

YWCA Greater Pittsburgh

Executive Summary

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Background

YWCA Greater Pittsburgh is a branch of a long-standing nonprofit organization with over 150 years of history in the Pittsburgh region. The organization's mission is to eliminate racism and empower women by providing programs and services that foster economic and social equity. The Opportunity Pathways Program, a newly launched initiative, offers educational and career development opportunities to individuals facing systemic barriers, particularly women and girls of color. Currently, the program relies on manual processes and basic digital tools for data collection and communication, primarily using Excel spreadsheets and paper surveys.

Project Description

Project Opportunity

YWCA's Opportunity Pathways Program faced significant challenges with manual data entry and limited ability to track student progress and program outcomes. The newly launched PATHmakers program required efficient data management to demonstrate positive outcomes to national headquarters. The organization's heavy reliance on paper-based systems and basic spreadsheets limited their capacity to analyze program effectiveness and generate impact metrics.

Project Vision

Our vision was to provide YWCA Greater Pittsburgh with an internal-facing platform that automates data entry and analysis, allowing staff to focus on program delivery rather than administrative tasks. After evaluating options, the team helped YWCA implement Airtable as a comprehensive database management solution that stores student demographics, tracks student progress, automates surveys, streamlines attendance taking, and generates program impact metrics.

Project Outcomes

The project delivered three key outcomes:

Schema Reorganization: Transformed disconnected Excel spreadsheets into a structured database with proper relationships between students, programs, and cohorts.

Automated Data Entry/Updating: Implemented interfaces for student profiles, survey responses, and attendance tracking, eliminating manual data entry. Survey responses now automatically link to students and cohorts, while attendance tracking features pre-filled sheets with toggleable status.

Dynamic Data Analysis/Visualization: Created interactive dashboards showing demographics, academic performance, attendance trends, program engagement data, and survey results. The solution includes automated reports for program evaluation and funding requests.

Project Deliverables

Airtable Database: Fully configured bases with all tables and interfaces, accessible via client account pathways@ywcaphgh.org

User Guide: Comprehensive step-by-step manual with videos, workflows, and instructions for system management

Training: Demo sessions and hands-on training for staff members

Recommendations

Ensure Data Integrity: Use only the provided interfaces for data entry to maintain consistency and avoid errors in auto-calculated fields.

Ongoing User Training: Maintain continuous training programs and update documentation as the system evolves.

Follow Defined Workflows: Strictly adhere to established workflows in the user guide to ensure automation success.

Student Consulting Team

Xinyi Chen is a senior student in Information Systems with a minor in Software Engineering. She will join Amazon as a Software Development Engineer after graduation.

Allison Feldman is a senior student in Information Systems with an additional major in Human Computer Interaction. She will Join M Science as a Front-End Software Engineer after graduation.

Jianing Shi is a junior student in Information Systems with a minor in Game Design. She will be interning at Confirmed LLC this summer and is looking forward to a career in software development.