Project Report-Out & Lessons Learned Document

1.0 TEAM NAME AND MEMBERS

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2.0 PROJECT SPONSOR

• Dr. Tim Maciag (ENSE 271 Professor)

3.0 BUSINESS NEEDS & OPPORTUNITIES

3.1 Overview

The UN's Sustainable Development Goals (SDGs) are a global initiative for peace, prosperity, and sustainability. They call for action from all countries to address poverty, inequality, and climate change. Local communities are aligning priorities with the SDGs through a process called SDG localization, involving local governments in achieving the goals. It's crucial to involve local governments in the SDGs' success.

3.2 The Challenge

The challenge is to create a community indicator system for Regina, Saskatchewan. This space should include a space for data, a place for local properties, and be mapped to the UN SDG Framework. The goal for this page is to create the following:

- Community awareness about the UN SDGs
- Map local data to this framework
- Provide a central space to host open-source and local community data
- To measure local progress on the UN SDGs

3.3 The Opportunity

To work alongside the NVSSN and DFG-SK and explore new innovative web designs and deliverables.

4.0 REFLECTIONS ON PROJECT PLANNING, EXECUTION, AND CLOSING

4.1.1 North Star

Our Primary customers are the NVSSN and Data for Good organizations, along with any passionate "change makers."

4.1.2 Carryover Customer

These include a targeted audience of investors, donors, community leaders, researchers, and contributing beneficiaries of the project.

4.2.1 Project Assumptions

The static data for the project will be provided by Mr. Scott Wells and the developing team is not expected to engage in monetary investments. The primary version control tool remains to be GitHub and the development process includes the following tools: Figma, WordPress, and StoriesOnBoard.

4.2.2 Project Constraints

Technical expertise within the WordPress development environment serves as a notable constraint, along with limited check-ins with the North Star customers. Also, navigating within the bounds of the available data limits the product to 2 implemented SDGs.

4.3 Key Findings from Affinity Diagramming & Empathy Mapping

- Motivation for community involvement in Sustainable Development Goals (SDG's).
- The need to bring awareness and inspire community action.
- A clickable dashboard leading to in-depth SDG information.
- Quantified dashboard to track the percentage completion of targets for each SDG.
- Design challenges for a stakeholder-aligned, user-friendly website.
- Preference for relevant graphs with targets and a summary page on the website.
- Desire for easy access to all data and statistics from a single user-friendly website.
- Data security concerns and adaptability for future project changes.
- The need to collect user feedback and questions, as well as the challenges of integrating data provided by Northstar.
- The aspiration to increase Regina's visibility and support from more Nonprofit Organizations.

4.4 Evolution of User Story Map & Minimum Viable Product

The development of our User Story Map (USM) began with highlighting the core functionality of our website, often referred to as the "Backbone". Our website primarily serves as a platform for users to access data and information related to Sustainable Development Goals (SDGs) and participate in community engagement. Beneath this foundational structure, we have various activities that support and enhance the backbone, including the initial release of our website known as the Minimum Viable Product (MVP). As a team, we've introduced two MVPs, with the second iteration representing future iterations desired by our customers following the launch of the first one. The results generated by our team aligns with the MVP concept as it effectively fulfills the objectives outlined by Scott and Colleen, particularly in creating a community indicator system for Regina. The requirements included educating users about the 17 SDGs, with a specific focus on the six SDGs relevant to Regina. Overall, we are confident that our deliverable meets the criteria of an MVP by addressing and aligning with the goals and needs of our customers.

4.5 Project Progressions

4.5.1 Home Page

As depicted in Figure 1, the home page was designed to have an interactive wheel where the SDGs can be explored. The main feedback with this design was to have a search bar so users can better explore the website.

In the next iteration of delivery, a Figma prototype was presented which demonstrated the theme and colours of the website. As Figure 2 shows, the team also presented their logo which was very well received by the audience. The main feedback here was to include an informative welcome message to deliver the main purpose of the website. The concept of skeuomorphism was implemented here with the interactive wheel to mimic the well-recognized colourful SDG circle. The wheel also serves as a constraint to only allow users to explore the SDGs that are on it. This allows the backend developers to work on future pages without exposing the incomplete pages to the users.

Figure 3 demonstrates the final delivery, where the welcome message with a short description is integrated. As part of the welcome message, the team also decided to include a button that navigates the users to the official SDGs website of the United Nations.

Furthermore, an "All SDGs" section was added upon the North Star customers' request where all 17 SDGs can be further explored. With the final iteration, users can hover over the SDG icon in the wheel, which causes the center of the wheel to present that specific SDG's number and title. If data for that particular SDG has been implemented, then a "Learn More" button is also presented that can navigate users to the detail page, which includes more qualitative and quantitative data.

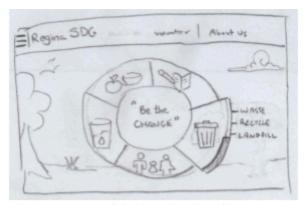


Figure 1. Low fidelity sketch of Home page.



Figure 2. High fidelity prototype of Home page.



Figure 3. Home page in WordPress.

4.5.2 All SDGs Page

As observed in the prototype, the SDG (Sustainable Development Goals) page was pictured with SDGs arranged in rows and columns. Each SDG was positioned within this grid layout, and upon hovering over a tile, a brief description of the SDG would appear. To dig deeper into any specific SDG, users could click on the respective tile for further information. Notably, one key feedback received was to exclude a volunteer page from the initial Minimum Viable Product (MVP), as per Scott and Colleen's preference

Regarding the High-Fidelity prototype constructed on Figma, the team incorporated Regina's six prioritized Sustainable Development Goals (SDGs) into the About Us page. Additionally, the team included the mission statement and listed the organizations involved. The feedback that the team received by Scott and Colleen was to add a separate SDG page which included all the 17 SDGs.

Drawing from feedback provided by Scott and Colleen in the second figure, which emphasized the need for a dedicated SDG page, the team developed the ultimate version of the website (MVP). This iteration featured an introduction explaining the concept of SDGs, followed by a comprehensive listing of all 17 SDGs that are the focus of the UN.

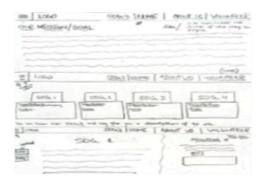


Figure 4: Lo-fi prototype



Figure 5: Hi-fi prototype



Figure 6: Wordpress

4.5.3 About Us Page

In our initial lo-fi prototype of about us we had decided to write a brief summary of what we will be displaying on the website. We also thought to write about our mission and also include some pictures to make the page more engaging. We also included a header with a logo and menu icon.

On our hi-fi prototype we made lots of changes after getting suggestions from scott and colleen on our lo-fi presentation. We firstly added an all sdg section into the about us page in which we include interactive flip tiles which were clickable and would take to the desired SDG goal's page. We also added a section where we gave a brief introduction on our collaborators NVSSN and data for good.

On our final wordpress website we further added changes like remorse the all SDg section and making a separate page for it. We add a brief info on our Regina SDG's page along with a background image of Regina. We then displayed the icons of our collaborators NVSSN and data for good. Further we used drop down containers to add brief info on the impact which the website would create and our mission to spread awareness on the sustainable development goals in regina. Finally we included an image which represents all the 17 SDG's and inspires people to come forward and take action.



Figure 7: Lo-fi prototype



Figure 8: Hi-fi prototype



Figure 9: Wordpress

4.5.4 Data Pages

Looking at the prototype on (Figure 10), it originally had the design of surrounding the graph with an object that correlates to its following SDG, along with infographics to help users understand how the specific SDG helps the community. Each page had a "next" and "previous" arrow to move in between sub-categories for that SDG, as well as a sidebar to the left acting as our navigation system.

Moving to the high fidelity design (Figure 11), the representation of the graph's correlation to the SDG was implemented and the infographics/facts were moved right beside the graph for easier viewing. The "next" and "previous" buttons were implemented to move between the sub-categories and SDGs The main issue for this design was the missing commas in between the zeros for easier readability.

The final design (Figure 12) was implemented with many changes. Due to the lack of customization brought by WordPress adding a more descriptive graph was impossible. To produce a graph, the Visualizer addon was used. The "next" and "previous" buttons were removed and the sub-categories were placed in tabs for ease of use. The infographics were moved inside accordions, as Colleen and Scott suggested. The download button opened up an excel file with both the graph data and raw data that Scott has provided. The share button only shares for Facebook.

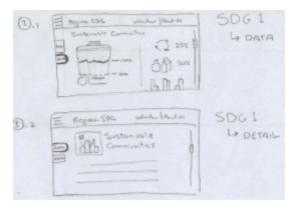


Figure 10. Low fidelity sketch for data page



Figure 11. High fidelity sketch for data page



Figure 12. SDG page for WordPress

5.0 PROJECT REFLECTIONS & RESULTS

Summarize how you felt about this project (likes/dislikes)

- The group enjoyed learning WordPress and particularly enjoyed prototyping in Figma. Learned skills will certainly pay dividends for future projects.
- It was a little challenging at times using WordPress, especially when placing and maneuvering content. The team understood that time was limited for presentations, but nevertheless, more time for customer presentations is preferred, for the delivery seemed rushed, and the group could not best reflect on the hard work put in.

Summarize what went well during the project.

- There was good communication within the team and everyone was pitching ideas whenever needed.
- Everyone completed their assigned tasks on time and were supporting others wherever necessary.
- We were able to achieve our mvp and website is very similar to our Hi-fi prototype
- Though at the beginning we were quite skeptical as it was our first time on wordpress, as we progressed with the activities we became quite proficient using it.

Summarize what did not go well during the project.

- We wanted our data to be more infographic by adding images into the graph but we could not figure how to do so.
- We could not add certain features to our website as it would require us to use the pro version.

How successful was your team in translating prototypes into WordPress reality?

The team effectively converted prototypes from Figma and basic sketches to Wordpress.
 Initially, transitioning from Figma to Wordpress posed a challenge as we had invested significant time in creating the prototype and had become comfortable with Figma's features.
 However, through perseverance and extensive effort, we successfully replicated the Figma prototype in Wordpress.

Did the people-centered design ideas discussed in lectures help/hinder your design explorations?

- Incorporating signifiers and affordances in our design significantly enhanced the user interaction and engagement. Providing animations, icons for each SDG, and, highlighting buttons, made it easier for users to find information.
- The idea of Skeuomorphism is prominent, especially in our data pages because in the accordions containing data, each set of information is paired with a corresponding icon. For example, when talking about the prices of houses, an icon of money is used. This allows the user to have a deeper understanding of what the information refers to.

What would you do the same for future projects?

- Keep the same core group members. We would keep the weekly group meetings as it allowed all of the members to be on the same page. The weekly meetings ensured that no one in the group was lost and always knew what was expected of them. This was a key factor in our process because it helped us feel like a team and that we were a cog in a bigger mechanism. Team cohesiveness was a big factor in our success.
- Another factor that really helped us was the use of GitHub. It was important in keeping our
 group organized, and even had a feature that listed available tasks that could be updated
 based on its completion progress. Github was also used to help us create presentations for our
 North Star customers because we're able to see the progress in our weekly files as it was
 grouped according to the data.

What would you do differently on future projects?

 Something we would do differently is think about investing some money into pro features in our future projects. Free features are always sufficient, but certain pro features allow us to create a smoother, and more efficient design within our projects. Some pro features outweigh the cost, and it also creates an easier time for the group members. As it is a group investment, the cost may be reduced to a trivial amount, so it may be something worth considering with some of our future work.

Summarize opportunities and design ideas for future work.

- Given additional opportunities, the group would like to explore a larger variety of data depictions, infographics, and graphs.
- Research further into plugins that offer a free search engine and download / shareable features. While these features do exist in the Elementor plugin, they require a paid premium subscription.

Appendix: WordPress themes and plugins

Plugin Name	User Rating	Last Updated	Active Installs	Purpose
Elementor	4.5/5	April 4, 2024	5+ Million	Offers interface use and control
Essential Addons for Elementor	5/5	April 1, 2024	2+ Million	Extensions and widgets for Elementor
Essential Blocks	5/5	April 3, 2024	100, 000+	Block library extension
Optimole	5/5	March 24, 2024	200,000+	Optimizes images
Jetpack	4/5	Apr 3, 2024	5+ Million	Better security, speed and performance. Connection to other social media
Starter Templates	5/5	April 1, 2024	1+ Million	Starter themes/designs to help start building website
Templately	5/5	March 20, 2024	300,000+	Templates for wordpress - Elementor supported
Visualizer: Tables and Charts for WordPress	4.5/5	April 2, 2024	30,000+	Offers use of responsive charts and tables
Visualizer	4.5/5	April 2, 2024	30, 000+	Tool for making graph
WPForm Lite	5/5	March 5, 2024	5+ Million	Beginner friendly WordPress Contact Form Plugin
My Sticky Bar	5/5	March 25th, 2024	100,000+	Allows the header bar to stick
Fibo Search	5/5	Jan 9th, 2024	100,000+	Adds a search bar