



Supporting Coffee and Chocolate Farmers in East Africa

Progress and Next Steps Report

Introduction

Recently, DataKind has been collaborating with a nonprofit organization that provides support to East African coffee and chocolate farmers. Currently past the initial stages of product development, a survey of the nonprofit organization's key stakeholders has been conducted to provide greater insight as to where DataKind should focus its efforts.

Survey Data

The survey received 21 responses regarding the opinions of stakeholders on two potential next steps, a rating of their experience with the project thus far, as well as additional comments.

General Rating

The respondents' current experience with the project was rated on a scale of 1-5, with 1 being terrible and 5 being fantastic. Figure 1 shows a histogram of these results.

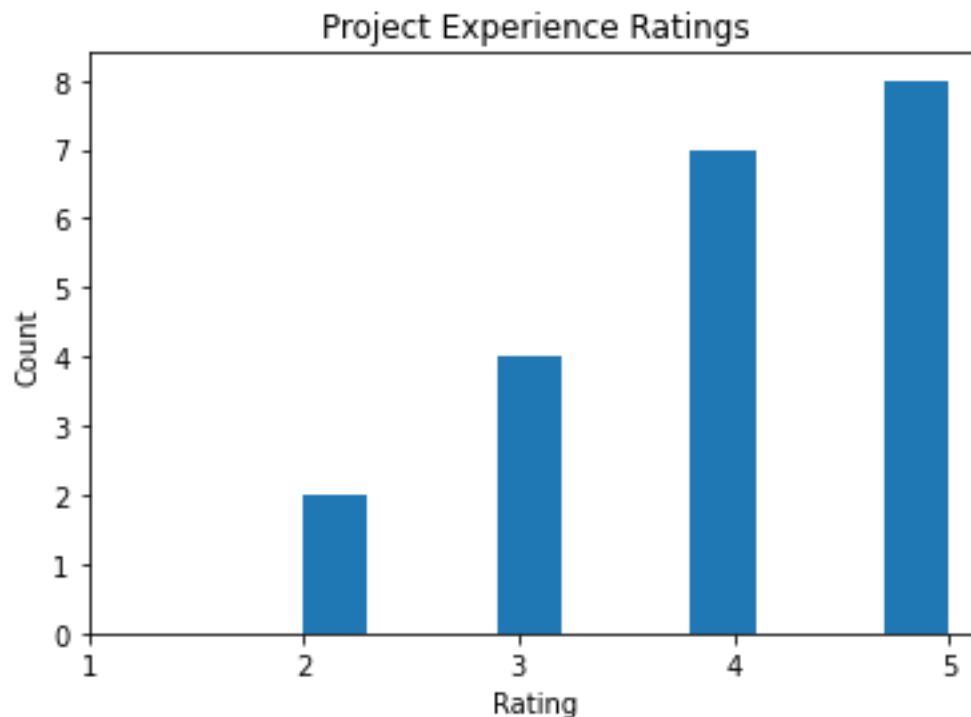


Figure 1. Project Experience Ratings

Most ratings were positive, with most respondents rating the project with a four or five. No respondent rated the project with a one. Overall, this demonstrates that stakeholders view the project as beneficial for the nonprofit organization's mission.

Website Interface Question

The first question regarding next steps involves the development of a website interface for users to interact with the support tool. Figure 2 displays the responses for this idea.

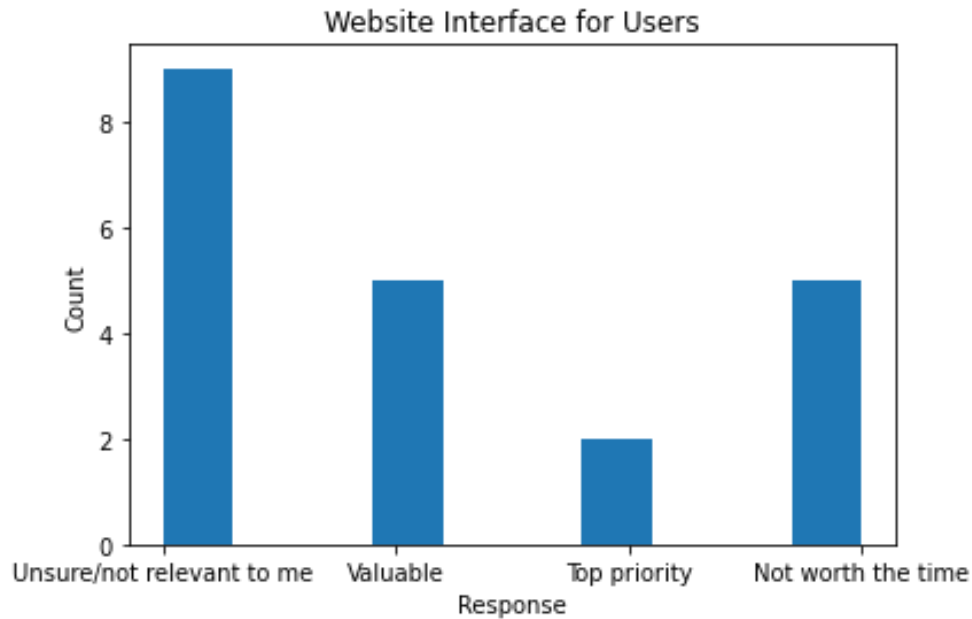


Figure 2. Website Interface for User Interaction

Two-thirds of stakeholders (14) responded that they were unsure, thought it was irrelevant to them, or that it was not worth the time to focus future efforts on a website interface. The rest responded that it was valuable (5) or top priority (2) to work on this interface. Overall, stakeholders are mostly unsure about the value of a website interface.

Tool Customization Question

The other potential next step for DataKind is to further customize the tool to better support the coffee farmer support team.

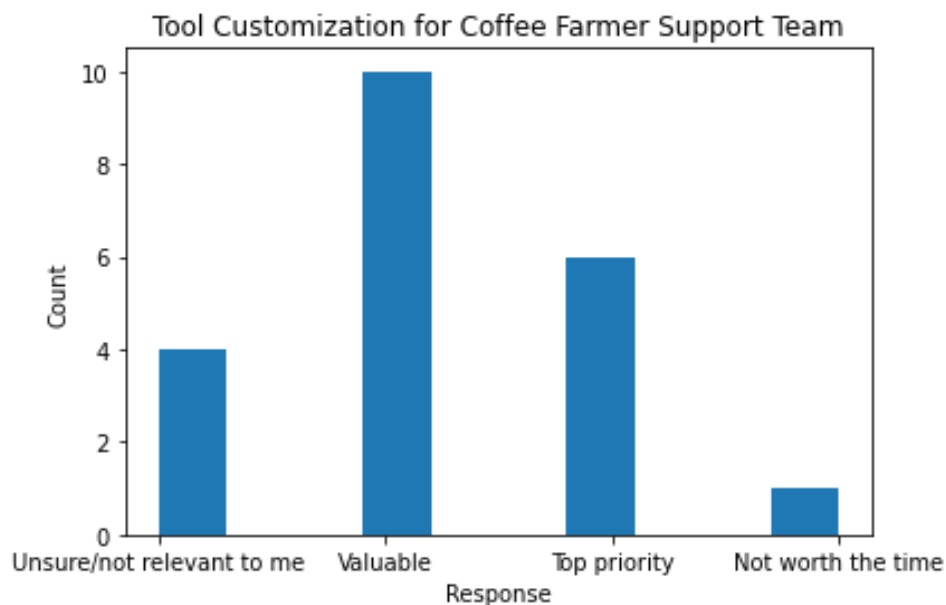


Figure 3. Tool Customization

Figure 3 demonstrates that the most common responses for customizing the support tool are in favor of doing so. Sixteen respondents answered that this option was 'Valuable' or 'Top Priority'. Only four were unsure/thought it was irrelevant to them, and only one respondent viewed this potential implementation as 'Not worth the time'.

Comments

The extra comments section was used by 14 out of the 21 respondents. These responses were analyzed using the vaderSentiment analysis tool. The fourteen comments were used as the inputs, and the outputs are 14 ratings of text analyzing the negative, neutral, positive, and compound sentiment scores. The composite scores are an overall picture of the text and values range from -1 (most extreme negative) to 1 (most extreme positive).

Using the composite scores, most comments are rated positive or near neutral (near zero). Specifically, commenters praised the functionality of the tool as well as their experience with DataKind volunteers. Comments with the lowest Vader scores expressed confusion with using the tool as well as the value of the tool.

Key Takeaways, Recommendations, & Conclusion

Overall, the project has been successful so far. Key stakeholders rated their experience positively and their comments demonstrate their appreciation of the tool and of DataKind's role in the project.

In terms of next steps, stakeholders prefer that DataKind works to customize the tool for greater support for the coffee farmer support team. The website interface for users could be a potential future development, but currently many stakeholders feel unsure about the need for it at the current stage or that it is not worth the time.

To conclude, DataKind's work with the nonprofit organization that supports East African coffee and chocolate farmers has been successful thus far as it has brought immense value to the stakeholders. To continue to provide more value, DataKind should explore ways to customize the tool to be better adapted for the coffee farmer support team.

Appendix

Table 1. Feedback and Vader Scores

	Text	Score
2	All good, nothing to add	{'neg': 0.0, 'neu': 0.58, 'pos': 0.42, 'compound': 0.4404}
3	The volunteer team is extremely responsive	{'neg': 0.0, 'neu': 0.642, 'pos': 0.358, 'compound': 0.4201}
5	I'm so impressed with how much this tool has helped us increase our ability to find the right chocolate farmers to share our training program with. I think it might be useful for other nonprofit organizations working in similar spaces, too!	{'neg': 0.0, 'neu': 0.729, 'pos': 0.271, 'compound': 0.9078}
6	I've learned so much about data science in this experience	{'neg': 0.0, 'neu': 1.0, 'pos': 0.0, 'compound': 0.0}
8	I don't really understand the value of the tool, not sure why we are doing this project	{'neg': 0.1, 'neu': 0.764, 'pos': 0.136, 'compound': 0.1783}
9	I don't get how this tool applies to my role and what it's value is, I think I need training on it	{'neg': 0.0, 'neu': 0.897, 'pos': 0.103, 'compound': 0.34}
10	I wonder if this tool might make for something we could share widely with the international development farmer support community, as they might also find it useful.	{'neg': 0.0, 'neu': 0.755, 'pos': 0.245, 'compound': 0.7783}
11	I'm so happy with the way DataKind has partnered with us! We have been brought along throughout the entire process.	{'neg': 0.0, 'neu': 0.816, 'pos': 0.184, 'compound': 0.6468}
13	It's been clear to me how much our organization is increasing in our capacity to use data for other projects in what we have learned from working with DataKind on this project	{'neg': 0.0, 'neu': 0.923, 'pos': 0.077, 'compound': 0.3818}

	Text	Score
14	DataKind has been excellent to work with	{'neg': 0.0, 'neu': 0.619, 'pos': 0.381, 'compound': 0.5719}
15	Thanks, DataKind!	{'neg': 0.0, 'neu': 0.239, 'pos': 0.761, 'compound': 0.4926}
17	It would be great if we could turn this tool into something that would be publicly available	{'neg': 0.0, 'neu': 0.796, 'pos': 0.204, 'compound': 0.6249}
18	This has overall been a really fantastic learning experience. The volunteers are all brilliant and helpful in teaching me about what data science can and cannot be used in each situations!	{'neg': 0.0, 'neu': 0.722, 'pos': 0.278, 'compound': 0.8953}
20	I think my team needs customized training on this tool	{'neg': 0.0, 'neu': 1.0, 'pos': 0.0, 'compound': 0.0}