-Administrator’ feature empowers diligent followers to become greater contributors on proposed project campaigns. Campaign administrators will have the ability to appoint co-administrators, and screen campaigns for disruptive followers.

Later versions and updates of Local Vocal will then display (Co-)Administrator badges, recommendations, and certificates on a user’s profile to distinguish one’s consistent patronage and history of trustworthy contributions. These badges can be shared across other social media outlets, such as LinkedIn, Google Plus, Twitter, etc. The objective is to see that Local Vocal will then resemble an online community that exemplifies the collaborative efforts of willing citizens all throughout.
References


