

# CMU | Regional Impact

## Executive Summary

### **Community Partner**

Chelsea Blackburn Cohen

### **Student Consulting Team**

Zoe Angell

Karissa Dunkerley

Simon Shin

## **Background**

Carnegie Mellon University Regional Impact is an initiative originating within the Office of the President as a part of President Farnam Jahanian's leadership vision for his current five year term. The initiative's main purpose is to describe and catalog CMU's community engagement efforts through data collection and analysis. It is being spearheaded by Chelsea Blackburn Cohen as the Executive Fellow for Community Engagement at CMU (a two-year fellowship). Cohen's ultimate goals are to connect similar outreach engagements to each other, improve the perception of CMU to the community, maintain and develop community partnerships, and maximize the impact CMU has in Pittsburgh.

## **Project Description**

### **Project Opportunity**

There were three main pain points identified. The first was visibility of the initiative, as the majority of CMU students, faculty, and staff were unaware of the extent of the outreach that CMU does. The second was community engagement data collection. The community partner was having to manually input data. The third pain point was data visualization. There was no way to quantitatively show and capture insights about the impact CMU has in the community. Mitigating these pain points would allow our community partner to quantify how CMU engages in the Pittsburgh community.

### **Project Vision**

The goal of this project is to increase the effectiveness, efficiency, and visibility of CMU Regional Impact. To realize this goal, our team leveraged a multi-pronged approach to address the three pain points. To increase visibility, we created a Community Impact Report template that includes general information about the initiative such as its purpose, why it was created, and how to get involved, as well as featured stories of impact. To aid in data collection, we conducted user testing on the current survey being distributed, identifying changes to more clearly present the survey. For visualization, we implemented an interactive Tableau dashboard to visualize engagement data and provide meaningful insights.

## **Project Outcomes**

### **Community Impact Report Outcomes**

We created two Community Impact Report templates using Mailchimp. The community partner can create, send, and analyze an email campaign, modifying one of the provided templates to include updated information in order to increase visibility.

### **User Testing Outcomes**

We implemented a think-aloud protocol to conduct five user testing interviews on the community partner's survey with IS faculty and staff. This user testing provided researched supported survey recommendations to increase clarity and reduce cognitive load, which the CP has implemented.

### **Tableau Dashboard Outcomes**

We created a Tableau dashboard that provides a way to analyze the impact faculty and staff has on the Pittsburgh area through community engagements. Our community partner can upload new data and edit visualizations with continued support and help from Institutional Research and Analysis to host and maintain the dashboard.

## **Project Deliverables**

Community Impact Report: ideation document, outline document, and documentation.

User Testing: consent form, notes, informal analysis, final analysis, and documentation

Tableau Dashboard: screenshots of the final state, data sources, document of considered visualizations, Python script for data cleaning, ERD for the data relationships, wireframes, packaged workbook for the Tableau dashboard, and documentation.

## **Recommendations**

To build upon the new ability to spread awareness of the Initiative through the community impact report, the team recommends developing a deployment and maintenance plan. For the survey, once the changes have been finalized, the team recommends conducting another round of think-aloud interviews with CMU faculty and staff involved in community engagement to gauge the results of the changes. Additionally, we recommend that the dashboard be maintained and updated once new data is collected, facilitating a more comprehensive view of the community outreach CMU is doing.

## **Student Consulting Team**

**Zoe Angell** is a junior in Information Systems (IS) with a minor in Information Security, Privacy, and Policy. She served as the project manager and implemented the community impact report and survey user testing solutions.

**Karissa Dunkerley** was the editor and a part of design support, focused on the implementation of the Tableau Dashboard solution. She is a third-year IS student with a concentration in Data Analytics and an additional major in French and Francophone studies.

**Simon Shin** is a junior in IS with a minor in Computer Science. He mainly helped with Tableau Dashboard implementation and note taking.