Cyclistic Bikeshare Usage: Google Data Analytics Capstone Project

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What We Will Explore Today:

- Focus
- What the Data Says
- <u>Data Limitations</u>
- Conclusion
- Appendix

Focus

- How do our members and casual riders use our Bikeshare service differently?
- Why would casual riders buy a membership with Cyclistic?
- How can Cyclistic use digital media to incentivize casual riders to become members?

Note: Casual riders are those who purchase either a one-time ride pass or a full-day pass with Bikeshare. Members purchase an annual membership with Bikeshare.

Goal

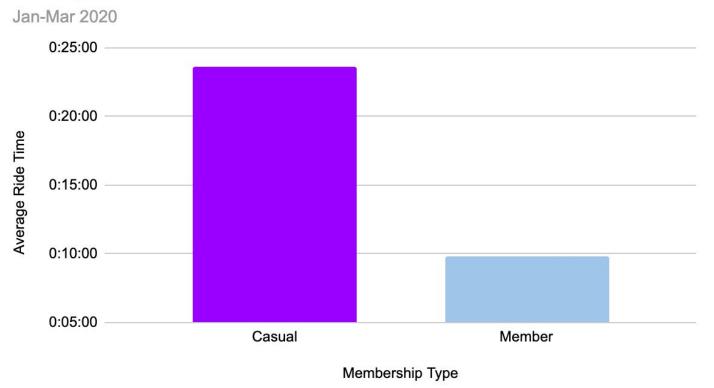
Cyclistic's goal is to increase memberships among our casual riders.

Using data from 2019 and 2020, I explored ways to increase memberships with Bikeshare.

I analyzed three different aspects of use: average ride length, weekly usage, and monthly usage.

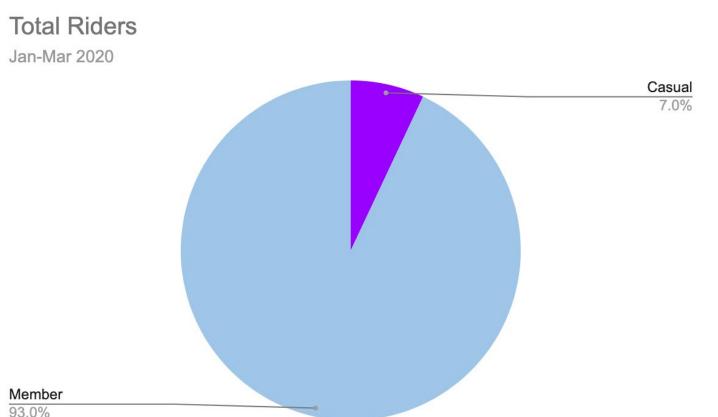
Average Ride Duration: 2019 vs. 2020

Average Ride Time of Membership vs. Casual Riders



On average, casual riders use our bikes the longest. This amount doubled from 2019 to 2020.

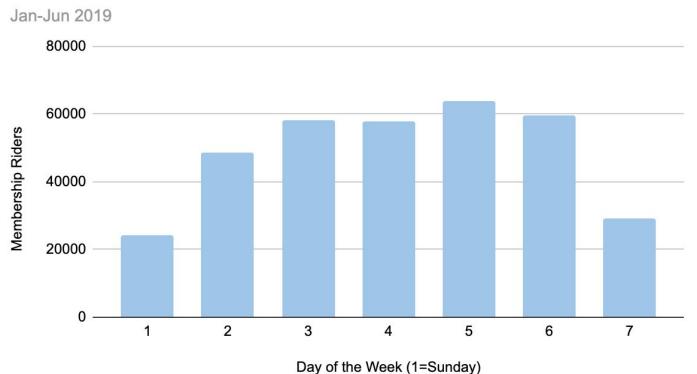
Total Users: 2019 vs. 2020



Although they use our services on average for longer, casual riders make up a very small percentage of our customer base. From 2019 to 2020, the amount increased by only 0.7%.

Weekly Usage: 2019

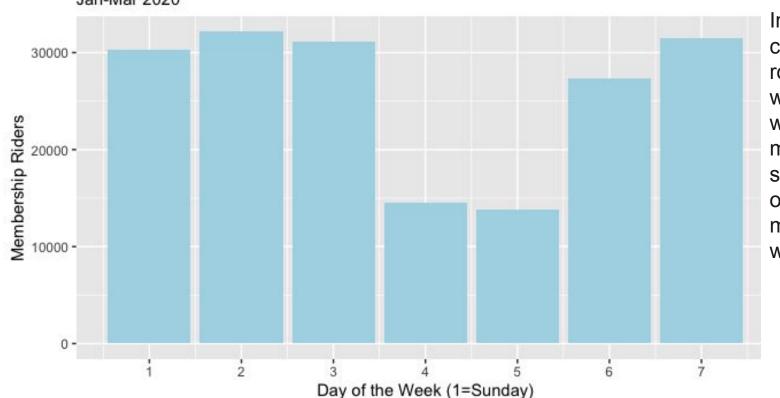
Membership Use by Weekday



In 2019, most casual riders used Bikshare on the weekend while members used it on the weekdays. Members are most likely commuters.

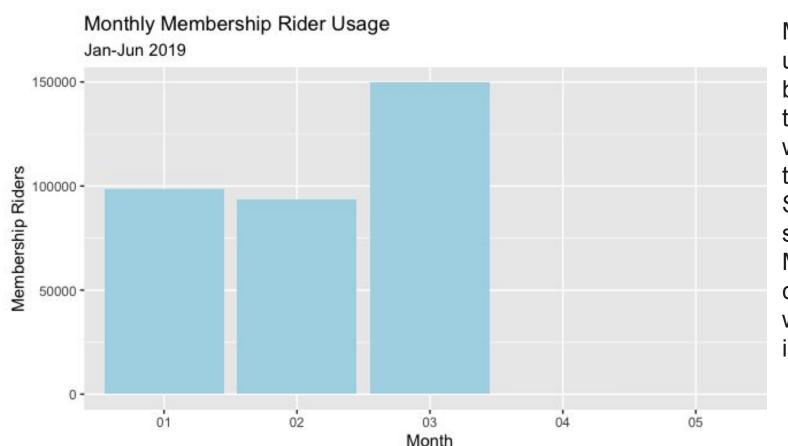
Weekly Usage: 2020





In 2020, more casual users rode on the weekday, while members started using our services more on the weekends.

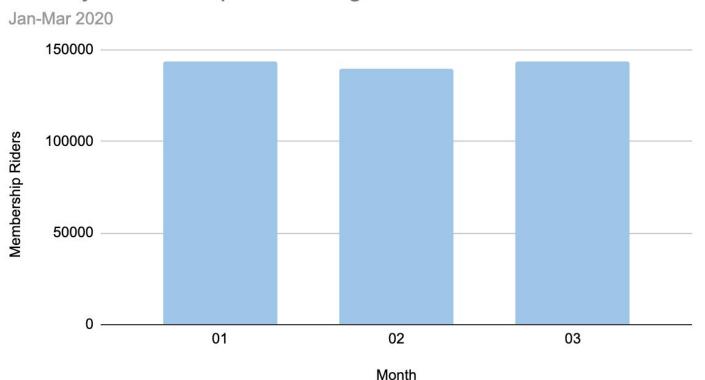
Monthly Usage: 2019



Monthly usage between the two groups was about the same. Seeing a spike around March is common as weather improves.

Monthly Usage: 2020

Monthly Membership Rider Usage



Again, usage jumped a lot going into 2020. Casual riders almost doubled in their use of our services. However, they are still not members.

Data Limitations

- Missing major information from monthly analysis.
 - Investigate possible causes for this large gap in our data collection.

- Data only available up to Q2 from 2019 and for Q1 from 2020.
 - Need more data for a deeper analysis.

Conclusion

How do our members and casual riders use our Bikeshare service differently?

Members are most likely commuters and therefore are more incentivized to be members.

Casual riders ride for longer amounts of time, but use our service less often. Going into 2020, their average ride time increased. However, their our total casual rider customer base only increased by 0.7%.

Conclusion

Why would casual riders buy a membership with Cyclistic?

Casual riders are not currently incentivized enough to become Bikeshare members.

The data indicates that more casual riders are becoming commuters, therefore would want an annual membership for cost and convenience.

Conclusion

How can Cyclistic use digital media to incentivize casual riders to become members?

Cyclistic can offer a few programs to increase memberships:

- Create an enticing program for new members, for example, offering a premium discount for joining within a specific time-frame.
- Install a point system for members, where points can be redeemed for coupons to local businesses.

These programs can be accessed on the customer's phone via a Bikeshare app developed by Cyclistic.

Next Steps

Develop and launch a Bikeshare app offered by Cyclistic. Introduce the aforementioned programs to increase memberships.

If we don't see any increase in membership sign-ons within the first 3 months of post-launch, we will conduct a survey via the app.

The survey will ask our members why they chose Cyclistic, and ask casual riders what improvements they would like to see from Bikeshare.

Once the data is collected, we would analyze the information and reassess more ways to increase memberships with our new insights.

Appendix

Data source

• R Studio code analysis: <u>2019</u>, <u>2020</u>

• Google Sheets analysis: 2019, 2020

If access is denied, please email me at athena.gerardo@gmail.com to request full access.