MTA

MTA DATA ANALYSIS OF New York SUBWAY for

Women Tech Women Yes (WTWY)

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Backstory

- Women Tech Women Yes (WTWY) has an annual gala in New York City (NYC) in summer each year. They try to do double duty with the gala to fill their event space with passionate individuals to support their event.
- To do this, they should place their street teams at the most trafficked NYC subway stations.
- The street teams will collect most email addresses and people who sing up are sent free tickets to attend the WTWY summer gala event.
- My goal is to use subway data from NYC's Transit Authority (MTA) to give WTWY more information about the top five crowded subway stations in New York City, so they can determine the placement of their street teams.

Tools:

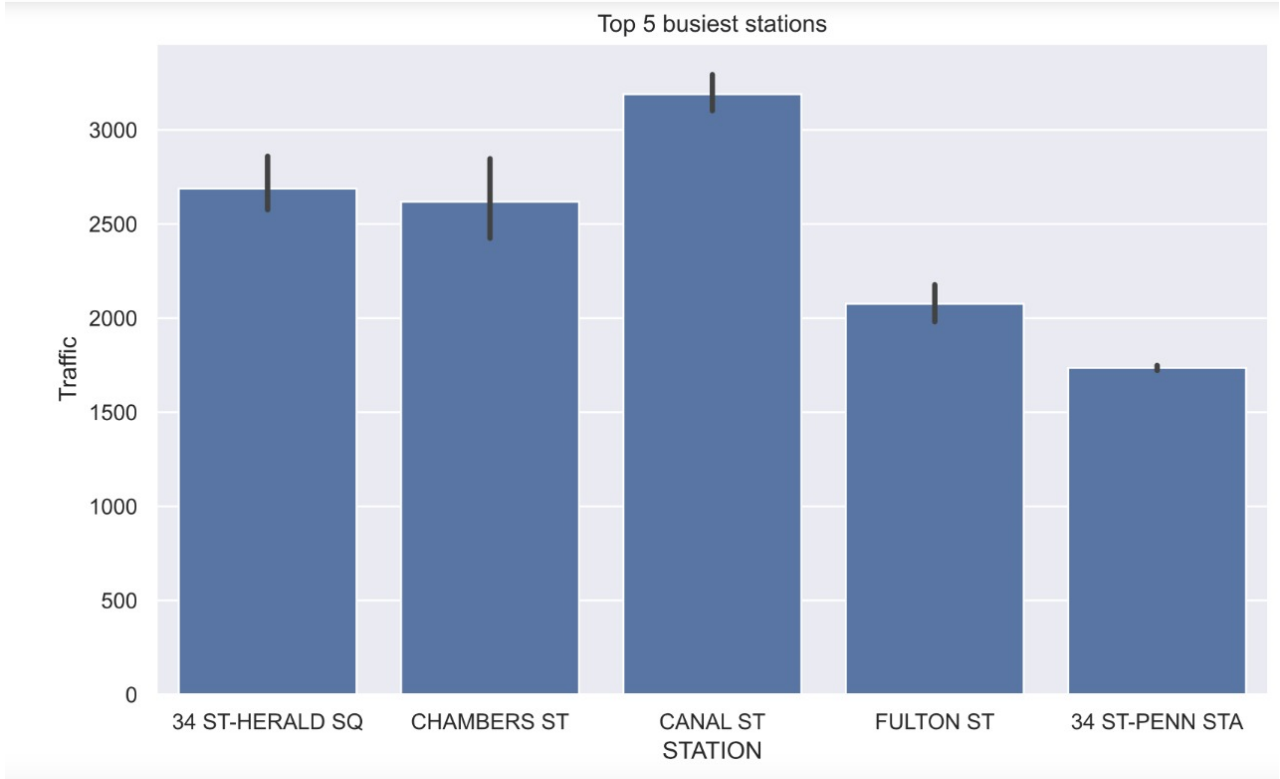
Data analysis with the following;

- Pandas
- NumPy
- SQLalchemy
- Matplotlib
- Seaborn

Data Sources

Using the New York City subway data to analyse transit patterns of commuters in order to optimize WTWY team placement.

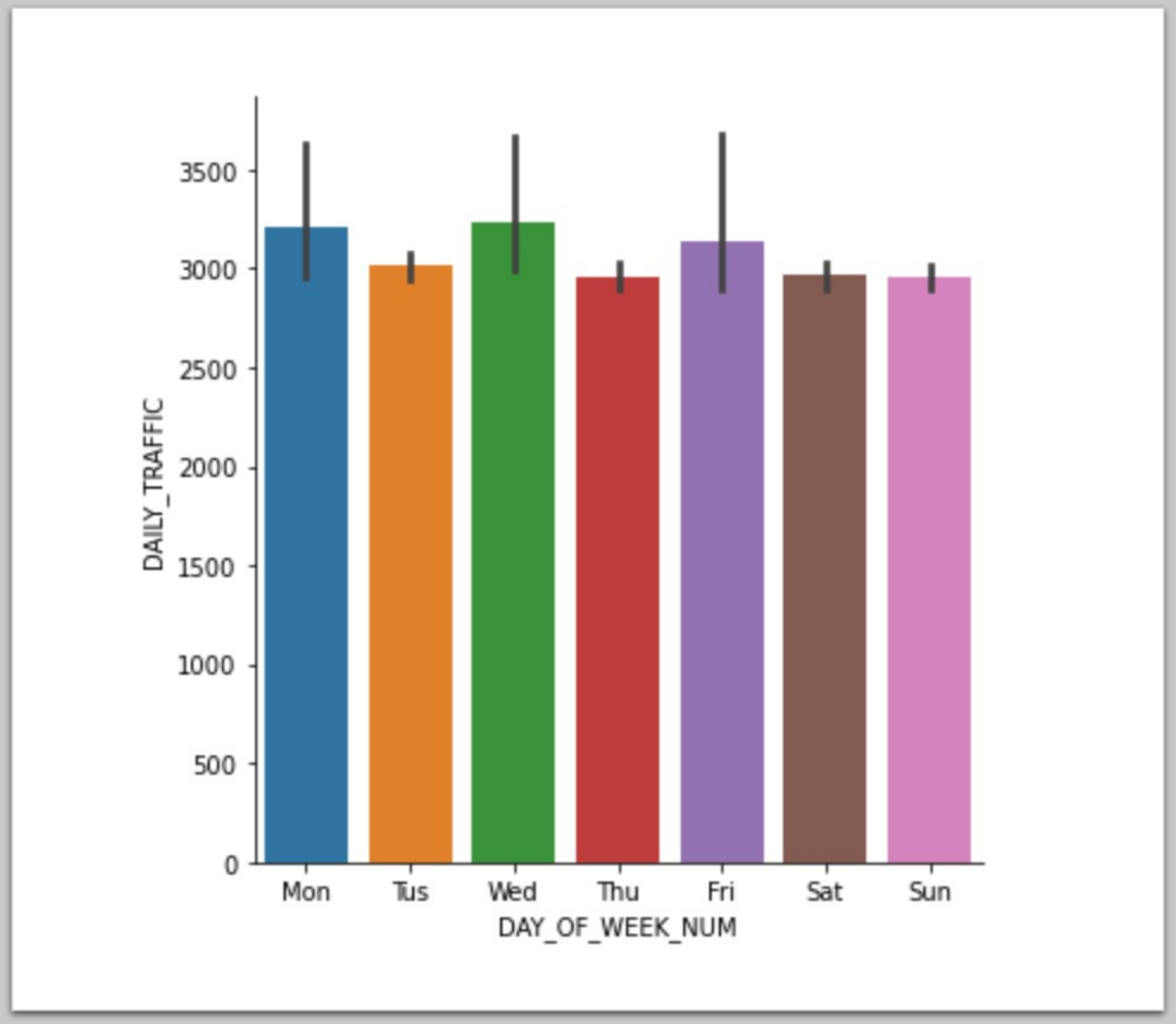
- From the MTA data I took three months (May, June and July in 2015).
- Looking for the most crowded stations in summer.
- For each station, I added both their turnstiles daily entries and turnstiles daily exits data to find the busiest stations.



Key Findings

The top five busiest stations are:

1) CANAL ST
2) 34 ST-HERALD SQ
3) CHAMBERS ST
4) FULTON ST
5) 34 ST-PENN STA



Key Findings

Finding the first crowded station CANAL by the number of weekdays .

- AS we can see the daily traffic during the weekdays is fluctuating.
- Monday, Wednesday and Friday have the highest daily traffic.
- However, on the weekend the traffic are stabilizing

Conclusion :

- My recommendation is to place the street teams at top five stations especially at CANAL station during the weekdays, so this will help the WTWY teams to achieve maximum of emails sign-ups.
- Moreover, this will help them to increase their fundraising on the summer gala event.


Thank you !