Dataset Stewarship Documentation

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Cyclistic bike-share Analysis Project:

Introduction

This project aims to analyze how casual riders and annual members use Cyclistic's bike-sharing services differently. The insights from this analysis will be used to design a marketing strategy to convert casual riders into annual members.

Business Task

- **Objective**: To analyze the behavioral patterns of casual riders and annual members in using Cyclistic's bike-sharing services.
- **Problem Statement**: How do annual members and casual riders use Cyclistic bikes differently?
- **End Goal**: To provide actionable recommendations for designing a marketing strategy that encourages casual riders to convert into annual members.

Key Questions Guiding the Marketing Program

- How do annual members and casual riders use Cyclistic bikes differently?
- Why would casual riders buy Cyclistic annual memberships?
- How can digital media be employed to influence casual riders to become annual members?

Note: The focus of this project is to answer the first question.

Data Sources

- Cyclistic's historical trip data

- enriched datasets

Metrics and KPIs

- **Conversion Rate**: Percentage of casual riders converting to annual memberships post-campaign.
- **Average Ride Duration**: For both casual riders and annual members.
- **Frequency of Rides**: Average number of rides per user type (casual vs. member) in a given time frame.
- **Peak Usage Time**: Days and times when most rides are taken, broken down by user type.

Key Stakeholders

- **Lily Moreno**: Director of Marketing
- **Cyclistic Marketing Analytics Team**: Data Analysts
- **Cyclistic Executive Team**: Decision-makers for approving the marketing strategy

Deliverables

- A clear statement of the business task
- A detailed description of all data sources used
- Extensive documentation of data cleaning or manipulation
- Summary of the analysis
- Professional data visualizations supporting key findings
- Top three recommendations based on the analysis

Timeline

- Data Preparation: 2 days
- Data Analysis: 2 days
- Data Visualization and Reporting: 2 days

Tools to be Used

- Data Preparation: SQL,
- Data Analysis: SQL, R
- Data Visualization: R library, Tableau
- Reporting: Documentation, Presentation