Google Data Analytics : Case Study : How Does A Bike –Share Navigate Speedy Success?(How do annual member and casual riders use Cyclistic bikes differently)

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Updated on :01/03/2023

Cyclistic
BIKE-SHARE

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Overview

In 2016, Cyclitic launched a successful bike-share offering. Since then, the program has grown to a fleet of 5,824 bicycles that are geo-tracked and locked into a network of 692 stations across Chicago. The bikes can be unlocked from one station and returned to any other station in the system anytime.

Cyclitic 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 pricing plans offered are: Single-ride passes, full-day passes, and annual memberships, wherein single –ride or full-day ride passes are referred to as casual riders and the ones with annual memberships are Cylistic members .

Objective

- Compare how different are annual riders to casual riders

- How to market a strategy to convince the casual riders to move to annual membership

- Data Source : It a indigenous data, accessible through :-

- https://divvy-tripdata.s3.amazonaws.com/index.html

- The data has been made available by Motivate International Inc. under the license :- https://www.divvybikes.com/data-license-agreement

- Data under analysis is for a period of one year ranging form February 2022 up till January 2023.

- Tools used for Analysis : Microsoft Excel, RStudio and Microsoft PowerPoint.

Data Cleaning & Manipulation

- The data was cleaned and manipulated in Microsoft Excel.

- Formatting changes were made to form constituency within the files,.

- Two new columns were added in the each of the 12 excel file for determining ride length and the day of the week.

- Further analysis was conducted based on the Rscript provided within the worksheet using the csv files form the original data source with Rstudio.

- The 12 dataset files were combined into a single file with 9 variable observations with count of :- 5754248.
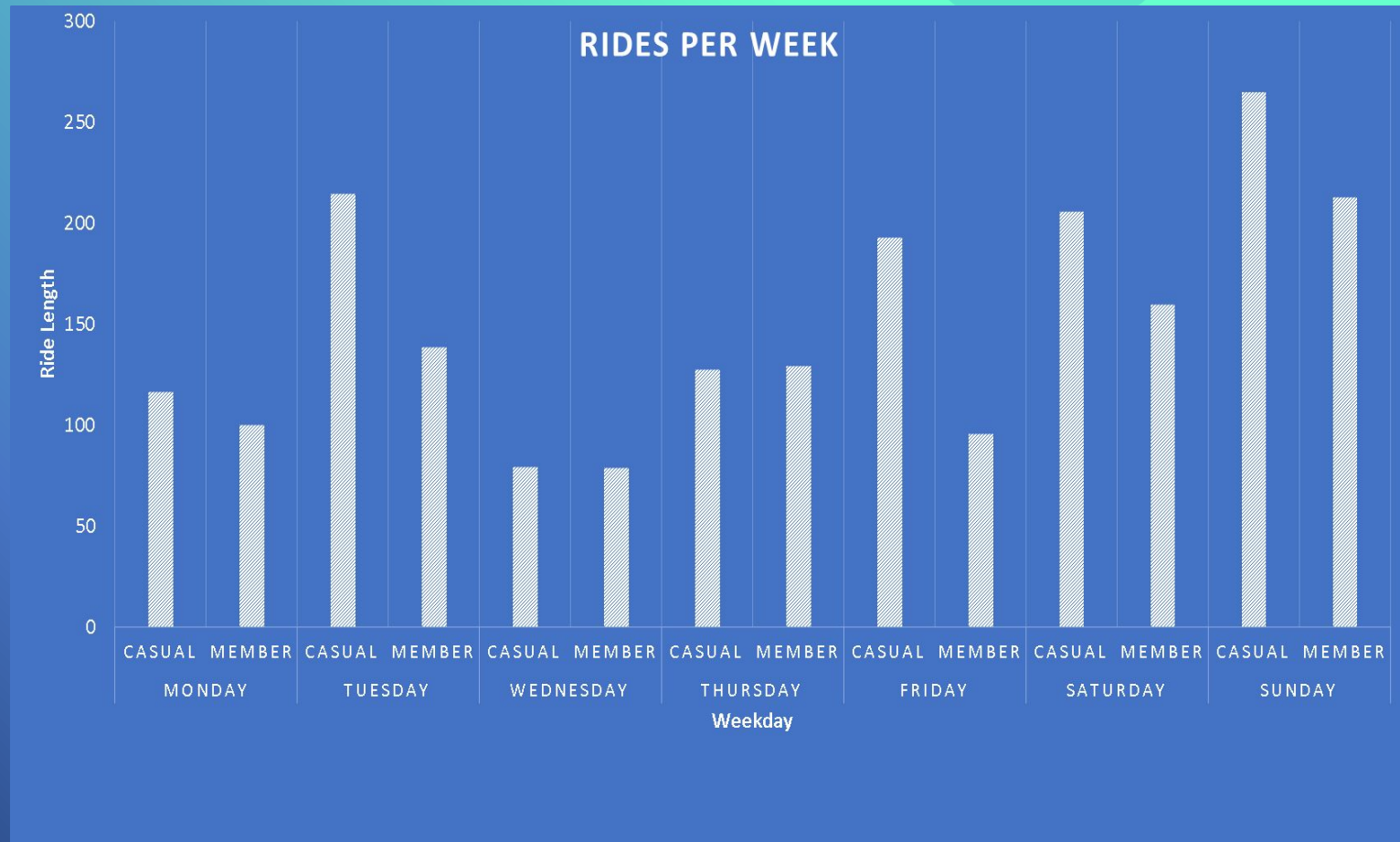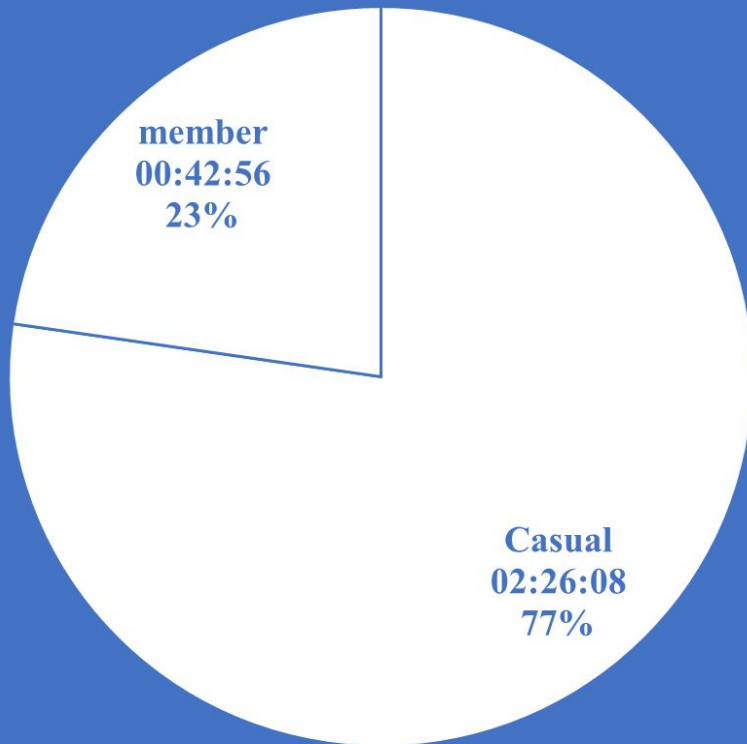
Total Rides taken in a year

RIDES IN EACH MONTH OF A GIVEN YEAR

No. of rides

Month	No. of rides
FEB-22	115609
MAR-22	284042
APR-22	371249
MAY-22	634858
JUN-22	769204
JUL-22	823488
AUG-22	785932
SEP-22	701339
OCT-22	558685
NOV-22	337735
DEC-22	181806
JAN-23	190301

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Random sample :Ride taken in a week in Jan 2023

Observations

- The number of casual as well as member riders through out the week is similar.

- The usage of casual riders increases during the weekends :- Saturday and Sunday.

- The dataset at hand has its limitations namely missing values, black spaces , which the through analysis compromised

- The frequency of rides decreases in the month of December, January and February because of winters.

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Recommendations

- A new annual pass exclusive to week should be issued to attract the casual riders.

- If added benefits such as exclusive access to the ride can attract casual riders.

- A reward system for the higher number of kilometers covered with Cyclistic, will thus help grab attention.

Any Questions

Thank you