**Bike\_share capstone project**:

**Ask phase**: In this phase of the analysis we will define the following questions.

● What is the problem you are trying to solve?

● How can your insights drive business decisions?

**Guiding questions**

* What topic are you exploring?

Cyclistic bike share, how does a bike\_share navigate speedy success?

* What is the problem you are trying to solve?

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

* What metrics will you use to measure your data to achieve your objective? Who are the stakeholders?

After initializing and asking questions regarding the business problem. I will use the spreadsheets and SQL to explore the data and find the relative data to address the problem to my stakeholders (Cyslistic Executives, Manager)

* Who is your audience for this analysis and how does this affect your analysis process and presentation?

In this analysis the Cyclistic marketing team, executive team and the Manager are my audience.

* How will this data help your stakeholders make decisions?

After exploring the data, I observed that the data contains biketypes, bike stations, member\_casual types, and ride times and date so we can explore so many things with this data.

**Prepare phase:**

**Guiding questions**

* Where is your data located?

Data is located in the form of CSV files in the system. And it is As a disclaimer the data has been made available by Motivate International Inc. under this [license](https://ride.divvybikes.com/data-license-agreement).

* How is the data organized?

It is organized in the table form.

* Are there issues with bias or credibility in this data? Does your data ROCCC?

A good data source is ROCCC which stands for **R**eliable, **O**riginal, **C**omprehensive, **C**urrent, and **C**ited.

Reliable — high — it has 476888 rows

Original — high — provided by the company directly

Comprehensive — high — Parameters match parameters

Current — med — Data is 3 years old and somehow relevent

Cited — high — Data collected from company, hence useful

* How are you addressing licensing, privacy, security, and accessibility?

The data has been made available by Motivate International Inc. under this license. It is secured and completely accessible.

* How did you verify the data’s integrity?

Hence it is approved by the motivative International Inc. and it does not include the personal information.

**Process phase:**

I imported the tables into SQL bigquery for analysis for cleaning and analyzing. I used a union all query to combine the tables. After that, I saved the results into new table for analysis.  
I used the new table to analyze the data, which led me to the following conclusions:

* No of rides
* Most patronized bike types
* Average length of ride in seconds
* Most active days
* Max ride length
* Most active month by usertypes
* Most active days with bike and user types

**Share:**

I used tableau for visualization. Here I am mentioning the link:

[https://public.tableau.com/views/CyclisticBikeShareDashboard2022/Dashboard1?:language=en-US&:display\_count=n&:origin=viz\_share\_link] here to see the visualization.

* There were six hundred thousand more recorded rides by member riders over casual riders. But the casual riders spent more than two times as many minutes in their rides than the member riders. Casual riders also experienced a maximum average ride length much higher than than that of the member riders per month.
* Casual riders experienced a peak in July while member riders experienced theirs in August. Both riders also experienced a year low in January.
* Casual riders went on the most rides on Saturdays whilst member riders went on the the most rides on Tuesday.
* The most common rideable type in the recorded period was the classic bike. Both rider types recorded the most rides with the classic bike. However, the member riders did not make use of the docked bike at all.
* Casuals have the greater max time spent riding, this could be as a result of enjoying the ride(pleasure/leisure/exploring) or as a means of exercising.

**Act**:

Some recommendations based on the analysis:

* Implement a limited time promotion tor annual membership that loosens limits on Friday, Saturday, Sunday rides, given those are the most popular days casual riders use Cyclistic bikes
* Add more electric bikes to inventory given casual riders prefer them over classic bikes.
* Another way to convert casual riders into full time members could be targeted physical ads and campaigns.
* Targeted premium features could be offered to persuade casual users to join as members to meet their goals for riding, mostly on weekends.