

Implementing the Solution Framework in a Social Impact Project

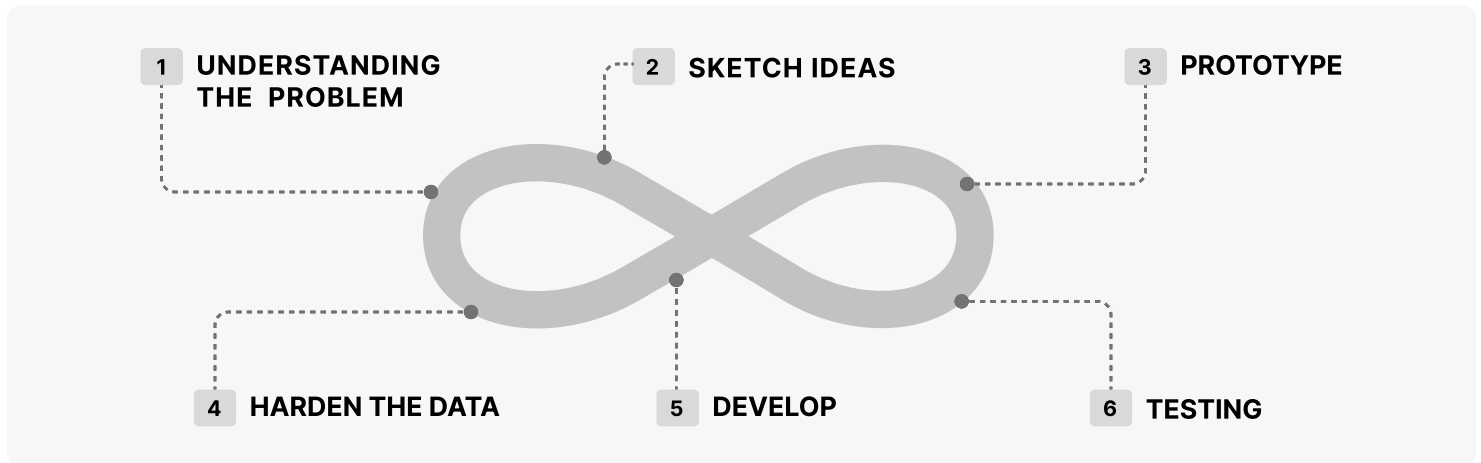


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This report outlines the data visualization process using the Solution Framework in a social impact project. Each stage includes practical lessons, making it a useful guide for educational and professional settings. This Solution Framework has been successfully implemented and is currently used at a financial services company. Kevin Ford, a business intelligence leader, has utilized this framework to guide data visualization practitioners and solve business problems effectively.



Why a Solution Framework?

A Solution Framework is important for data-driven teams and companies as it provides a structured approach to problem-solving and project execution. Implementing a framework offers several benefits, including:

Standardization and Consistency

Ensure that all projects adhere to the same high standards, reducing variability and enhancing quality.

Efficiency and Automation

Automate repetitive tasks, freeing up time for more strategic work and improving overall efficiency.

Collaboration and Communication

Facilitates better communication and collaboration among team members, ensuring that everyone is aligned and working towards common goals.

Case Study: Social Impact Project

In this case study, we aimed to test the framework outside the corporate environment by participating in a social impact project promoted by VizForSocialGood (VFSG).

Who is VizForSocialGood?

In a data-driven world, VFSG emerged as a group of data visualization volunteers dedicated to helping non-profits with their data strategies. Since 2017, VFSG has united over 700 volunteers globally and assisted 41 non-profits, including the World Health Organization, Bridges to Prosperity, Build Up Nepal, Sunny Street, and many more.

How VizForSocialGood Works?

VFSG collaborates with non-profits to define project goals and structure datasets. They launch the project on social media, providing data visualization practitioners with resources, chat support, and feedback for creating compelling visualizations. Each project typically lasts one month, concluding with volunteers submitting their projects for selection and presentation.

Visualizing the Social Impact of VizForSocialGood

In March 2024, VFSG decided to share their own data with the goal of seeking help from volunteers to demonstrate tangible benefits and changes brought by the organization. They aimed to encourage continued support and engagement from the community, potential volunteers, and partners by illustrating the value and impact of these projects. Additionally, they sought to motivate the audience to support future projects by volunteering, partnering, donating or spreading the word about VizForSocialGood.

In the following chat logs, you'll see the practical implementation of each stage of the project, guided by the Solution Framework. These conversations between the mentor and mentee provide insight into the iterative process, challenges faced, and insights gained.

■ Understanding the Problem

Before diving into the data, it's important to understand the audience and their questions. Identify their primary concerns and the top issues on their minds.

- Who's the audience?
- What are their questions?

■ Sketch Ideas

Validate assumptions and involve the client in the ideation process.

- Confirm the problem
- User co-owners



Mentee Mar 21, 2024

I reviewed the organization's mission, values, and the project scope. The project goal is too broad, aiming to address all audiences simultaneously. I'm curious to know if a single visualization could achieve this or if I should focus on a single audience. I decided to sketch the audience and their main questions.

 **Fig. 1. Sketch of the audience and their main questions.**



Operation Director Mar 24, 2024

So cool! We need more of these funders!



Mentee Mar 24, 2024

Oh wow! That's helpful. Now, I have a narrow scope and know where to focus. But wait a minute, I don't know anything about fundraising. Let me do a little research about it first.



Mentee Mar 29, 2024

Okay, I have done my research. I have looked up ways that non-profits sell the idea of raising funds. Two important things are showing funders the benefits of investing in the company and showcasing how the organization will spend the resources. I assume VFSG can spend the resources on operational costs, community engagement, and capacity training. I created a storyboard using a train analogy to illustrate VFSG's mission and encourage donations. I think I'm ready to start developing.

 **Fig. 2. Sketch of the solution, storyboarding.**



Mentor Mar 29, 2024

Wait! Before moving on to development, please confirm your assumptions. I really like that you researched general fundraising strategies, but you need to confirm all your assumptions with your user first. In this stage, you are sketching based on your understanding, with your bias and background. Go back to the client so they can teach us about it and confirm if we are on the right path.

Mock Up/Prototype

Develop a more robust solution focusing on usability. Share prototypes with the client for feedback without emphasizing the numerical details at this stage.

- Dirty real data
- Confirm the solution

Harden the Data

Automate data collection, processing, and presentation. Ensure the final dataset is coherent and reliable.

- Proper data sources
- Automate → What is the plan or procedure for future updates?

Develop Content

Construct the interface while adhering to best practices in data visualization.

- Build interface
- Best Practices



Mentee Mar 29, 2024

All right, I will contact the Fundraising Director, and we can set up a meeting to discuss my solution.



Meeting with Fundraising Director Apr 05, 2024

I would like to hear any ideas and the context around the storyboard and discuss how it could potentially be used in fundraising plan for VFSG.



Mentee Apr 05, 2024

Wow, that meeting really helped me. I confirmed my assumptions and provided more insights about the fundraising strategy. The director also provided feedback on my sketch, and we decided that a short infographic would be more effective than a long-format presentation for this audience.



Mentee Apr 08, 2024

I created a new sketch. This one is easier to digest and only contains the most important information. As a personal touch, I kept the analogy of the train. I am going to share it with the Fundraising Director.

 **Fig. 3. Sketch and prototype of the solution.**



Fundraising Director Apr 10, 2024

This is amazing! I love your creativity and approach. I'm only wondering if there was a way to include how support will help change lives/global reach.



Mentee Apr 10, 2024

Thank you for your feedback! That's a good point. Let me see if I can incorporate that without redundancy.



Mentee Apr 10, 2024

I started working on the data model and wrote the functions to calculate the main indicators. This step was efficient since I had defined all the necessary data in the prototype.



Mentor Apr 10, 2024

Exactly, that's why you need to define your solution before moving to development. It can be messy to program and figure out all the variables at the same time. Also, it makes it easy to build a process to automate and facilitate future visualization updates.



Mentee Apr 11, 2024

I finished the solution. I used Figma for the prototype, Procreate for sketches, and Tableau for the visualization. I am going to share it with the client for their feedback.

 **Fig. 4. Finished Solution Before Feedback.**

Testing

Conduct comprehensive testing with the target audience and data visualization experts.

- Beta testing
- Test outside Audience

Presentation

Present the finalized solution to stakeholders, emphasizing both the process and the tangible impact of the project.

- How to communicate the insights?
- What metrics to highlight?

Conclusion

In the end, it's not just about the visualizations we create but the actions they inspire and the impact they have on our clients.

By implementing the Solution Framework, we have created an effective data visualization and contributed to improving processes that support the organization's mission. This case study highlights the importance of structured frameworks in driving social impact through data visualization.



Mentor Apr 11, 2024

Make sure you also get feedback outside of your audience. Why don't you share the visualization with the Elevate DataViz community?



Mentee Apr 11, 2024

You were right. I received valuable feedback from both groups. From the VFSG community, I received feedback on copywriting. From the Elevate community, I received feedback about the placement of the Donate button. The original position didn't align with how our eyes followed the infographic. Now, it's in a better position where everyone can spot it easily.



Mentee Apr 17, 2024

They really liked the final version and want us to present it in the live presentation. However, I'm still thinking about the Fundraising Director's comment: "How support will help change lives/global reach." I haven't shown something more tangible.

 **Fig. 5. Final Visualization.**



Mentor Apr 17, 2024

In my company, to show the impact of our visualizations, we calculate how much analyst time we save annually through our work. We could track the hours volunteers spent on the visualizations and use a factor of freelancing charge for that time. If there are 20 participants, 20 projects, 20 hours for each individual, and \$120 an hour, participants have donated \$960,000 in data visualization design and analysis.



Mentee Apr 17, 2024

I like that idea. We should mention it in our presentation.



Final Presentation Apr 19, 2024

The recording is available at the following link:
<https://www.youtube.com/watch?v=eLym5wSJGEk>



VizForSocialGood May, 2024

This work has inspired VFSG to convert volunteer time into hours and financial metrics. Now, we use these metrics in fundraising communications. This approach demonstrates the broader impact of their volunteers' efforts and enhances their ability to communicate their value to potential funders.



VizForSocialGood May, 2024

Together, our volunteers have contributed 11,000 hours and over \$1 million worth of consulting and analytical services to 40+ non-profits worldwide.

 **Fig. 6. New VFSG Fundraising message.**

VFSG AUDIENCE

Volunteers

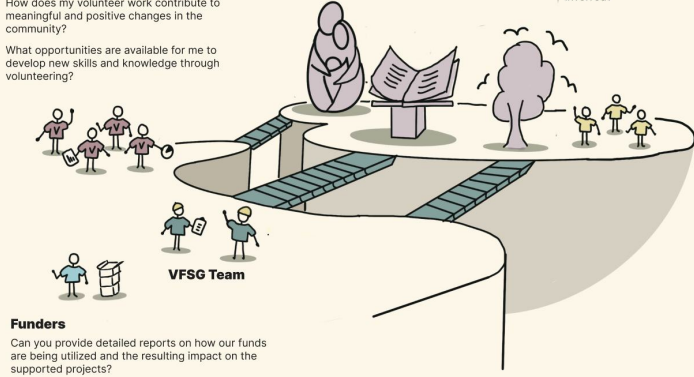
How does my volunteer work contribute to meaningful and positive changes in the community?
What opportunities are available for me to develop new skills and knowledge through volunteering?

Charities

How does the VFSG ensure a match between our charity and skilled volunteers?

Broader Community

Can you share stories that highlight the impact of volunteer efforts and inspire others to get involved?



Funders

Can you provide detailed reports on how our funds are being utilized and the resulting impact on the supported projects?

Fig. 1. Sketch of the audience and their main questions.

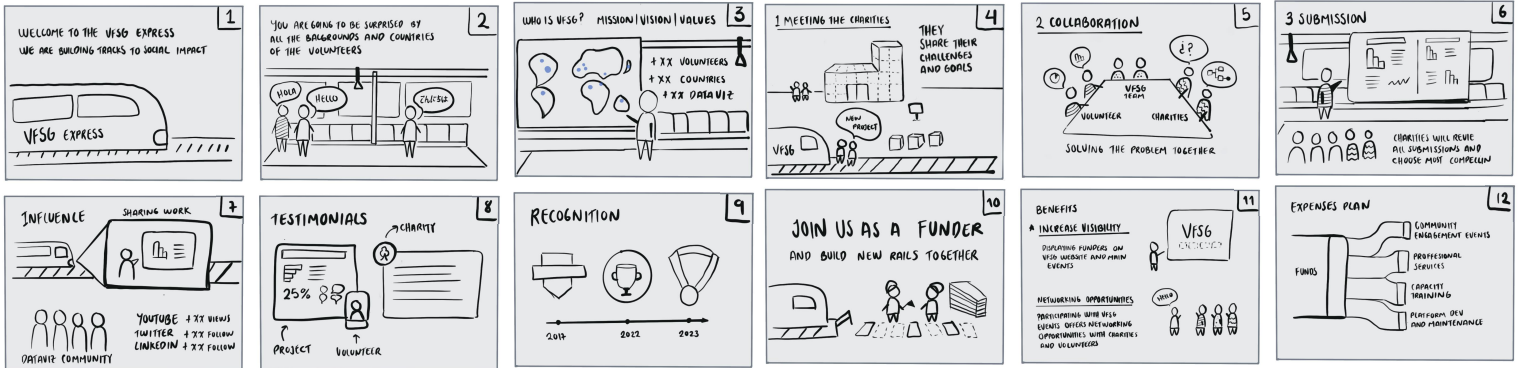


Fig. 2. Sketch of the solution, storyboarding.

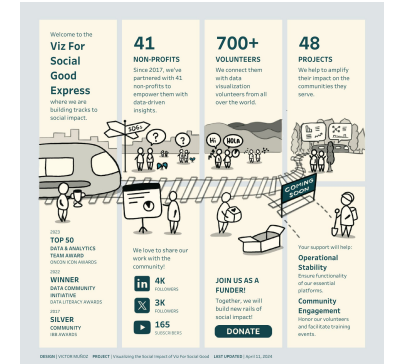
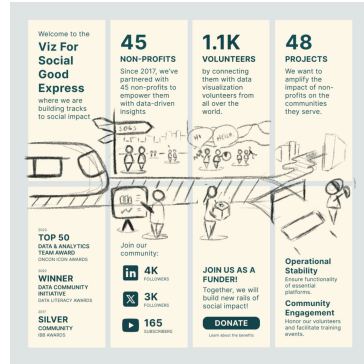
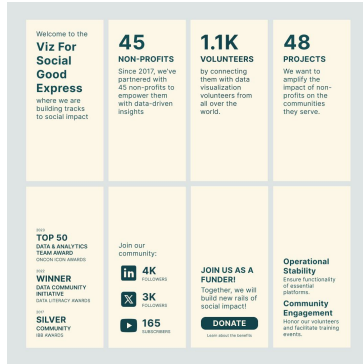
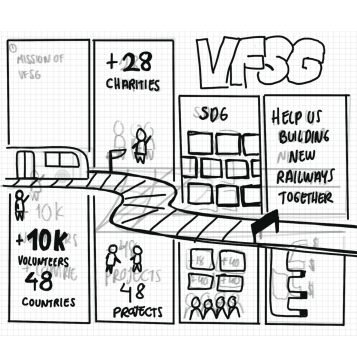


Fig. 3. Sketch and prototype of the solution.

Fig. 4. Solution before Feedback.

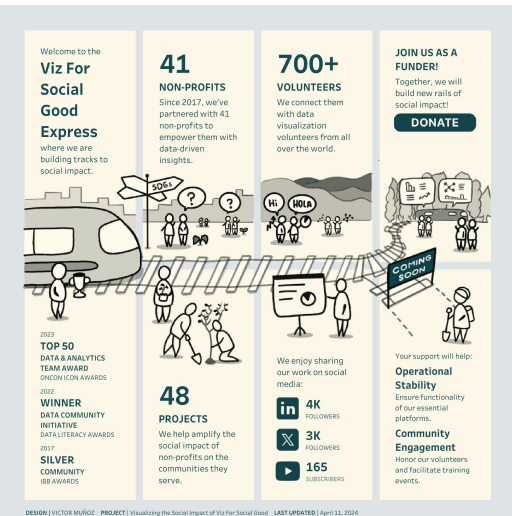


Fig. 5. Final Visualization.



viz for social good

Non-profits worldwide are at the forefront of driving positive social change, but 76% of them lack a data strategy, and 79% don't have enough time or personnel to focus on data*.

VFSG helps these mission-driven organizations thrive in the digital age by connecting them with data visualization enthusiasts, who create digestible and engaging visuals to help the non-profits raise awareness of their causes, make data-driven decisions, engage with donors and key stakeholders, and expand their digital reach.

Together, our volunteers have contributed 11,000+ hours and >\$1 million USD worth of consulting and analytical services to 40+ nonprofits worldwide.**

*According to the Nonprofit Trends Report and research from Salesforce
**Calculated using data from the Data Visualization Society's State of the Industry Report 2023

Fig. 6. New VFSG Fundraising message.