

ENSE 271 – PEOPLE CENTERED DESIGN

A WEB-BASE SOLUTION FOR SOUTH SASKATCHEWAN COMMUNITY FOUNDATION

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To fully utilize the report, we recommend accessing the accompanying project GitHub repository. The link for the repository can be found in the footer section.

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1 OVERVIEW

1.1 Internal

Project Sponsor – Dr. Tim Maciag

1.1.1 External

Director - Community served by the Regina Foodbank

Manager – Victor Roman (Manager of Community Impact & Communication)

1.2 Business Need

The business need/opportunity is to create a new and innovative web design that inspires people to act around community needs. The design should incorporate a Design Thinking (Agile)/Fast Feedback Cycle approach, with a focus on local community issues and their connection to the global sustainable development goals.

The site should be easy and intuitive to navigate, allowing users to filter data by various regions and focus areas, including food security, homelessness, and mental health & wellbeing. The site should also include infographics, long-form written content, and community impact stories for each focus area and region and integrate a community advocacy lens with calls to action to motivate and inspire community action. The design should be created using technology/programming environments such as Stories OnBoard, Adobe XD, Figma, WordPress, Local by Flywheel, and GitHub (public repository required), and should be licensed under Creative Commons Share & Share Alike (CC BY-SA 4.0).

1.3 Challenges

The Vital Signs reports provide valuable information on the social, economic, and well-being of individuals and communities in southern Saskatchewan. These reports are utilized by community-based organizations, government organizations, and funders to inform their projects and initiatives. The latest report, "Through COVID-19 and Beyond," has identified some of the most critical challenges facing communities, such as addictions, mental health, racism, community safety, and homelessness.

Previous Vital Signs reports were shared with key stakeholders, including community-based organizations, government entities, researchers, and funders, in PDF format. Although the PDF version serves its purpose, the SSCF aims to create an interactive report on their website to provide users with a more meaningful experience.

By integrating community stories and connecting them to the UN Sustainable Development Framework, the SSCF hopes to help community members understand the significance of the work done by local organizations in advancing global development goals.

Ultimately, the interactive report aims to encourage communities to act on critical issues. The goal is to inspire people to donate their time and resources to improve their community.

2 PROJECT PLANNING

2.1 NorthStar

The primary NorthStar customer for this project is donors. Our goal is to design a website that makes it easy for potential donors to access and understand the information we are presenting to attract more donations. The aim is to make the website user-friendly and easy to navigate so that potential donors can quickly find the information they need and feel confident in their decision to donate.

2.2 Carryover

This project focuses on our target carryover customers, which include government organizations, charity sectors, and volunteers. We aim to establish effective communication with these groups to maintain a strong relationship and achieve a common goal. Specifically, for government organizations, we want to provide updates and open collaboration channels, whether through requesting or helping. For charitable organizations, we want to share our work and potential partnership opportunities. Lastly, for volunteers, our goal is to clearly present the opportunities and benefits of volunteering with the South Saskatchewan Community Foundation.

2.3 Constraints

In addition to the constraints mentioned, some assumptions were also made during the project. For example, the assumption that users would prefer a simple and intuitive interface, which guided the team's design decisions. Another assumption was that users would prefer to filter reports based on their location or region preferences, as suggested by the customer during the feedback sessions. These assumptions were further validated through usability testing and feedback from users. Additionally, the team had to work within the constraints of the WordPress platform, which limited certain design choices and required the use of specific plugins and tools. However, the team was able to navigate these constraints and deliver a

final solution that met the customer's needs and provided a user-friendly experience for the website's visitors.

2.4 Summary of Affinity Diagramming & Empathy Mapping

In Activities 1 and 2, our team engaged in a variety of design thinking activities to understand the needs of their customers and create low-fidelity prototypes to address those needs. Through empathy mapping, the team developed a deeper understanding of their customers' perspectives and used that understanding to create user story maps and site maps. Using sticky notes and sketches, they were able to visualize and organize their ideas and iterate on their designs. They also incorporated key topics related to people-centered design, such as affordances and constraints, into their prototypes to ensure they were intuitive and easy to use. In Activity 3, the team used Figma to create a high-fidelity prototype, which allowed them to further refine their design and add more detail to the user interface. The team worked collaboratively to create both a desktop and mobile version of the prototype, which demonstrated their ability to adapt their design to different platforms and user contexts.

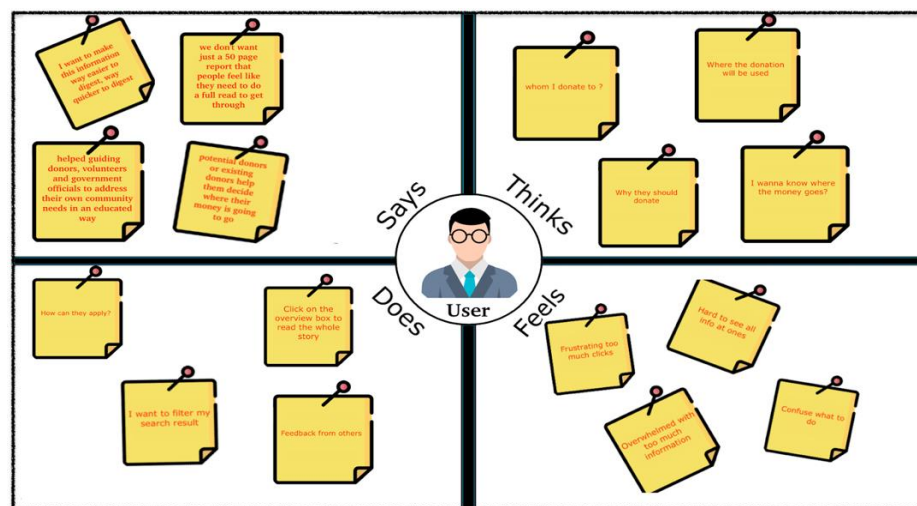


Figure 1: Empathy Mapping Diagram

2.5 User Story Mapping

The team developed user stories and user experience activities based on the key actions identified during the affinity diagramming activities. These were used to define the minimal viable product (MVP). The user story map was continuously updated throughout the project lifecycle, incorporating ideas and feedback from client checkpoints to add new features and future integrations. This resulted in an end-to-end roadmap, outlining MVPs and future opportunities.

2.6 Prototyping Activities and Usability Evaluation Findings

The prototyping activities involved gathering feedback and comments from the customer and student colleagues to inform the design ideas and final solution. In Activity 1, the customer emphasized the need to showcase the graphs of money required by the charities and the money donated to them, to focus on new donors and to demonstrate or implement feedback received from donors. In Activity 2, the customer emphasized the importance of implementing filtering capabilities based on location or region preferences, providing brief summaries of each report, and using infographics to display feedback for the reports. The customer also provided four reports to work with. In Activity 3, the customer suggested creating a template for the report pages for easy navigation and allowing staff members to edit the reports with ease. The customer also proposed search filters for reports by region, specific reports, year, and/or area.

Design ideas were linked back to the class topics of affordances, gestalt, and constraints. Affordances were used to provide users with a personalized experience by implementing filtering capabilities based on their location or region preferences. Gestalt was used to provide users with a quick overview of each report by using summary cards. Constraints were used to limit the number of filters and search options to avoid overwhelming users and to create a template for report pages to provide consistency and ease of navigation. Overall, the feedback and comments gathered from the customer and student colleagues were crucial in guiding and changing the design ideas and final solution to meet the customer's needs and provide a valuable and useful product.

2.7 Summary of Final WordPress Solution

Our final WordPress solution is a product of the iterative design process that we undertook throughout the prototyping activities. The feedback and comments gathered from the customer and our student colleagues guided and changed our design ideas, which were informed by lecture topics related to people-centered design. Our website has evolved since the high fidelity prototype, with the addition of a "focus area" section that displays the 17 global goals, which is the data that will be filtered. We also made some minor changes to the site based on feedback received in each step of the design process. Our site features a clean and modern design, with easy navigation, and improved filtering capabilities that allow users to filter reports based on their location or region preferences. We also incorporated the use of summary cards, which provide users with a quick overview of the report and encourage them to click and read the full report if they are interested in learning more. Our use of infographics to display feedback for the reports provides users with a visual representation of the data, making it easier to understand and digest. Overall, our final WordPress solution provides users with a valuable and useful product that meets the customer's needs and incorporates key design principles such as affordances, gestalt, and constraints.

3 PROJECT RESULTS

3.1 Feeling Towards Projects (Likes/Dislike)

Initially we had some miscommunication for the 1st activity of this project. Though we enjoyed doing the rest of the activity together, it was a great experience as a group. Also, it was our 1st software project that we are making for a real industry client. We had no knowledge of WordPress at the starting of this project though the client likes our design so it was a really good achievement for us. We enjoyed working with story mapping and affinity diagrams as it helps us to make our design and work accordingly. Also, we were good at making low-fidelity and High-fidelity prototypes. It was some time consuming at the end when working with WordPress as we didn't have a Pro version and we have limited knowledge with it. Overall, we learned a lot of things while working on this project and it will be helpful to us in our future project for real industry as well as Capstone Project.

3.2 What Went Well

As we have step by step activities assigned from the beginning, we have clear ideas of how we need to work on it and we did everything according to it. We divided the work among all the group members and worked according to it and the feedback from the customer guides us to do the changes and make the design more effective. However, we did everything well in making the final design as Customer was pleased with it.

3.3 What Went Not Well

There was some miscommunication for the 1st activity which created some trouble in completing that activity on time. Also, we have some technical issues while working in WordPress, but we manage it. The rest of the things went well for us.

3.4 Prototype to WordPress

As we have clear ideas with the prototype and so we didn't have many issues with design things in the WordPress. Also, after our meeting with Customer for Hi-fi prototype we got some notes that we need to work on and we work according to that and we updated whatever thing he told us to change and it was very interesting to work on WordPress.

3.5 People Center Design Ideas Exploration to Design

The people-centred design ideas discussed in lectures helped in guiding our design explorations and ensuring that user needs and preferences were taken into consideration. In our website we try to display everything simply so that users can get an idea which button or option is working for which things.

3.6 What same thing can be done in future project

For the future project, we can use the same strategies as we used for this project, like to communicate with team members, dividing work equally and do it within time, doing research on the user's needs and work according to it so we can achieve our best performance for the project.

3.7 What different thing can be done in future project

For the future project, we can do some different things such as better communication with group members, and everyone should know what task they have worked on throughout the project. Also, there should be an option for using some different designing tools from the beginning so we can get the best result.

3.8 Design Ideas for future work

In Future work we could explore additional features and integrations to enhance the website's functionality, based on user's feedback. Also, there should be some alternatives kept for users to choose which design they prefer to use more sufficient and work for them.

4 WORDPRESS DEVELOPMENT

The plugins utilized on our WordPress website come at no cost: 1. Add Categories to Pages plugin, which enables you to easily include Categories and Tags to your WordPress Pages. Upon activation, the plugin grants category and tag support to WordPress Pages, enabling users to filter pages according to specific categories or tags, as well as facilitating developers in searching pages based on categories or tags. This plugin, created by ankit, has received a 4.5-star rating from 30 users and was last updated three years ago.

We have utilized the "Image Hover Effects Ultimate (Photo Gallery, Effects, Lightbox, Comparison or Magnifier)" plugin on our WordPress site, which offers stylish and contemporary CSS hover effects and animations. This plugin is ideal for showcasing portfolio, gallery, and image items using short codes and custom posts, as it brings your images to life with its stunning animations and transitions. We incorporated this plugin in our Focus Area filter, which displays content as an image hover with a brief description and an option to read more upon clicking. Created by Biplob Adhikari, the plugin has received a 4.5-star rating from 208 users and was last updated just five days ago.

When we received the link to our WordPress website, we discovered that Jetpack was already integrated into the platform. Jetpack is a powerful tool that offers security, performance, and marketing features, all crafted by WordPress experts. By ensuring your site is secure, Jetpack allows you to concentrate on other essential aspects of your website. This plugin was created by Automatic and received a 4-star rating from 1865 users and was last updated just two days ago.

The "Post Type Switcher" plugin provides an effortless way to alter the post type in WordPress. This tool came in handy when we needed to switch numerous posts to pages, as we were dissatisfied with the appearance of the post pages. The plugin was developed by Triple J

Software, Inc. and has garnered a 4.5-star rating from 224 users and was last updated five months ago.

We used "Search & Filter" plugin on our website to enable users to search by Category, Tag, Custom Taxonomy, Post Type, Post Date, or any combination of these to refine their searches. However, we found the free version to be unsatisfactory. The plugin, developed by Code Amp, has received a 4.5-star rating from 161 users and was last updated four months ago.

The "Starter Templates" plugin offers users access to over 280 pre-designed full website templates and individual pages for their preferred page builder, including Elementor, Beaver Builder, and the Block Editor. It was the initial plugin we installed on WordPress, and it automatically installed another plugin called Spectra. Developed by Brainstorm Force, the plugin has received a perfect 5-star rating from 3,873 users and was last updated just three days ago.

We chose to install the Astra theme, a stunning and fully customizable WordPress theme that suits various website categories such as blogs, personal portfolios, and business websites. Developed by Brainstorm Force, the theme has received over 5,000 users who have rated it a perfect 5-star. As of writing this, the theme was last updated today.
