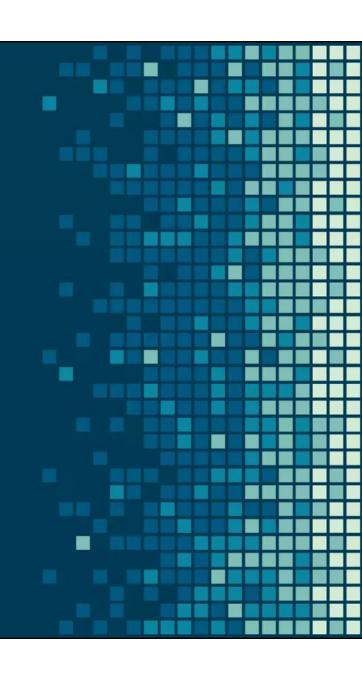
CYCLISTIC BIKE-SHARE ANALYSIS (CASE STUDY)

Uvais M 31/12/2021



CASE STUDY SNAPSHOT

Study scenario

Imagine you are the **junior data analyst** working in the **marketing analyst team** at **Cyclistic** a bike-share company. Your team wants to understand how casual riders and annual members use Cyclistic bikes differently to design a new marketing strategy to convert casual riders into annual members.

Business problem

How **annual members** and **casual riders** differ, why casual riders would buy a membership, and how digital media could affect their marketing tactics.

About the company

In 2016, **Cyclistic** launched a successful bikeshare offering. Since then, the program has grown to a fleet of **5,824** bicycles that are geotracked and locked into a network of **692** stations across Chicago.

About the data

You will use Cyclistic's historical trip data to analyze and identify trends. This is public data that you can use to explore how different customer types are using Cyclistic bikes.

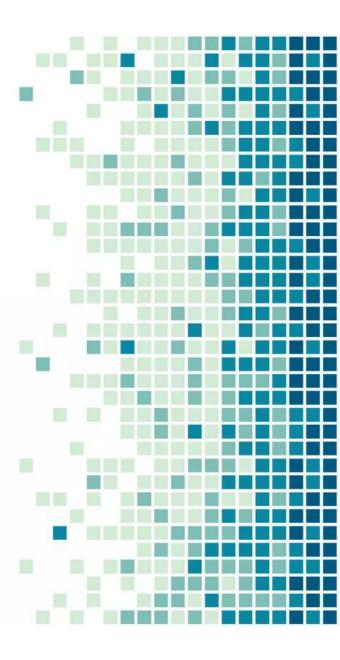
WANT TO ANALYZE YOUR OWN? Download the previous 12 months of Cyclistic trip data here.

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



1. CASE STUDY SCENARIO

You are a junior data analyst working in the marketing analyst.....



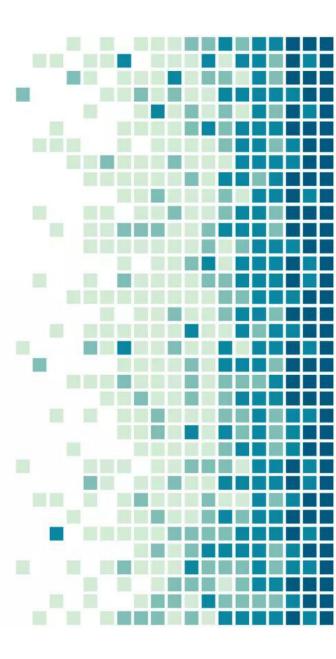
CASE STUDY SCENARIO

You are a junior data analyst working in the marketing analyst team at Cyclistic, a bike-share company in Chicago. The director of marketing believes the company's future success depends on maximizing the number of annual memberships. Therefore, your team wants to understand how casual riders and annual members use Cyclistic bikes differently. From these insights, your team will design a new marketing strategy to convert casual riders into annual members. But first, Cyclistic executives must approve your recommendations, so they must be backed up with compelling data insights and professional data visualizations.



2. ABOUT THE COMPANY

Cyclistic, a fictional bike-share company based in Chicago.....



ABOUT THE COMPANY

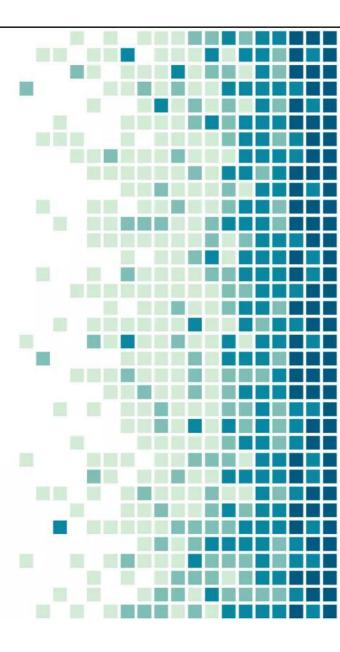
Cyclistic, a fictional bike-share company based in Chicago launched a successful bike-share offering. The bikes can be unlocked from one station and returned to any other station in the system anytime.

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.



3. BUSINESS PROBLEM

How annual members and casual riders differ,....



BUSINESS PROBLEM



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

- 2. Why would casual riders buy Cyclistic annual memberships?
- 3. How can Cyclistic use digital media to influence casual riders to become members

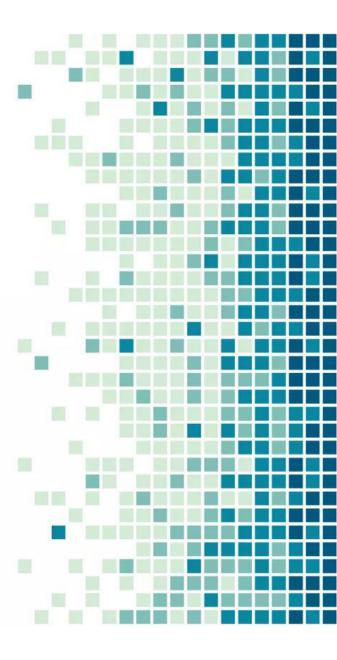


DATA ORGANIZATION AND VALIDATION

- Cyclistic's historical trip data of last 12 months was used to analyze and identify various trends. Data was stored in a separate directory and copies of every dataset was made, if needed to come back to it.
- There was no bias or credibility in data provided as it was internal data. Integrity too wasn't a problem as it was first party data.
- Security, privacy, accessibility wasn't a problem as the dataset is public and available for everyone to use.
- Software used to do the entire data analysis is "R Studio"

4. CASE STUDY ANALYSIS

Lets explore what the data tell us



95,063,062

minutes of ride!!!

Whoa! That's a big number



CASUAL RIDERS

MEMBER RIDERS

total 1,362,954

total 2,167,603

47min average ride time

15min average ride time



3,530,557 users

That's a lot of riders

27 minutes

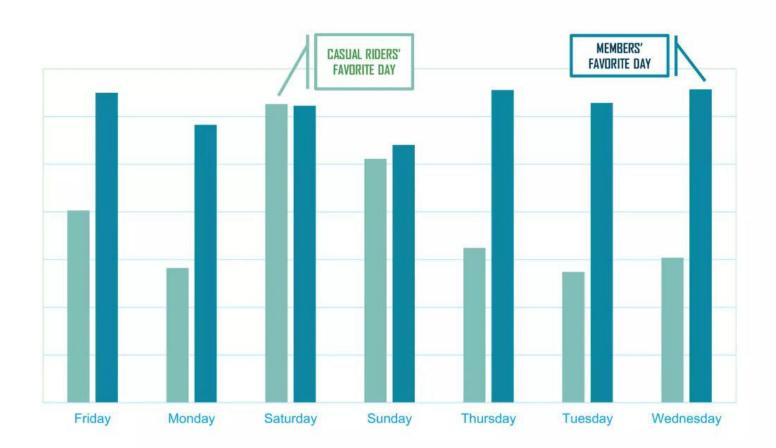
of average rides



Is the most popular month



BEST DAY TO RIDE A BICYCLE



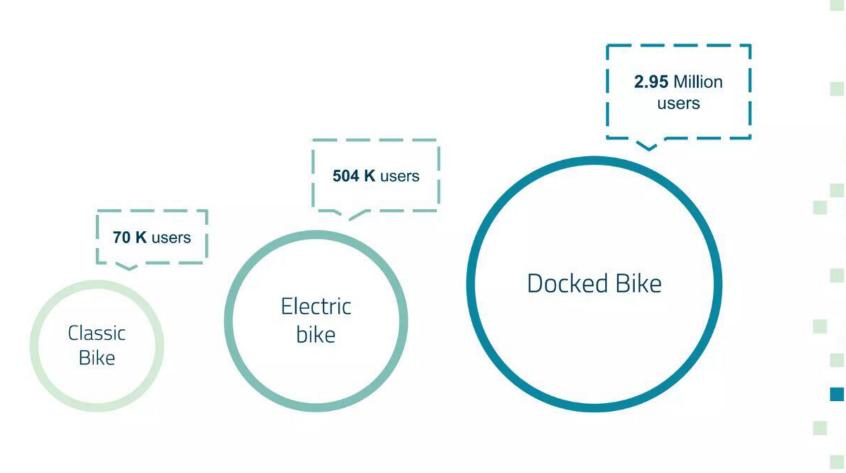


WHEN IS RUSH HOUR IN CHICAGO?



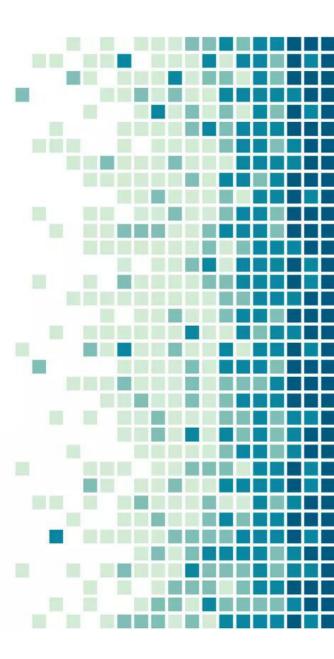


USERS' PREFERENCE



5. KEY TAKEAWAYS

Casual riders ride more during the weekends.....



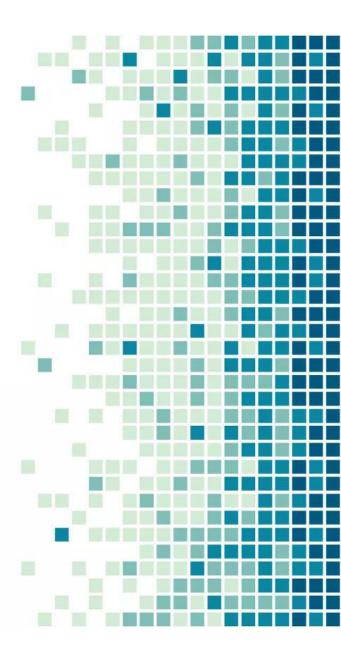
KEY TAKEAWAYS

- Casual riders take less number of rides but for longer durations
- ☐ There is noticeable high number of rides from casual riders during the weekend period.
- Both type of riders (casual and members) prefer the docked bike more then the electric or classic bike.
- Afternoon is the most rushed time.



6. RECOMMENDATIONS

Offer any weekend promotions based on the bike trip duration.....



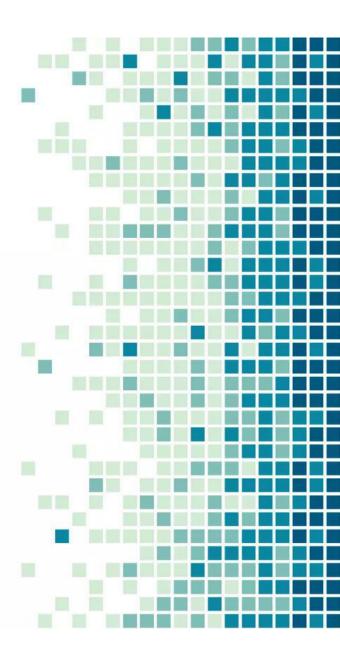
HOW COULD THE MARKETING TEAM APPLY THE INSIGHTS?

- Offer occasional membership discount to casual riders on weekends and on festival days/holidays.
- ☐ Giving discounts to casual riders based on their duration of rides in order to increase their chance of becoming members.
- Giving incentives or rewards for achieving milestones for members, in order to attract casual riders to become members.
- ☐ Launch mobile app for bicycle booking for casual riders and lists available stations on the same.



7. CASE STUDY ROADMAP

The project follows the six step data analysis process: *ask, prepare, process, analyze, share, and act*





are trying to solve? How can your insights drive business decisions?

What is the problem you

Process

Before we start analyzing, it is necessary to make sure data is clean, free of error and in the right format. Used R studio for cleaning

Share

Microsoft PowerPoint is used for data visualization and presenting key insights.



Prepare

The data that we will be using is Cyclistic's historical trip data from last 12 months (Jan to Dec 2020)

Analyze

Performed data aggregation using R Programming. Further analysis were carried out to perform calculations, identify trends and relationships using PivotTable and Charts on Microsoft Excel



Act
After analyzing, we reached to the conclusion.

CREDITS

Special thanks to all the people who made and released these awesome resources for free:

- Github community
- Kaggle



THANKS!

Any questions?

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