CYCLISTIC CUSTOMERS: CASUAL VS. MEMBER

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Cyclistic Case Study Google Data Analytics Capstone

PREFACE

This case study was performed as the capstone for the Google Data Analytics Professional Certificate.

This document is a record of the data analysis process. The analysis follows Kevin Hartman's <u>Divvy case study</u> in its approach to wrangling this dataset and some of the basic exploratory data analysis.

The data has been made available by Motivate International Inc. under this license.

AGENDA

Introduction

Problem/Question

The Data

What I found

Recommendations

INTRODUCTION

Cyclistic's strategy reaching new customers until now has focused on raising consumer awareness and establishing Cyclistic as a major bike-sharing company in Chicago.

That strategy has worked: the data shows that Cyclistic customers have taken over 4.5 million unique trips on Cyclistic bicycles.

PROBLEM

That strategy now needs to change.

THE PROJECT

- Lily Moreno, director of marketing, has chartered a project to change Cyclistic's strategy
- A strategy of converting casual riders into members is now being explored.
- The data analysis I will share with you today is the first step towards developing that strategy.

MY GOAL TODAY

• How do annual members and casual riders use Cyclistic bikes differently?

THE DATA

- To answer this question, I looked at Cyclistic's logs of every trip taken by our customers from September 2021-August 2022.
- The dataset comes from internally collected data, so the quality and veracity are very high.
- Additionally, because of consistent internal standards, the data was consistent and easier to harmonize across months.
- Considering of the size of the dataset, I decided to perform my cleaning and analysis in R.

THE BASICS

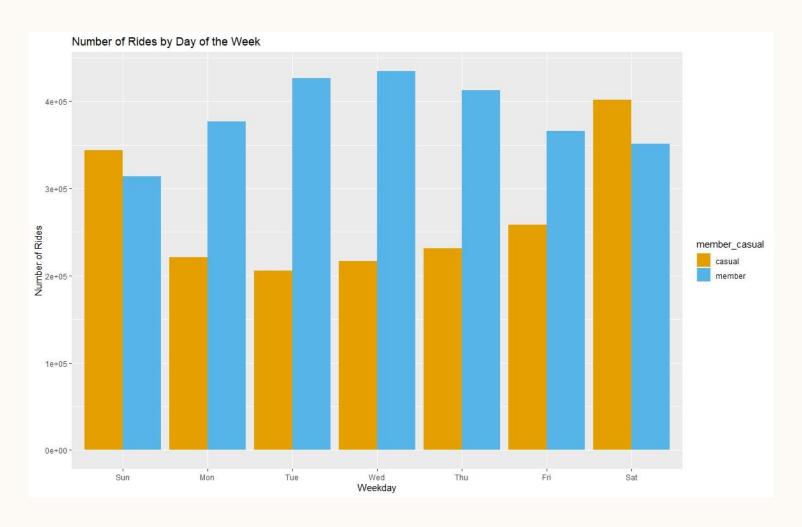
Number of Rides

| | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---------|---------|---------|-----------|----------|---------|----------|
| Casual | 344,001 | 221,074 | 205,520 | 216,900 | 230,986 | 257,978 | 401,490 |
| Member | 313,832 | 376,560 | 426,887 | 434,711 | 412,980 | 365,703 | 351,425 |

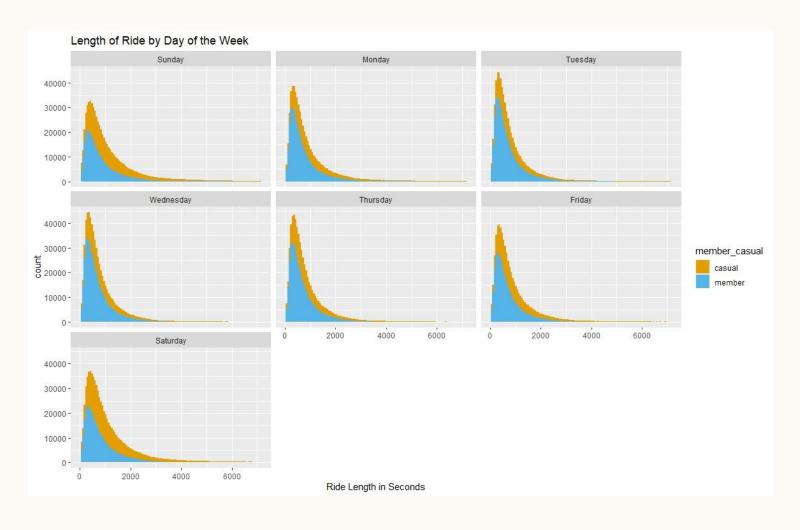
Average Length of Rides (Minutes)

| | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|----------|----------|----------|-----------|----------|----------|----------|
| Casual | 29.72255 | 26.77665 | 22.57347 | 22.08239 | 22.77363 | 24.03008 | 28.38835 |
| Member | 14.13425 | 12.15973 | 11.81273 | 11.92040 | 12.04234 | 12.26818 | 14.08712 |

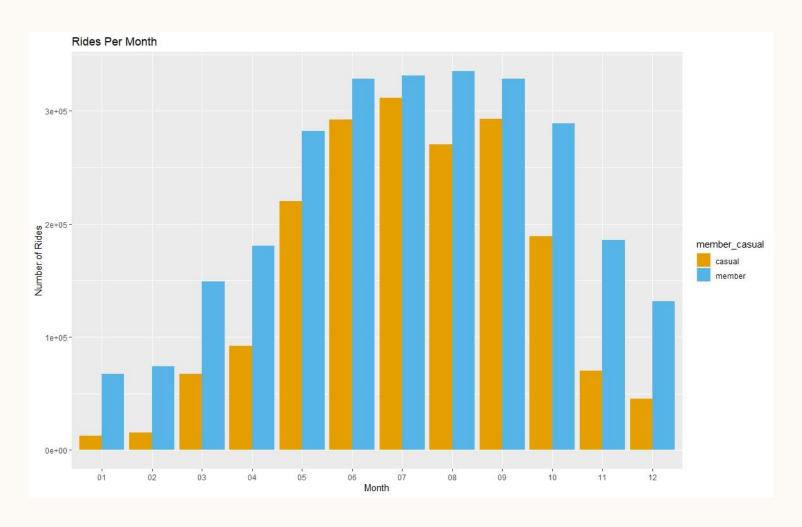
RIDE BY WEEKDAY



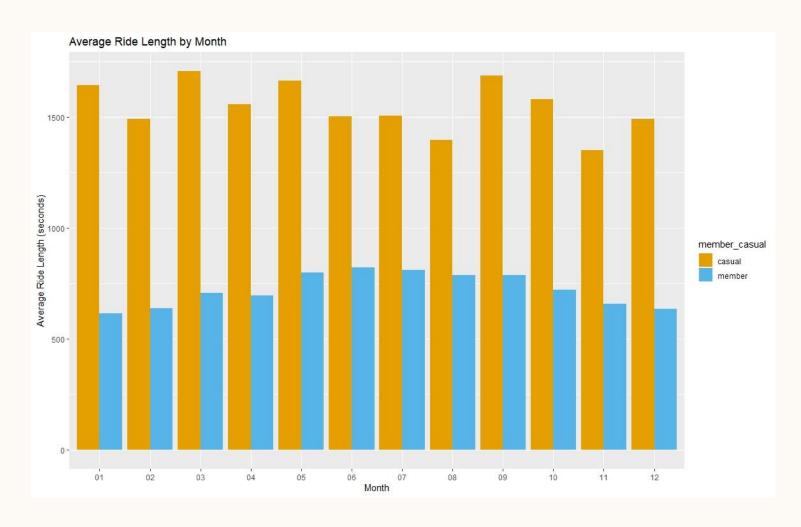
RIDE LENGTH: LONG TAILS



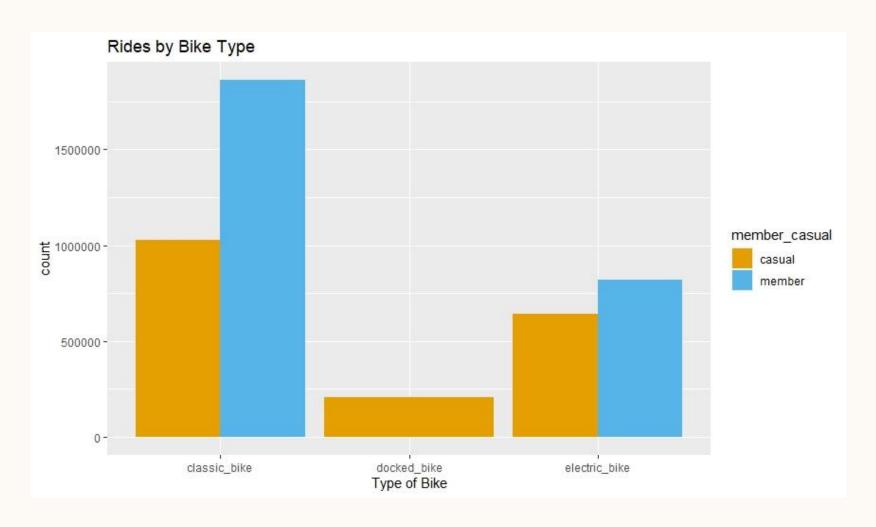
RIDES BY MONTH



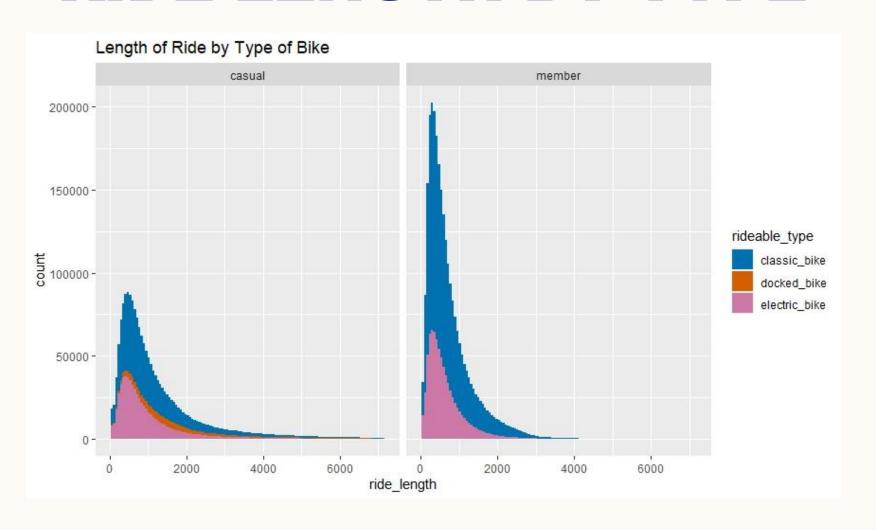
RIDE LENGTH BY MONTH



BICYCLE TYPE PREFERENCE



RIDE LENGTH BY TYPE



MY RECOMMENDATIONS



LAST-MILE TRANSPORTATION

- Highlight value of shorter trips to casual riders.
- Connect day-to-day tasks with cycling and Cyclistic.



FLEXIBILITY = ROI FOR CUSTOMERS

- Number of rides decreases for everyone in winter. Further research needed to explore if this is a factor specific to casual riders.
- Explore flexible options that allow customers to join and get the most out of their membership.



FOCUS ON FREQUENCY

- Selling our customers on shorter, more frequent trips is good for their budget, health, and the environment.
- This could be a way to encourage casual riders to more frequent, shorter rides on class bikes as well.

THANK YOU

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