CIS 9440 - Data Warehousing for Analytics

Final Project Milestone 4

Group Number - 5

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1) List your final set of 5 KPI's.

1. Number of citi bike trips per location

2. Total Revenue per location

3. Average price a night per location

4. Number of rentals generated based on citi bike trips

5. Average ratings per location

2) Short description of Visualization that will be used for each KPI. Why will you use that type of visualization?

- Number of citi bike trips per location

  - We will use a treemap to effectively show and compare the number of citi bike trips per location using size and color. We filtered it by using only the top 15 neighborhoods in terms of citi bikes traffic. The size and colors of the rectangles allow the readers to immediately make sense of what they're seeing, and directly understand which neighborhoods are most visited.

- Total Revenue per location

  - We will use a scatter plot with two y-axis to easily describe the relationship between the total revenue per neighbourhood and the number of citi bike trips. We filtered it by using

only the top 15 neighborhoods in terms of citi bikes traffic. The left y-axis would be the number of citi bike trips and the right y-axis would be the total revenue. This not only gives us the total revenue per most frequented neighborhood, but also explains the revenue's relationship with the number of citi bike trips.

● Average price a night per location

- We will use a scatter plot to show the relationship between two numerical values which are the average price of Airbnb per night and the average citi bike trips. This gives the reader an overview of the price for each zip code, and explains the relationship with the citi bike traffic.
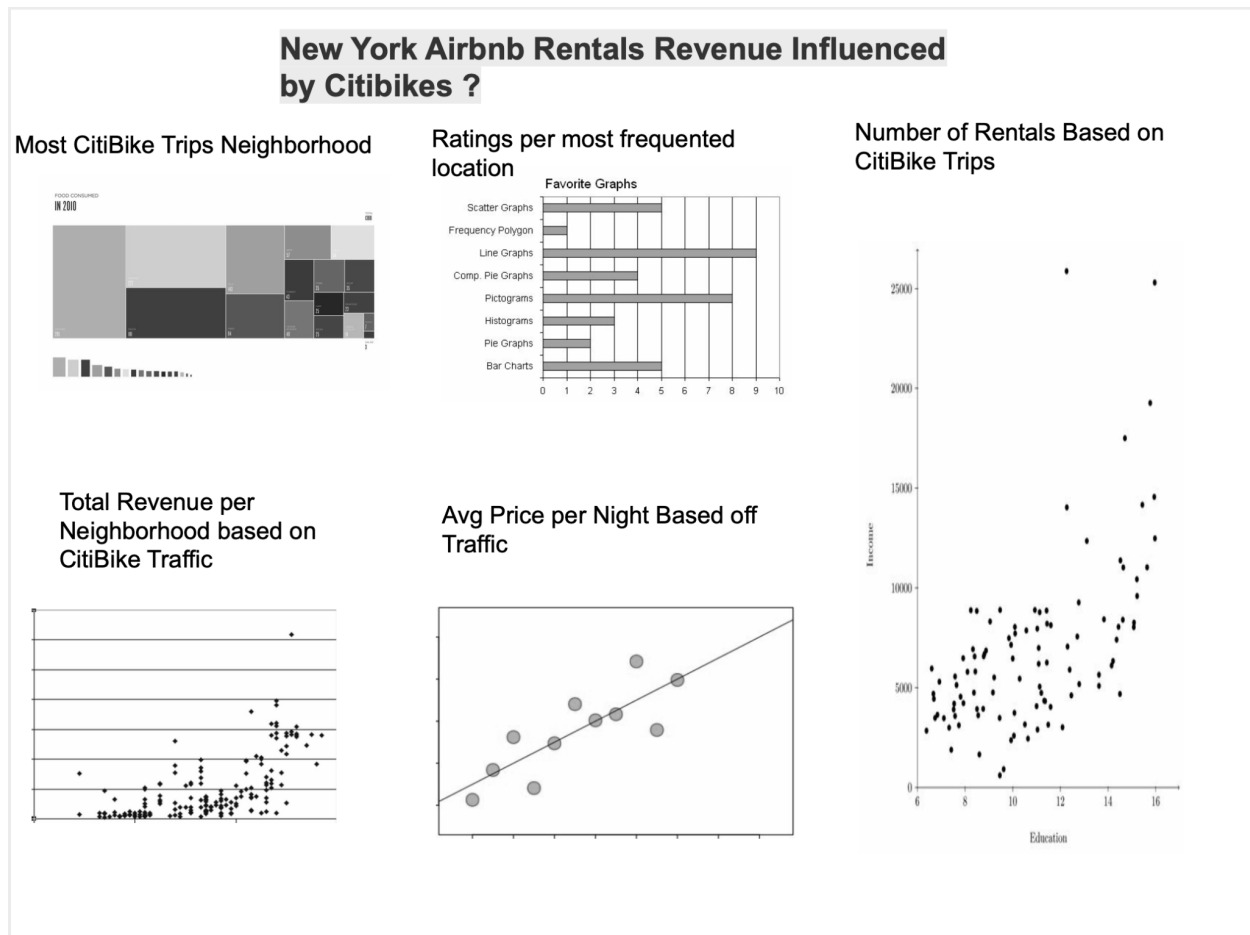
● Number of rentals generated based on citi bike trips

- We will also use a scatter plot to show the relationship between the number of rentals and the number of citi bike trips based on the location zip code and neighborhood name. Creating a scatter plot with a trend line makes it easier to understand how the greater the traffic in citi bike, the higher the number of listings will be rented.

● Average ratings per location

- We will use a horizontal bar plot to show the average review scores of Airbnb per neighbourhoods in descending order. We filtered it by using only the top 15 neighborhoods in terms of citi bikes traffic. We chose to range the x-axis from 4 to 5 to show clearly the difference in ratings, as all neighborhoods have quite great and close average ratings.

3) Paste a picture of your BI Application Wireframe (hand drawn image, google draw, any other format).

New York Airbnb Rentals Revenue Influenced by Citibikes ?

Most CitiBike Trips Neighborhood

Ratings per most frequented location

Number of Rentals Based on CitiBike Trips

Total Revenue per Neighborhood based on CitiBike Traffic

Avg Price per Night Based off Traffic

4) Link to your Tableau Public dashboard. (ensure this link works!)

https://public.tableau.com/app/profile/mehdi.lahlou.charki/viz/Tableaufinalproject_163836 59899150/Dashboard1