# EVENT SUCCESS: DATA-DRIVEN DASHBOARDS FOR GROWTH

### PROBLEM STATEMENT

### **©OBJECTIVE:**

UNLOCKING THE POWER OF EVENTS: TRANSFORMING MARKETING DATA INTO GROWTH STRATEGIES

### KEY CHALLENGES:

- FRAGMENTED DATA: SCATTERED ACROSS MULTIPLE SOURCES.
- Manual Processes: Inefficient and PRONE TO ERRORS.
- LIMITED INSIGHTS: DIFFICULTY IDENTIFYING SUCCESSFUL STRATEGIES.

# PROJECT DELIVERABLES



### AUTOMATED USER INTERFACE:

- STREAMLIT UI: ALLOWS THE CLIENT TO UPLOAD FILES DIRECTLY.
- AUTOMATED PROCESSING: STREAMLINES DATA CLEANING, VALIDATION, AND CONSOLIDATION, REDUCING MANUAL EFFORT AND IMPROVING EFFICIENCY.



#### INTEGRATED DATASET:

 MERGE DATA FROM MULTIPLE DATA SOURCES INTO A SINGLE UNIFIED DATASET.

# PROJECT DELIVERABLES



### INTERACTIVE DASHBOARDS TO ADDRESS KEY BUSINESS QUESTIONS:

#### **KEY QUESTIONS:**

- 1. EVENT SUCCESS BY SCHOOL
- 2. OUTREACH ENGAGEMENT IMPACT
- 3. GROWTH OFFICER CONTRIBUTION
- 4. FOLLOW-UP COMPLIANCE



#### ACTIONABLE RECOMMENDATIONS:

INSIGHTS TO IMPROVE FUTURE EVENT PLANNING AND MARKETING.

### THE DATA PUZZLE

WE WERE PROVIDED WITH FOUR FILES, EACH WITH UNIQUE INFORMATION.

SUBMITTED APPLICATIONS

INCLUDES ALL SUBMITTED APPLICATIONS, REGARDLESS OF STATUS. APPROVED APPLICATIONS

LISTS
APPLICATIONS
THAT MET ALL
REQUIREMENTS.

MEMBER OUTREACH

TRACKS ALL
MEMBERS
CONTACTS BY
GROWTH OFFICERS.

EVENT DEBRIEF OR SPONSORSHIP

DOCUMENTS ALL EVENTS PLANNED AND EXECUTED BY THE GROWTH TEAM.

### THE DATA PUZZLE



#### **CHALLENGES:**

- MISSING AND MISMATCHED DATA FIELDS.
- DATA INCONSISTENCIES BETWEEN DATA SOURCES.
- NO DIRECT METHOD TO LINK OR INTEGRATE DATA SEEMLESSLY



#### **LEARNINGS:**

- IMPORTANCE OF AUTOMATED WORKFLOWS FOR CONSISTENT RESULTS.
- Value of visualizations for driving actionable insights.
- INTELLIGENT LOGIC IS NEEDED TO EFFECTIVELY OVERCOME THESE CHALLENGES.



#### **SOLUTION:**

- EXTENSIVE ANALYSIS AND PREPROCESSING TO MATCH AND MERGE DATASETS.
- Created a structured database ready for automation.

# KEY FEATURE TO TRACK



### THE FOLLOWING ARE THE KEY FEATURES WE DECIDED TO FOCUS ON:

- SCHOOL AFFILIATIONS
- Events
- Growth Officers
- Event Dates
- Customer names
- Outreach Dates (1st and 2nd)
- Occupation

### DATA PIPELINE AND AUTOMATION



#### BUILT A PIPELINE TO AUTOMATE:

- DATA CLEANING
- INTEGRATION OF THE FOUR DATA SOURCES



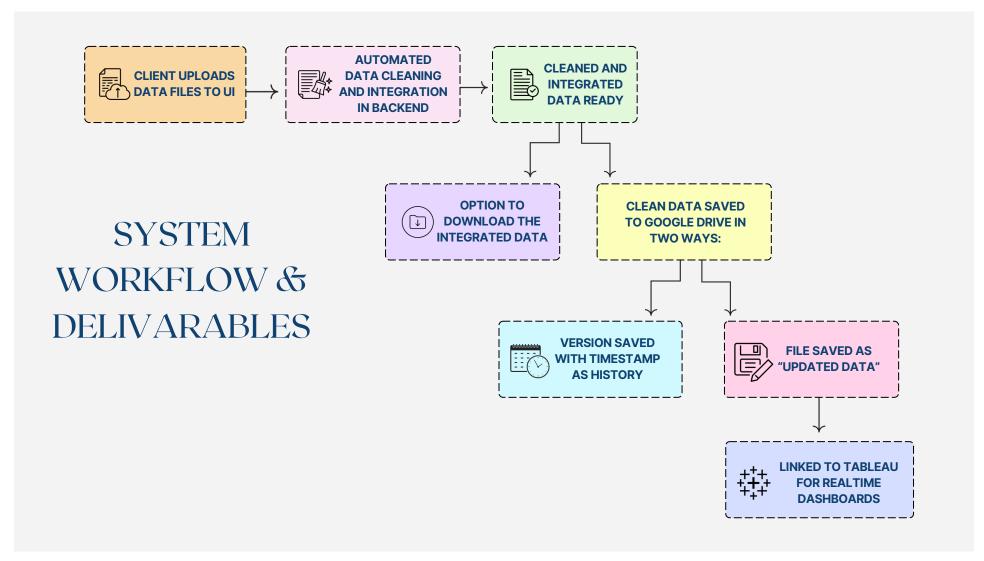
#### **TOOLS USED:**

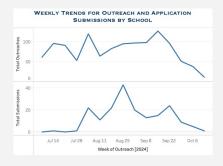
- INITIALLY, WE USED SQL, PYTHON, AND EXCEL TO ANALYZE THE DATA AND IDENTIFY THE BEST METHOD FOR INTEGRATION.
- AFTER EVALUATING ALL OPTIONS, WE CHOSE <u>PYTHON</u> AS THE PRIMARY TOOL FOR AUTOMATING THE DATA PIPELINE.



#### **OUTPUT:**

A COMBINED, CLEAN DATASET FEEDING DIRECTLY INTO THE DASHBOARD.









#### Events by School

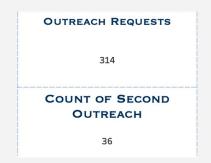


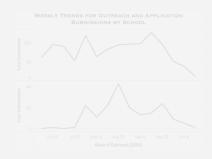












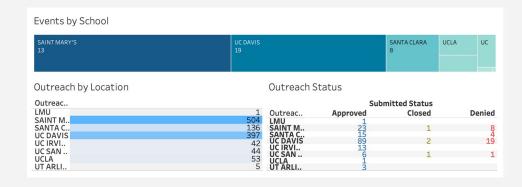












# CONCLUSION

#### **KEY**

#### **ACHIEVEMENTS:**

- DEVELOPED A STREAMLINED APPROACH TO TRACKING EVENT SUCCESS WITH AN INTUITIVE, USER-FRIENDLY UI ACCESSIBLE TO ALL USERS.
- ENABLED REAL-TIME DECISION-MAKING THROUGH DYNAMIC DASHBOARDS AND HIGHLIGHTED THE IMPACT OF OUTREACH EFFORTS ON UCU'S GROWTH.

# PROJECT OUTCOMES

STREAMLINED DATA PROCESSING:
AUTOMATED WORKFLOWS SIGNIFICANTLY
REDUCED MANUAL EFFORT AND ERRORS.

DYNAMIC DASHBOARDS: REAL-TIME INSIGHTS ENABLE INFORMED DECISION-MAKING AND PERFORMANCE TRACKING.

INTEGRATED DATASETS: Consolidated four fragmented data sources into a unified, cohesive dataset.

ENHANCED OUTREACH ANALYSIS: IMPROVED UNDERSTANDING OF REPEATED OUTREACH EFFORTS AND CUSTOMER ENGAGEMENT.

THIS PROJECT'S OUTCOMES PROVIDES UCU WITH A SCALABLE, INTUITIVE APPROACH TO MONITOR EVENT SUCCESS AND DRIVE ORGANIZATIONAL GROWTH EFFECTIVELY.

### RECOMMENDATIONS



- OUTREACH DATE SHOULD BE REQUIRED
  - Email should be required
  - Growth Officer should be standardized across all the files
  - Event Name, Event Type, On which date they attended the event should be included and required on Outreach File
  - School should be standardized across all the files

### FUTURE WORK



- CUSTOMER RETENTION (POST-EVENT ENGAGEMENT ANALYSIS)
  - PREDICTIVE ANALYTICS
  - ROI AND ATTRIBUTION ANALYSIS
  - GAMIFICATION METRICS
  - GEOSPATIAL COST ANALYSIS
  - EVENT CUSTOMIZATION SUGGESTIONS

# THANK YOU