**Cyclistic Case Study**

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**1. ASK**

**1.1 ABOUT THE COMPANY**

Cyclistic is a successful bike-share offering program. Since its launch in 2016, the program has grown exponentially to a fleet of 5,824 bicycles that are geotracked and locked into a network of 692 stations across Chicago. Cyclistic has made bike-sharing more inclusive by offering assistive bike options.

**1.2 BUSINESS TASK**

Cyclistic offers annual memberships for regular customers and single-ride or full-day passes for casual riders. Lily Moreno, the director of marketing, has relied on building general awareness and appealing to broad customer segments. Cyclistic finance analysts have recently concluded that the annual members are more profitable than casual riders. Hence, the marketing analyst team will be analyzing the trends in the historical bike trip data from the last 12 months to better understand

* How do annual members and casual riders use Cyclistic bikes differently?
* Why casual riders would buy a membership?
* How digital media could affect their strategy?

**1.3 SCOPE**

The scope of this case study is to answer the first question from the above list as assigned by Lily Moreno.

**1.4 KEY STAKEHOLDERS**

* **Lily Moreno,** the director of marketing.
* Cyclistic marketing analytics team.
* Cyclistic executive team.

**2. PREPARE**

**2.1 DATA SOURCE AND LICENSE**

* The [*dataset*](https://divvy-tripdata.s3.amazonaws.com/index.html) used in this analysis is Cyclistic’s historical bike trip data.
* This dataset has been made available by Motivate International Inc. under this [*license*](https://ride.divvybikes.com/data-license-agreement).

**2.2 DATA CREDIBILITY**

**2.2.1 RELIABILITY:** This dataset is considered to be reliable as the data is provided by trusted stakeholders, and assured to answer the business questions.

**2.2.2 ORIGINALITY:** Since Cyclistic is a fictional company the dataset is not original to the company. The dataset is made available by Motivate International Inc. under this [*license*](https://ride.divvybikes.com/data-license-agreement).

**2.2.3 COMPREHENSIVE:** The data is collected from every rider regardless of the status of the customer(member/casual). Hence, the sample represents the population accurately.

**2.2.4 CURRENT:** Lily Moreno has asked to analyze the previous 12month historical trip data of Cyclistic. This case study was conducted in July 2022, and the data used dates from June 2021 to May 2022. The data for June 2022 was not available yet. Therefore the data is considered current.

**2.2.5 CITED:** Lyft Bikes and Scooters, LLC (“Bikeshare”) operates the City of Chicago’s (“City”) Divvy bicycle-sharing service. Bikeshare and the City are committed to supporting bicycling as an alternative transportation option. As part of that commitment, the City permits Bikeshare to make certain Divvy system data owned by the City (“Data”) available to the public, subject to the terms and conditions of this License Agreement (“Agreement”).

**2.3 IMPORTING DATA**

The datasets are downloaded from [here](https://divvy-tripdata.s3.amazonaws.com/index.html). The downloaded datasets are imported into the MS SQL Server database using the MS SQL Server Import and Export Wizard into tables for further exploration and analysis.

**2.4 DATA EXPLORATION**

The imported datasets can be queried now to study and familiarize the individual rows and columns. The datasets are large, which will help with the detailed analysis report. Upon further analysis, it is evident that the columns and their data types match every table imported. Some rows have null values that need to be cleaned.

**3.0 PROCESS**

**3.1 MERGING THE TABLES**

Since the columns and the data types of all the tables are the same, for ease of analysis, these tables are merged into a single table. Queries used for processing the data can be found **HERE.**

**3.2 CLEANING**