Dashboard Design

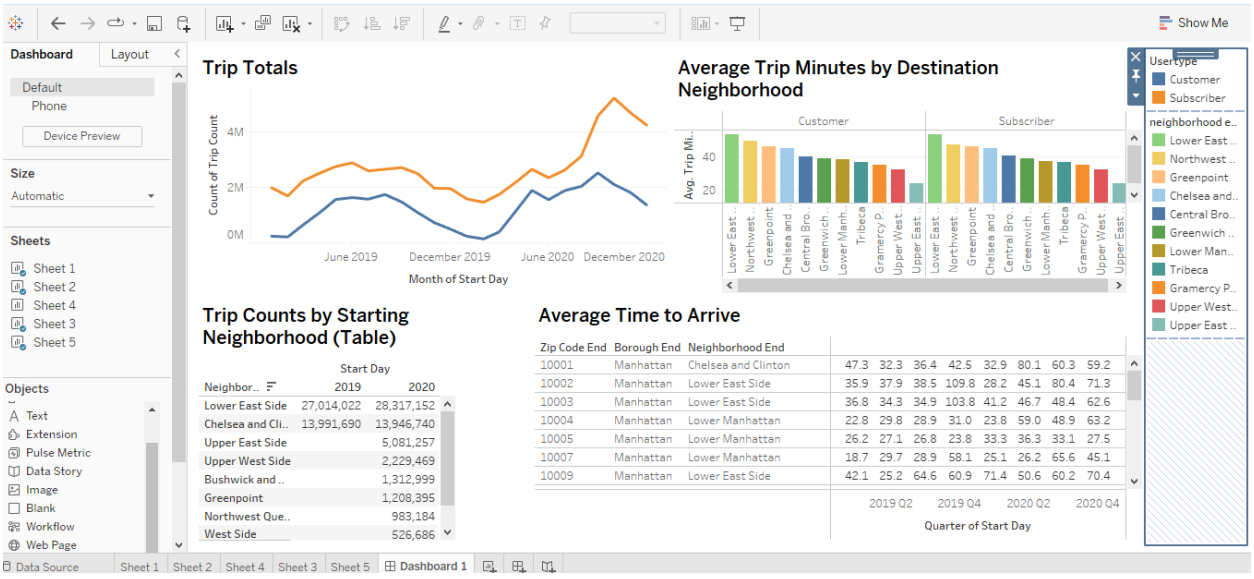
Course 3 end-of-course project overview: Cyclistic

So far, I worked with a fictional bicycle rental company, Cyclistic, to provide their team with key business intelligence insights. I joined tables that included key metrics necessary for a visualization and generated a reporting table to be imported to Tableau.

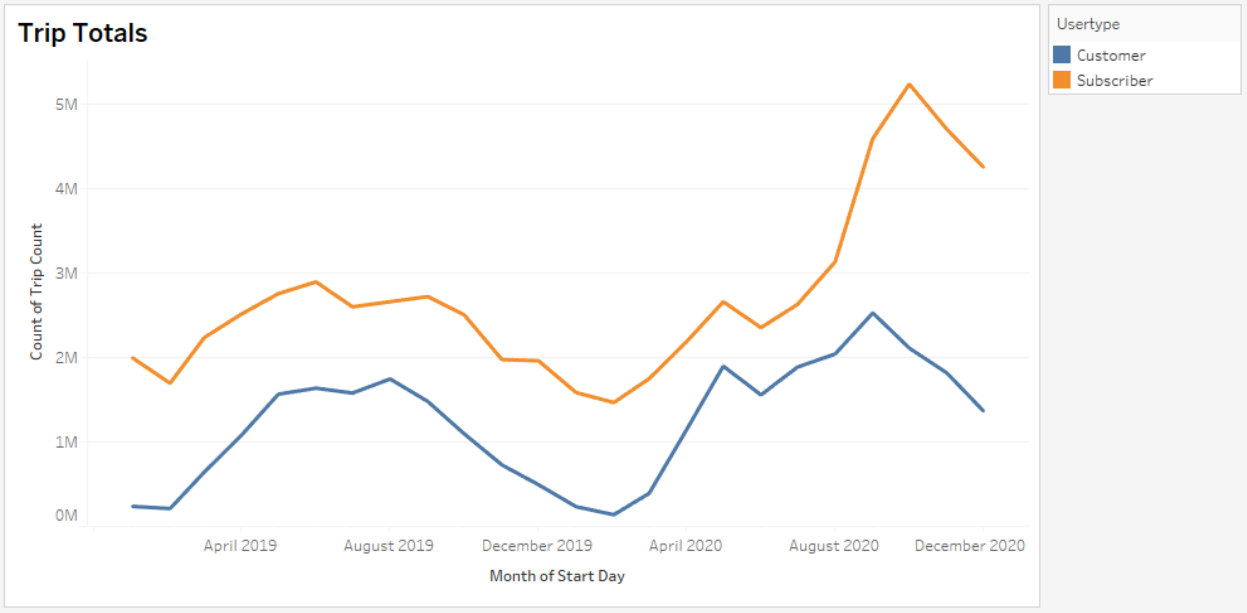
Scenario

The product development team at Cyclistic has begun developing their business plan for next year. In order to build a better Cyclistic, the team needs to understand how customers are currently using the bikes, how location and other factors impact demand, and what stations get the most traffic. The Cyclistic team has a few goals:

- Understand what customers want, what makes a successful product, and how new stations might alleviate demand in different geographical areas
- Understand how the current line of bikes are used
- Apply customer usage insights to inform new station growth
- Understand how different users (subscribers and non-subscribers) use the bikes



Trip Totals chart

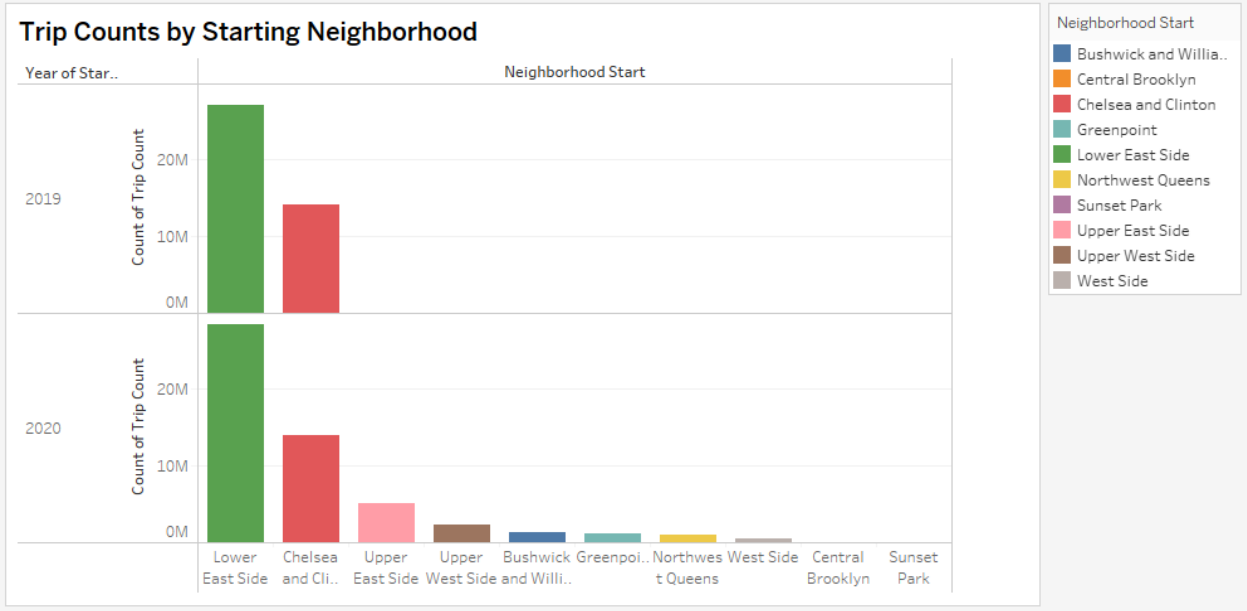


The Trip Totals chart visualizes the total number of bike trips taken throughout 2019 and 2020, with a distinction between customers and subscribers. This chart shows that subscribers make up a significantly larger portion of Cyclistic's users than regular customers. It also shows that there are far more users in warmer months (May - October) than there are in colder months. This makes sense considering that people are less likely to ride bicycles in colder weather.

Trip Counts by Starting Neighborhood table

Trip Counts by Starting Neighborhood (Table)

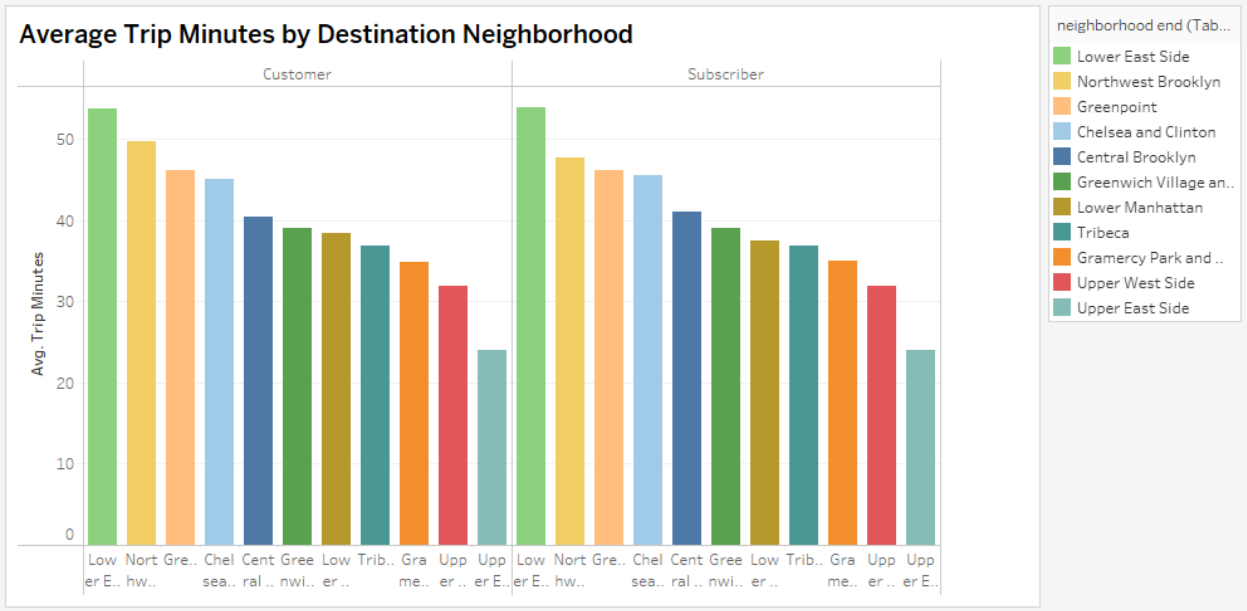
	Start Day	
Neighborhood Start	2019	2020
Lower East Side	27,014,022	28,317,152
Chelsea and Clinton	13,991,690	13,946,740
Upper East Side		5,081,257
Upper West Side		2,229,469
Bushwick and Williamsbu..		1,312,999
Greenpoint		1,208,395
Northwest Queens		983,184
West Side		526,686
Central Brooklyn		52,505
Sunset Park		476



The Trip Counts by Starting Neighborhood table lists the total number of bike trips started in each neighborhood in each month of 2019 and 2020. It also uses a color gradient to emphasize the highest and lowest counts of monthly trips.

Because the starting location is more indicative of where users look for a bike, it is more important to emphasize starting location when determining where to advertise. The most active stations are in the Lower East Side and the Chelsea and Clinton neighborhoods.

Average Trip Minutes by Destination Neighborhood & Average Time to Arrive



Average Time to Arrive

Zip Code End	Borough End	Neighborhood End	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3	2020 Q4
10001	Manhattan	Chelsea and Clinton	47.3	32.3	36.4	42.5	32.9	80.1	60.3	59.2
10002	Manhattan	Lower East Side	35.9	37.9	38.5	109.8	28.2	45.1	80.4	71.3
10003	Manhattan	Lower East Side	36.8	34.3	34.9	103.8	41.2	46.7	48.4	62.6
10004	Manhattan	Lower Manhattan	22.8	29.8	28.9	31.0	23.8	59.0	48.9	63.2
10005	Manhattan	Lower Manhattan	26.2	27.1	26.8	23.8	33.3	36.3	33.1	27.5
10007	Manhattan	Lower Manhattan	18.7	29.7	28.9	58.1	25.1	26.2	65.6	45.1
10009	Manhattan	Lower East Side	42.1	25.2	64.6	60.9	71.4	50.6	60.2	70.4
10010	Manhattan	Gramercy Park and Murra..	15.8	23.7	31.5	31.2	21.3	33.4	37.6	37.2
10011	Manhattan	Chelsea and Clinton	26.0	33.9	37.6	42.2	22.6	80.8	53.1	58.3
10012	Manhattan	Greenwich Village and So..	19.0	28.3	28.4	21.4	17.0	35.3	41.0	49.0
10013	Manhattan	Greenwich Village and So..	21.5	29.4	30.8	39.5	23.5	24.8	46.6	40.7
10014	Manhattan	Greenwich Village and So..	32.5	30.7	26.5	42.1	20.4	35.6	56.2	82.8
10016	Manhattan	Gramercy Park and Murra..	20.0	24.3	26.3	68.1	17.4	24.1	45.5	56.3
10017	Manhattan	Gramercy Park and Murra..	28.2	22.7	23.1	20.7	22.2	28.9	90.8	27.2
10018	Manhattan	Chelsea and Clinton	36.7	25.8	28.5	29.0	25.8	45.4	37.1	41.7
10019	Manhattan	Chelsea and Clinton	32.8	34.2	39.9	49.0	29.2	62.8	67.5	35.0
10021	Manhattan	Upper East Side	23.1	25.9	24.5	23.3	22.6	43.4	25.1	20.3
10022	Manhattan	Gramercy Park and Murra..	21.4	21.8	29.4	24.6	23.9	35.6	24.7	29.3

Quarter of Start Day