

Divvy Bikes User Type

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Tasks

- Maximize the number of **annual** memberships.
- Design a new **marketing strategy** to attract more annual memberships.

Objectives

Identify how **duration** and **distance** change over **years** for member type and casual type.

Theory

- COVID-19 Changes the way people use our bikes
- Social media, Internet or TV advertisement is more efficient.

What does data tell us?

First, let's take a look at some **basic numbers** and **structure** of riders.

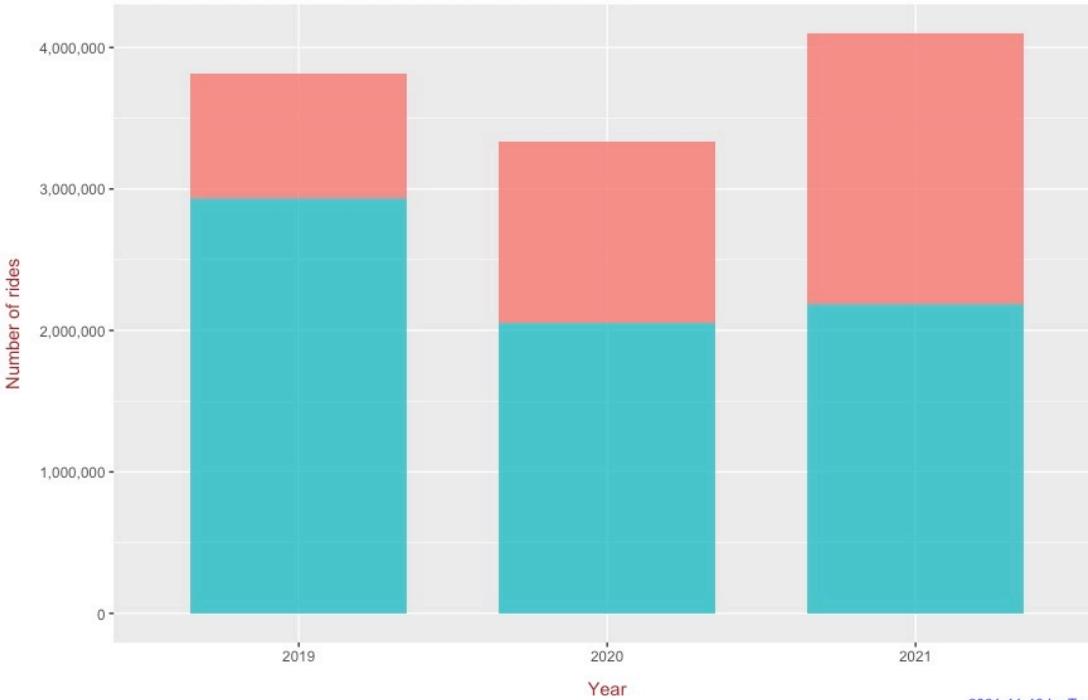
Data Source

- Internal data (from the company)
- Data covers 2019, 2020 and January to October 2021

Number of rides vs Year

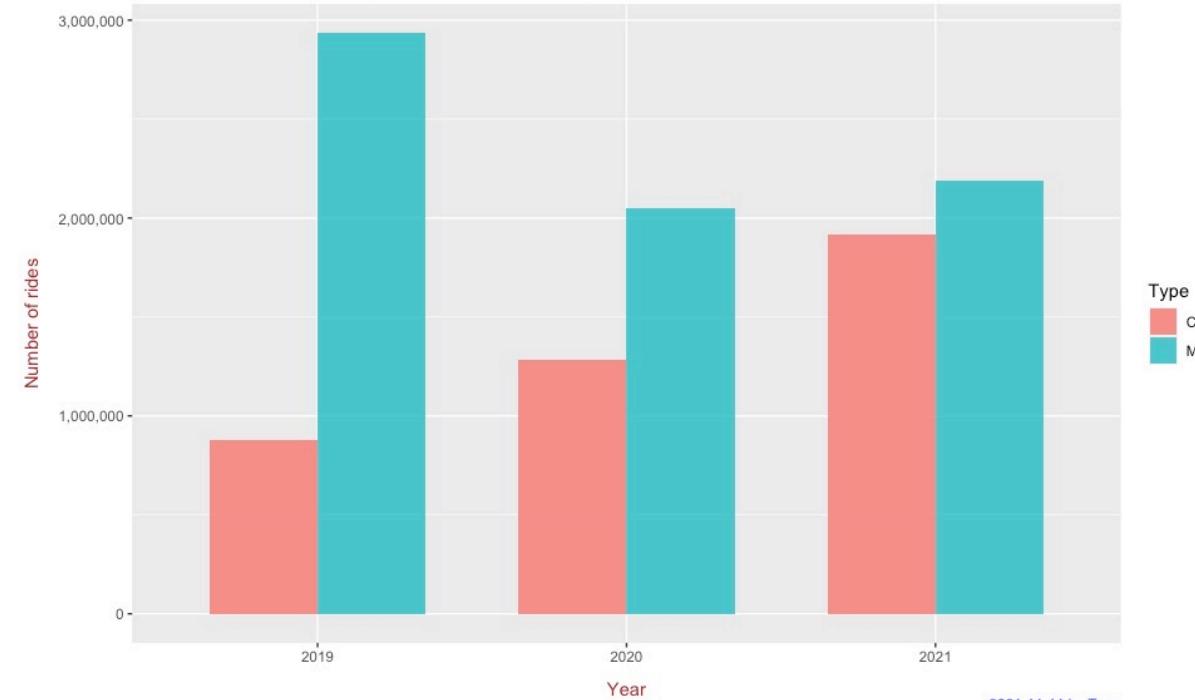
Number of rides By Year

Compare number of rides on 2019, 2020 and 2021 (Jan to Oct)



Number of Ride vs Year

Compare number of rides on 2019, 2020 and 2021(Jan - Oct) for member type and casual type

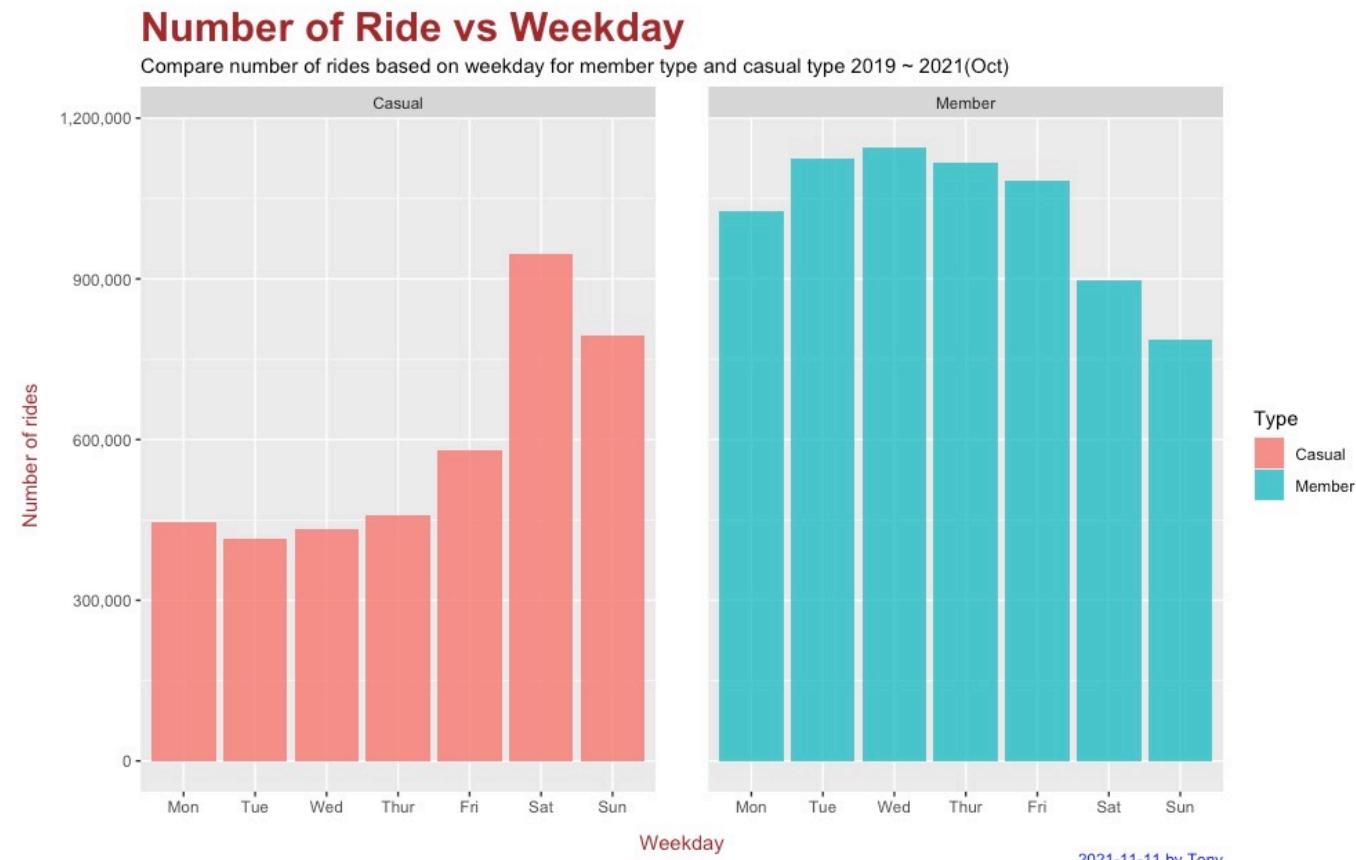


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Who are member or casual riders?

- Member riders are those who commute to work or school.
- Casual riders are those who rides for exercise or fun.





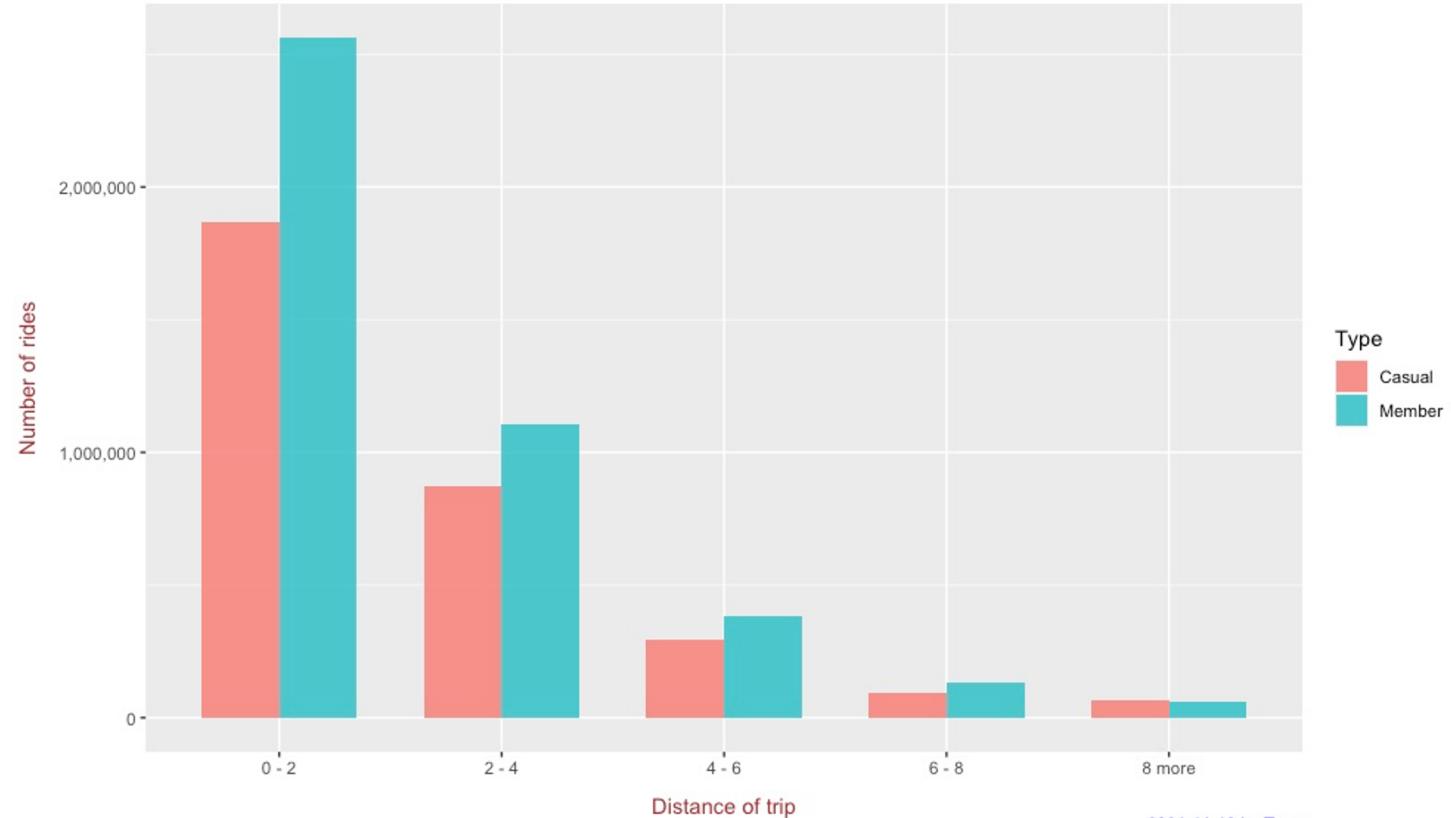
Next, let's take a look at **distance** and
duration statistics.

Distance

- Both number of rides reduces over distance.

Distance Of Trip For Member and Casual

Compare number of rides based on distance for member type and casual type



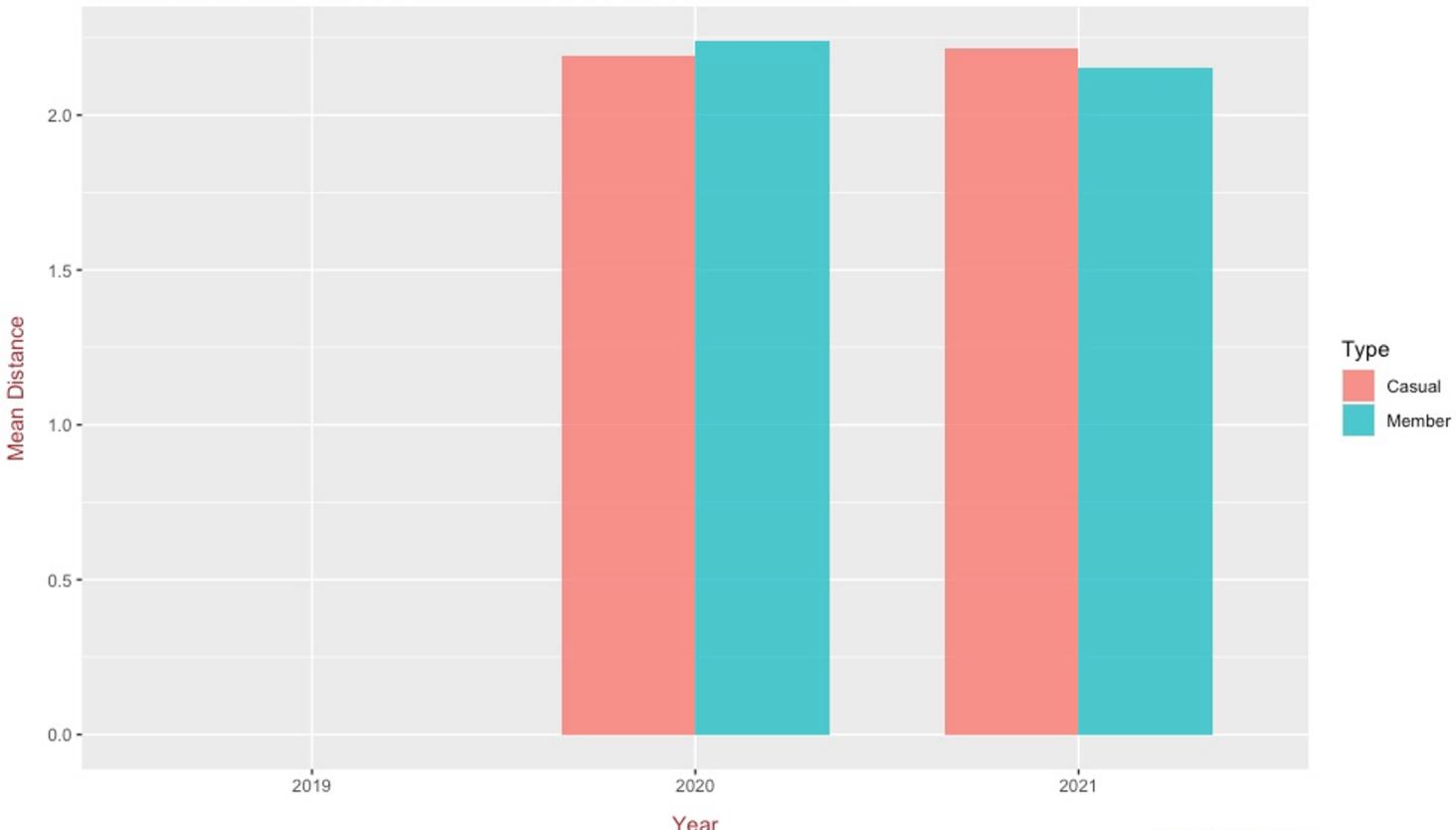
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User Type / Distance	0 ~ 2 km	2 ~ 4 km	4 ~ 6 km	6 ~ 8 km	8 km more	Total
Casual	1866482	873042	295328	93851	66611	3195314
Member	2564788	1103569	380275	131008	61934	4241574

- Mean distance shows very little changes.
- Distance does not change a lot over time.
- The reason why most people ride a bike remain the same.

Mean Distance vs Year

Compare mean distance based on each year for member type and casual type

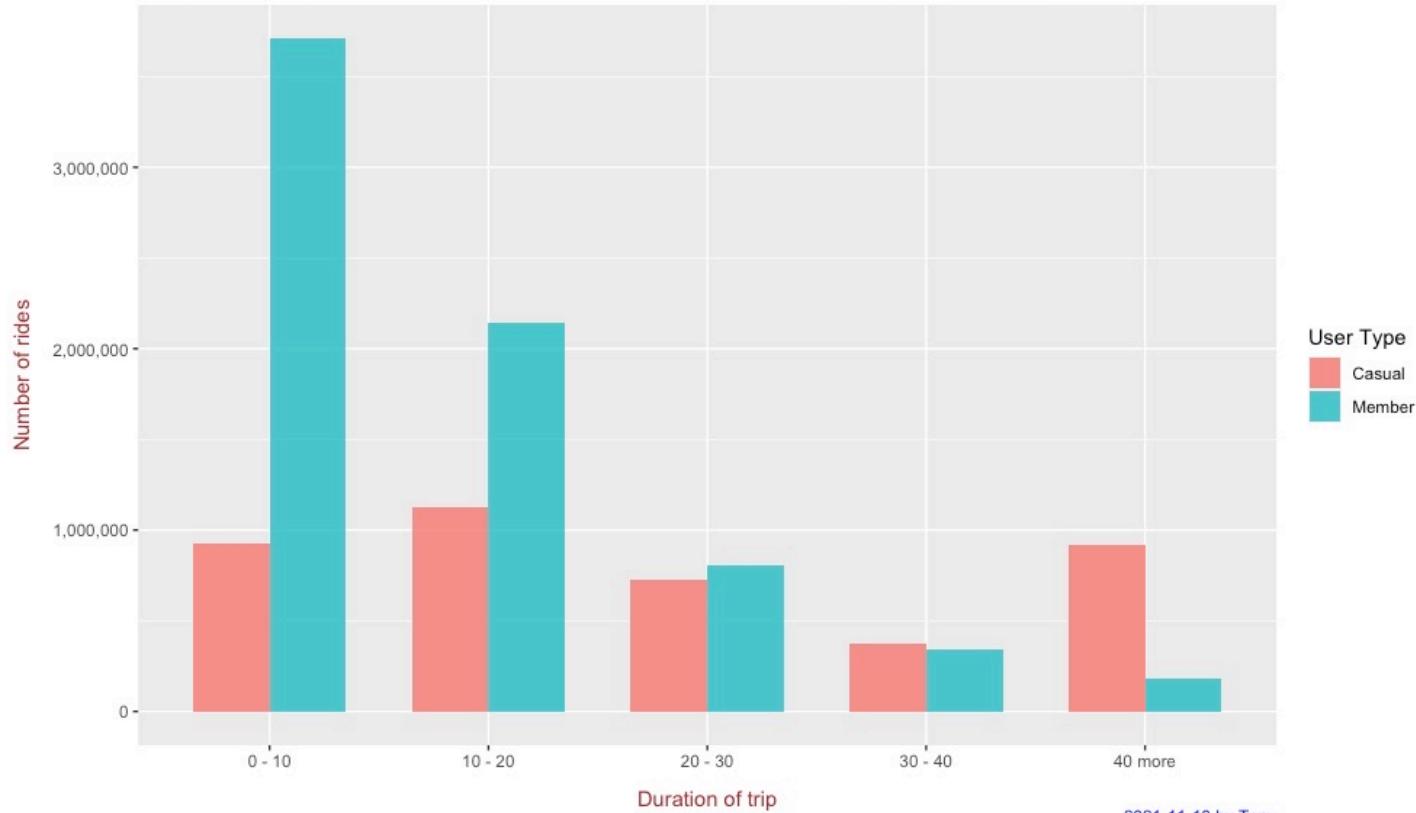


Duration

- Member riders are commuter so duration of trips is generally shorter.
- Casual riders ride for fun or exercise, so there is an increase trend.

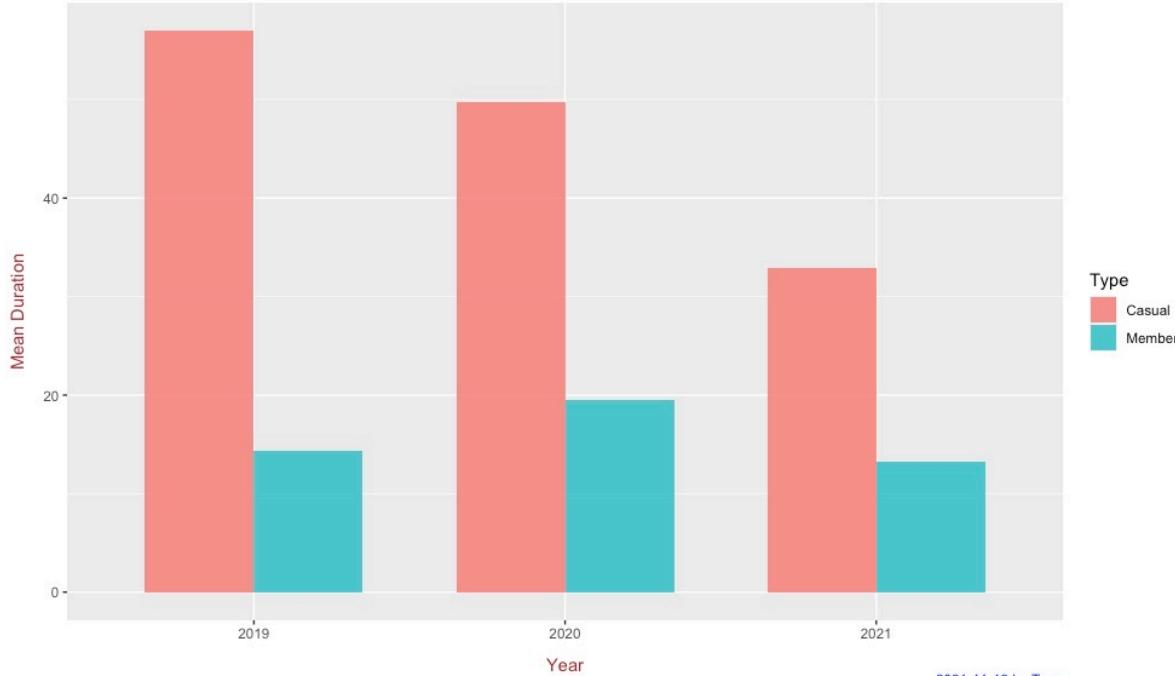
Duration Of Trip For Member and Casual

Compare number of rides based on duration for member type and casual type 2019 ~ 2021(Oct)



Mean Duration vs Year

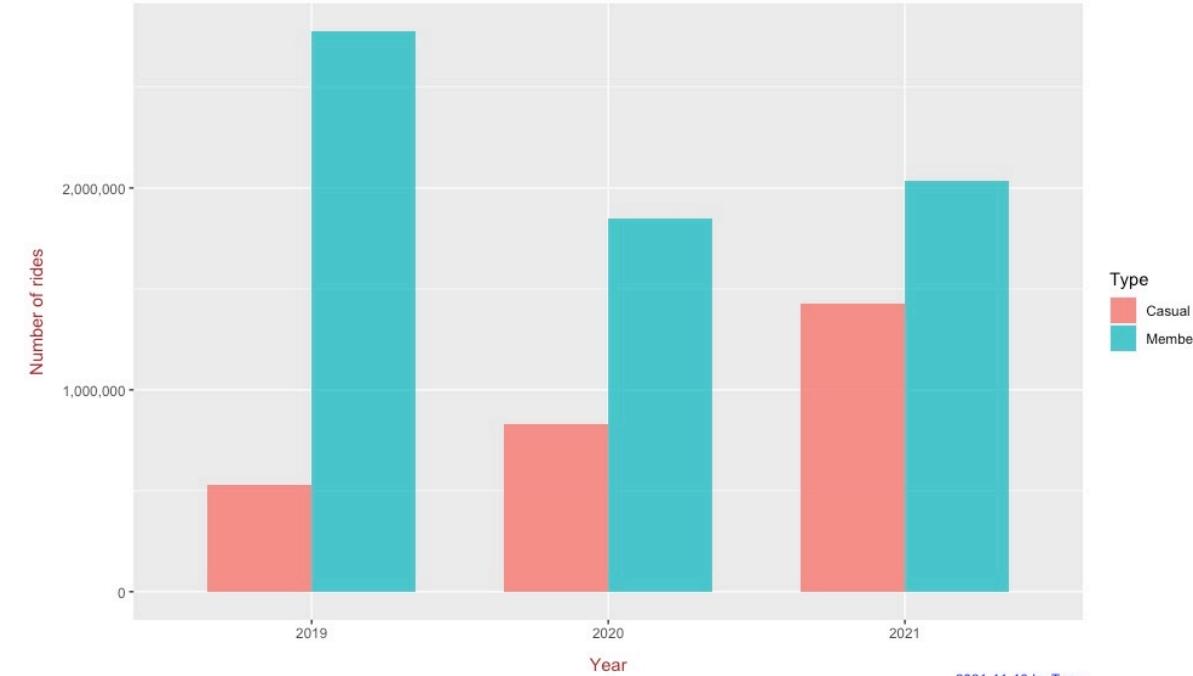
Compare mean duration based on each year for member type and casual type



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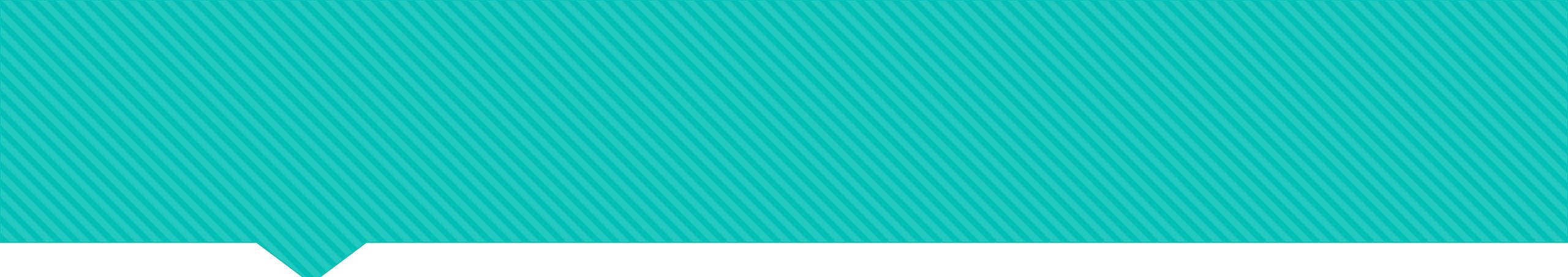
Short Duration For Member and Casual By Year

Compare number of rides based on short duration (less than 30 min) for member type and casual type



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- Due to COVID-19, the time people allowed to stay outside is reduced in 2020.
- Longer duration rides change to shorter duration rides.



Then, let's see how data solves our task.

Why Do Riders Change to Casual Ride?

A fun and affordable way to get around

Annual Membership

\$9 / month

The best deal for locals and frequent riders - \$108 billed upfront annually

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Single Ride

\$3.30 / trip

Great for a quick, classic bike trip under 30 min

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Explorer Pass

\$15 / day

Perfect for tourists and exploring Chicago

[LEARN MORE](#)

- 
- The purpose riders ride bikes does not change but duration and number of ride changes due to COVID-19.
 - Riders do not want to pay the time they do not use bikes. They just want to pay as they use.

Conclusion

1

COVID-19 changes people's life style.
People's life style changes **the way they use bikes.**

2

Lots of people work from home. They use tablets and computers to work or to study. They have more time to browse **social media.**
So, social media advertisement can be more efficient.

3

To maximize annual member, change prices for annual member fees.

Recommendation

- Reduce annual membership fees to \$6/month or \$6.6/month.
- Advertise through social network or internet.

Appendix

- See Cast Study Report (Word file) for data cleaning process.
- See divvy_trips_2019.csv, divvy_trips_2020.csv and divvy_trips_2021.csv for raw data (cleaned data).
- Link for original data () .

THANK YOU