Cyclist Case Study

# About Cyclist

A bike-share program that features more than 5,800 bicycles and 600 docking stations. Cyclistic sets itself apart by also offering reclining bikes, hand tricycles, and cargo bikes, making bike-share more inclusive to people with disabilities and riders who can’t use a standard two-wheeled bike.

The bikes can be unlocked from one station and returned to any other station in the system anytime.

Until now, Cyclistic’s marketing strategy relied on building general awareness and appealing to broad consumer segments. One approach that helped make these things possible was the flexibility of its pricing plans: single-ride passes, full-day passes, and annual memberships. Customers who purchase single-ride or full-day passes are referred to as casual riders. Customers who purchase annual memberships are Cyclistic members.

# Business Problem

Cyclistic’s finance analysts have concluded that annual members are much more profitable than casual riders. Although the pricing flexibility helps Cyclistic attract more customers, CEO believes that maximizing the number of annual members will be key to future growth. Rather than creating a marketing campaign that targets all-new customers, he believes there is a very good chance to convert casual riders into members. He notes that casual riders are already aware of the Cyclistic program and have chosen Cyclistic for their mobility needs.

# Business Task

* Gain some insights from the dataset
* How do annual members and casual riders use Cyclistic bikes differently?

# About the dataset

* The data is from April 2020 to March 2021
* Each month’s data is recorded in a separated CSV file

# Methodology

* Transferred all the CSV files to MS SQL database
* Created a new table which contained all the separate tables merged into one
* Added ride length and Weekday column
* Filtered incorrect data (ride length negative)
* Performed EDA using SQL and Python
* Visualized the data using Power BI (https://app.powerbi.com/groups/me/reports/76077117-57f9-493f-9257-718b3203f5d5?ctid=789a7d0d-b817-4cbd-aecb-fbc2a7017168&pbi\_source=linkShare)

# Findings

* There were a total of 3.49 Million valid records
* 2.06 Million were Member riders and 1.43 Million Casual members
* Average ride length was 27.89 Minutes
* August was the month with most rides
* Saturday had the most number of rides but the average ride length was greatest on Sunday
* Casual members had significantly greater ride length than annual members as they are likely to use the bikes for recreation
* Casual riders use the service mostly on weekends
* The most popular station was Streeter Dr & Grand Avenue