Analysis of Cyclistic's data

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Cyclistic? Who are they?

Cyclistic is a **bike sharing company located in Chicago**. It sets it self apart by **offering different types of bikes**, while providing assistance for users with disabilities. They provide a large number of rideables and multiple docking stations.





600 docking stations

The main issue is

Cyclistic's built a flexible pricing plan based on three types

These type of users count as count as count as Cyclistic members

Single ride passes

Full day passes

These type of users count as Cyclistic members

Annual Membership

The main issue is

Cyclistic's financial analyst concluded that annual members are much more profitable than casual riders

The director of marketing believes the company's future success depends on maximizing the number of annual memberships



Whats the plan?

Design marketing strategies aimed at converting casual riders into annual members by answering three main questions based on data

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

Question 2 : Why would casual riders buy Cyclistic annual memberships ?

Question 3 : How can Cyclistic use digital media to influence casual riders to become members?

Our part in the story and what it took..

1. We were tasked to answer to the first question by evaluating how different are the casual riders from Cyclistic members



2. We conducted our analysis on data that was collected by Cyclistic's marketing analytics team for the previous 12 months



3. Cleaning, transformation and summary statistics were done using SQL. A detailed description of the process is included in the report

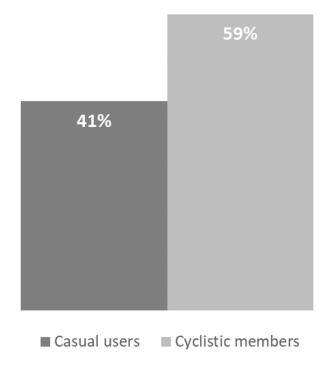


4. Visualization and plot creation was done using spreadsheets



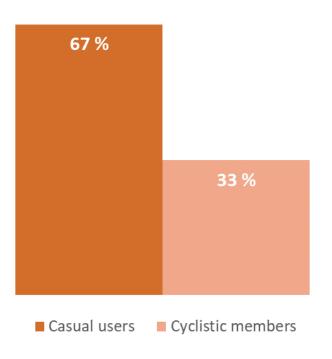
Casual users use the bike service 18% longer

Total amount of usage for both type of users in minutes

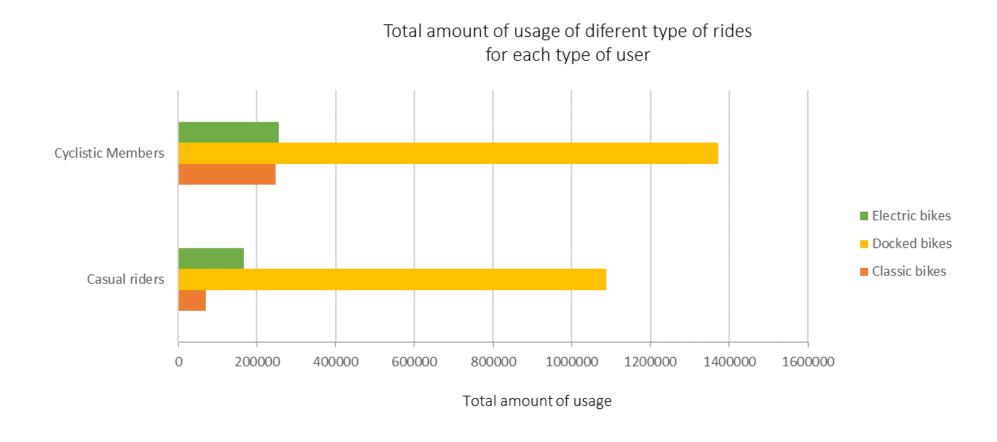


Cyclistic members use 34 % more often the bike service

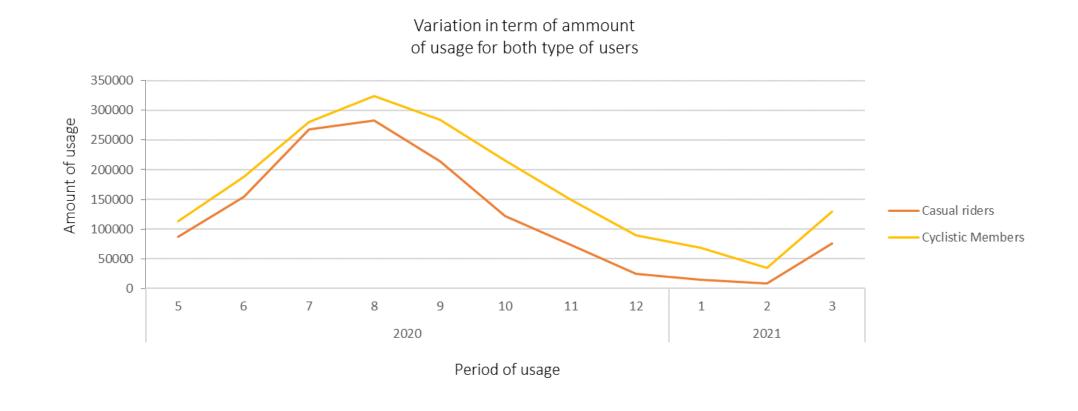
Total length of usage for both type of users in minutes



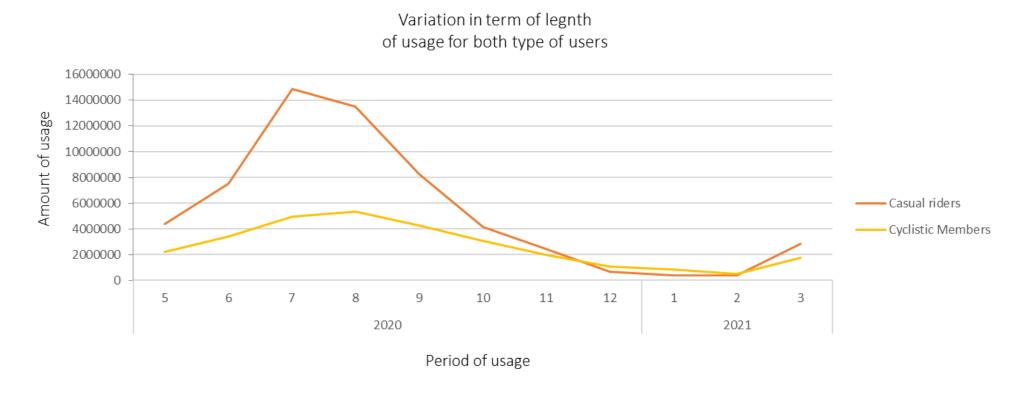
So for both cases, docked bikes has a lot of success. Interestingly, Electric bikes are more preferred than classic bikes for casual riders, in comparison to Cyclistic members



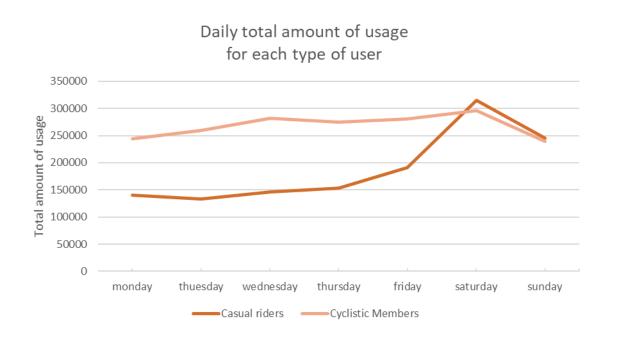
Time analysis showed an increase that peaks around August and gently decrease with time. A slight increase begins around March in the following year. Both curves show similar variation with Cyclistic members showing higher total of usage.

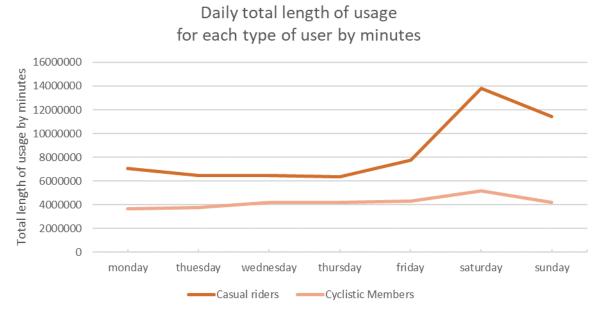


Same variation seen with total amounts is seen with the length of usage. The casual riders show a drastically higher peak value in august. Cyclistic members have smaller range.



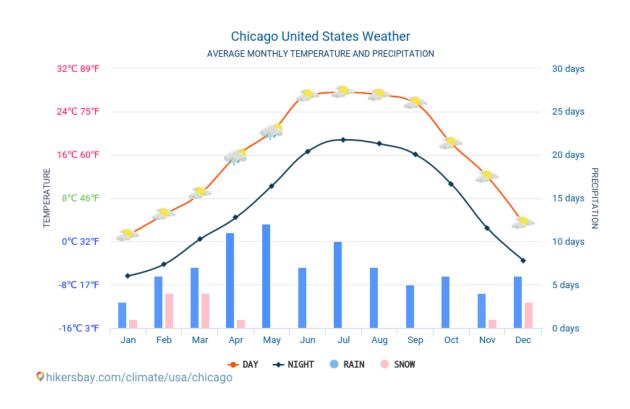
Daily usage of Cyclistic users is somewhat constant with a small maxima at the weekends. Same thing goes for casual users but with a higher range, with total amount and lengths nearly double at the weekends





What all of this means?

- The casual usage of bikes gets higher during the period when Chicago's weather is better (based on hikersbay pulled data)
- Both type of memberships gets to lower values during colder periods
- We can suppose a correlation between finer weather and the increase of bike usage (kind of obvious? Cant bike much when it rains?)



http://hikersbay.com/climate/usa/chicago?lang=en

What all of this means?

- For both type of users, the total amount of usage and length both increase during the weekends
- The amount of increase is drastically higher for Casual users. We all love weekends!



What could be done based on results?

- 1. Proposing a seasonal membership plan that doesn't span during the whole year and take into account the warmer periods
- 2. Making a formula dedicated for weekends only? This might encourage users to get a membership for weekends strides only
- 3. To fill the gap during the colder periods, it might be possible to think about making available covered bikes that limit the effects of weather

Conclusion !!!

- 1. Weather of Chicago directly affect usage of bikes regardless of type of users. Cyclistic should implement logistical solutions to incite usage in bad weather (covered bikes?)
- 2. Because of the seasonality in term of usage during the year, Cyclistic should implement plans that leverage the peak of usage during spring-summer periods (mid annual plans?)
- 3. Weekend surge might also be leveraged by implementing a membership plan for weekends only