Pennsylvania Resources Council

Executive Summary

Community Partner
Sarah Alessio Shea
Student Consulting Team
Neha Chintamaneni
Cecilia Mendoza
Govind Menon

Background

Pennsylvania Resources Council (PRC) is Pennsylvania's oldest grassroots environmental organization. Since 1939, they have worked to protect the Commonwealth's resources for future generations through environmental education, recycling, waste diversion programs, anti-litter campaigns, and much more.

Project Description

Project Opportunity

PRC was eager to partner with our team to find a way to better showcase the positive impact created by their programs. Their process of data collection and aggregation was siloed by the program, resulting in limited standardization across the entire organization. They hoped to eventually reach a state where they could quickly generate impact summary metrics for each program for future grant reporting.

Project Vision

Our team helped PRC standardize their data and capture summary statistics through individual Excel templates for each program.

Project Outcomes

Outcomes from this project are many, in the vein of people, process, and technology outcomes. The most noteworthy was the problem identification process at the beginning with PRC, where we determined that standardizing data was needed for calculating summary statistics for each of their programs and a prerequisite for all future automation work they hoped to pursue. Following the identification of the problem, we then created templates that allow for easy data collection and aggregation. These templates reduce grant reporting time spend by almost 95% and sustained capacity has been demonstrated by employees now being able to seamlessly calculate summary statistics and display the positive impact left by their programs.

Project Deliverables

The final deliverables presented to PRC consist of Excel templates for each of PRC's nine programs (E-waste, Glass, Education/In-school, Workshops, Hard to Recycle, Household

Hazardous Waste, Zero Waste, Rain Gardens, and StreamSmart Audit programs), summary statistics Excel template across all programs, template user guide, Excel template documentation, data visualization template, training materials, and data quality and management guidelines. Nine program-specific templates have been provided based on 2021 program data, which include detailed summary statistics. The summary statistics Excel template shows high-level summary statistics for each program, in addition to summary statistics across all programs. The data description template breaks down each of PRC's program excel templates by outlining program descriptions, data field descriptions, data types, example data inputs, and additional notes for each program's template. The data visualization template features three data visualizations for 2021, meant to be used as examples of showcasing PRC's impact on the environment. In terms of documentation and training to encourage sustainability of the solution, an Excel template user guide, template documentation, and video training materials include information on includes information on the data description template, summary statistics template, Excel formulas used to calculate program-specific and across-program summary statistics, and additional resources such as data quality and management guidelines.

Recommendations

Our team has a few recommendations for PRC and for future IS teams. The key recommendations for PRC are related to data collection, automation, specific templates, and data visualization. For future teams, we suggest that for future implementations they assist PRC with automation, real-time data visualization, website update, and marketing strategy.

Student Consulting Team

Neha Chintamaneni: Neha was the Client Relations Management Lead. She is a senior majoring in Information Systems. She will be working full-time at McKinsey as a Digital Analyst specializing in data engineering.

Cecilia Mendoza: Cecilia Mendoza served as the Project Manager. She is a junior with a primary major in Information Systems and a minor in Global Systems and Management. During the summer, she will be participating in the Technology Consulting in Global Community Program.

Govind Menon: Govind Menon served as Quality Assurance Manager. He is a senior majoring in Information Systems with minors in Human-Computer Interaction and Business Administration. Govind will be working full time at goPuff as a Product Manager.