# BATTLE OF NEIGHBORHOODS WEEK 2

FARZANA SHAHEEN

# Introduction

THE CITY OF NEW YORK IS THE FINANCIAL AND INDUSTRIAL HUB OF UNITED STATES.

IT PROVIDES LOT OF BUSINESS OPPORTUNITIES AND BUSINESS FRIENDLY ENVIRONMENT. IT IS THE CENTER OF FASHION, AND OFFERS WORLD-CLASS CREATIVE TALENT, RETAIL SPACE IN HIGHLY POPULATED LOCATIONS, BEST-IN-CLASS PRODUCTION COMPANIES AND FASHION AND DESIGN SCHOOLS.

TO START A NEW CLOTHING AND ACCESSORIES OUTLET WHERE PEOPLE ALREADY HAVE MULTIPLE OPTIONS ,THE DECISION NEEDS TO BE TAKEN BASED ON REALISTIC LOGICS .

THUS, ANY NEW BUSINESS VENTURE OR EXPANSION NEEDS TO BE ANALYZED CAREFULLY. THE INSIGHTS DERIVED FROM ANALYSIS WILL GIVE GOOD UNDERSTANDING OF THE BUSINESS ENVIRONMENT WHICH HELP IN STRATEGICALLY TARGETING THE MARKET. THIS WILL HELP IN REDUCTION OF RISK. AND THE RETURN ON INVESTMENT WILL BE REASONABLE.

# Problem Description

- A dress boutique is a business which designs and sells dresses according to the fashion trends for customers in return for money, either paid through credit /debit, cash on delivery ,cash payment after purchasing any item.

- The City of New York is famous for its excellent fashion shows, fashion brands and street fashion. Its fashion culture includes an array of ethnic, western and modern designs, here are the fashion categories of brands designing items from high class to the budget friendly categories operating in in NYC.

- To start a new clothing business it needs analytics based on facts and figures to survive this venture. If this becomes successful, then I can replicate the same in other locations. First move is very important, thereby choice of location is very important.

# Data acquisition and cleaning

- In order to segment and explore 5 boroughs and 306 neighborhoods

  Link to the dataset: https://geo.nyu.edu/catalog/nyu_2451_34572

- Fabric wholesale markets in NYC segmented into neighborhoods, we will cluster the data of each neighborhood and analyze the dataset using yelp API

  Link :https://www.yelp.com/search?find_desc=Wholesale+Fabric&find_loc=New+York%2C+NY

- Data of fashion/clothing stores opened between year 2015-2019 in New York city, we will segment the data in boroughs and analyze the frequency of brands in neighborhoods

  Link: https://nycfuture.org/pdf/CUF_StateoftheChains_2019_7.pdf

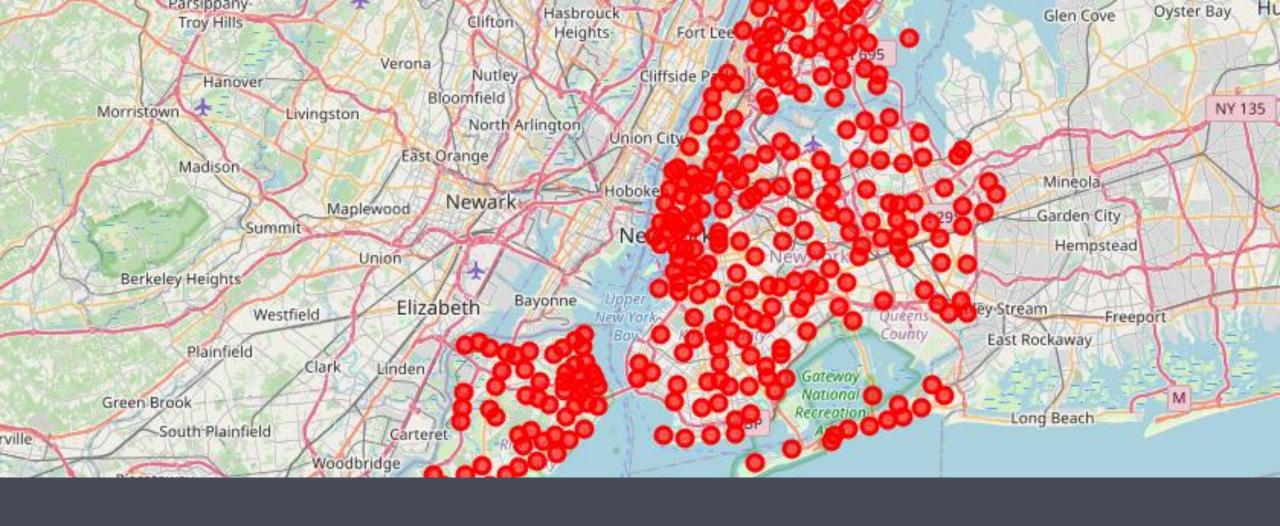- To analyze the demographics of NYC we will scrap data from the links below

  Link: https://en.wikipedia.org/wiki/New_York_City
  Link: https://en.wikipedia.org/wiki/Portal:New_York_City

# Analyzing Boroughs of NYC

| | Borough | Neighborhood | Latitude | Longitude |
|---|---------|--------------|----------|-----------|
| 0 | Bronx | Wakefield | 40.894705 | -73.847201 |
| 1 | Bronx | Co-op City | 40.874294 | -73.829939 |
| 2 | Bronx | Eastchester | 40.887556 | -73.827806 |
| 3 | Bronx | Fieldston | 40.895437 | -73.905643 |
| 4 | Bronx | Riverdale | 40.890834 | -73.912585 |

– **JSON file is scraped and dataset of NYC is created**

Analyzing NYC dataset | Used Foursquare API to plot the map of neighborhoods of NYC

# Population & Racial Composition Dataset of NYC

```
[54]: population_data = population_data.fillna('')
      population_data
```

[54]:

| | Borough | County | Estimate_2017 | GrossDomesticProduct\n | square_miles | square_km | persons_sq_mi | squarekm | persons/sq.mi | persons/km2\n |
|---|---------|--------|---------------|------------------------|--------------|-----------|---------------|----------|---------------|--------------|
| 0 | The Bronx | Bronx | 1,418,207 | 42.695\n | 30,100 | 42.10 | 109.04 | | | |
| 1 | Brooklyn | Kings | 2,559,903 | 91.559\n | 35,800 | 70.82 | 183.42 | | | |
| 2 | Manhattan | New York | 1,628,706 | 600.244\n | 368,500 | 22.83 | 59.13 | | | |
| 3 | Queens | Queens | 2,253,858 | 93.310\n | 41,400 | 108.53 | 281.09 | | | |
| 4 | Staten Island | Richmond | 476,143 | 14.514\n | 30,500 | 58.37 | 151.18 | | | |
| 5 | | City of New York | 8,336,817 | 101,000 | 842.343 | 302.64 | 783.83 | | | |
| 6 | | State of New York | 19,453,561 | 89,000 | 1,731.910 | 47,214 | 122,284 | | | |
| 7 | | Sources:[14] and see individual borough articles | | | | | | | | |

[92]:

| | Racialcomposition | 2010 | 1990 | 1970 | 1940 |
|---|-------------------|------|------|------|------|
| 0 | None | None | None | None | None |
| 1 | White | 44.0% | 52.3% | 76.6% | 93.6% |
| 2 | Non-Hispanic | 33.3% | 43.2% | 62.9% | 92.0% |
| 3 | Black or African American | 25.5% | 28.7% | 21.1% | 6.1% |
| 4 | Hispanic or Latino (of any race) | 28.6% | 24.4% | 16.2% | 1.6% |
| 5 | Asian | 12.7% | 7.0% | 1.2% | – |

```
[93]: df.to_csv('nyc-demographics.csv',index=False)
```

# No of clothing-stores opened in NYC from 2015-2019

```python
print("Number of clothning-stores opened in Brookly from year 15-19  ", df['Brooklyn'].sum())
print("Number of clothning-stores opened in Bronx from year 15-19 ", df['Bronx'].sum())
print("Number of clothning-stores opened in Queens from year 15-19 ", df['Queens'].sum())
print("Number of clothning-stores opened in Manhattan from year 15-19 ", df['Manhattan'].sum())
print("Number of clothning-stores opened in Staten Island  from year 15-19", df['Staten Island'].sum())
```

```
Number of clothning-stores opened in Brookly from year 15-19   1698.0
Number of clothning-stores opened in Bronx from year 15-19  984.0
Number of clothning-stores opened in Queens from year 15-19  1752.0
Number of clothning-stores opened in Manhattan from year 15-19  2883.0
Number of clothning-stores opened in Staten Island  from year 15-19 454.0
```
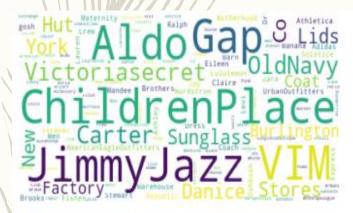
# Most Preferred Clothing Brands in NYC
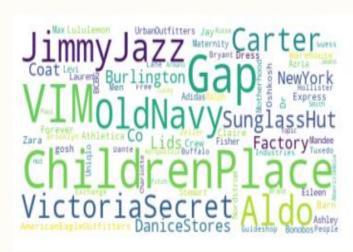


Top 8 clothing brands of NYC

Top 5 clothing brands of Brooklyn

Top 5 clothing brands of Bronx

Top 5 clothing brands of Manhattan
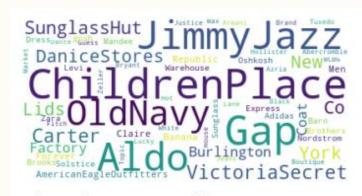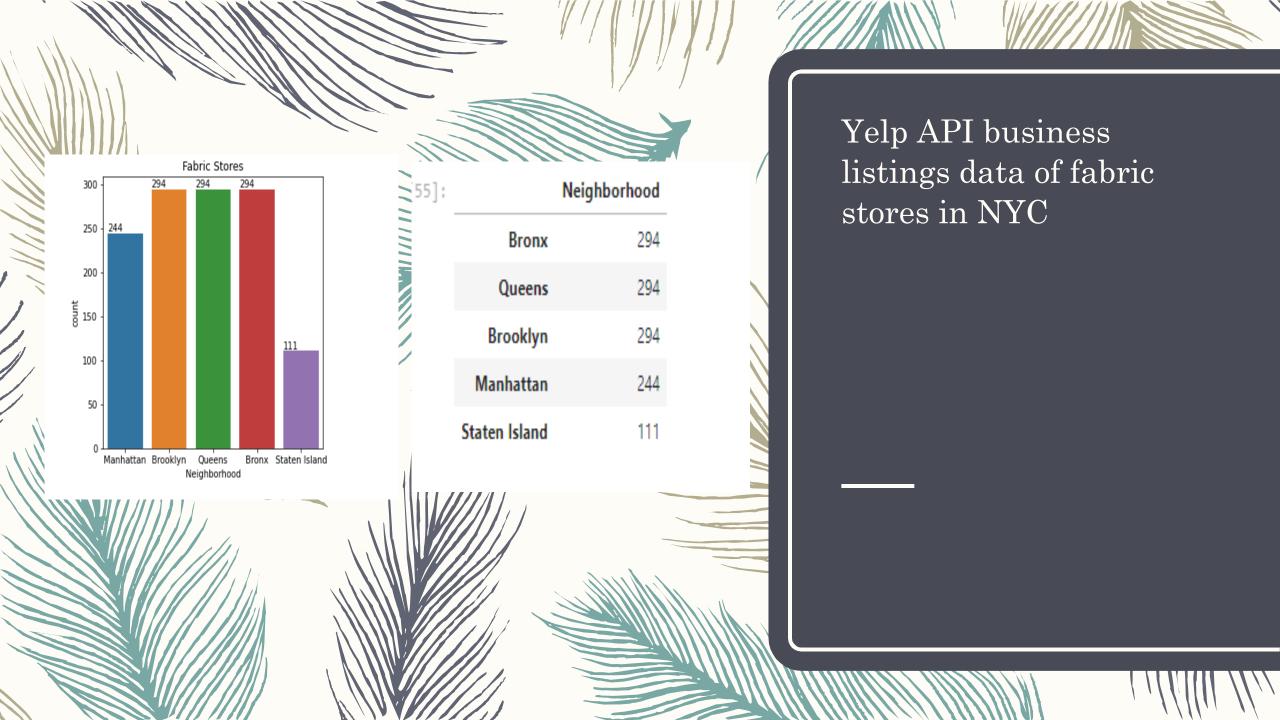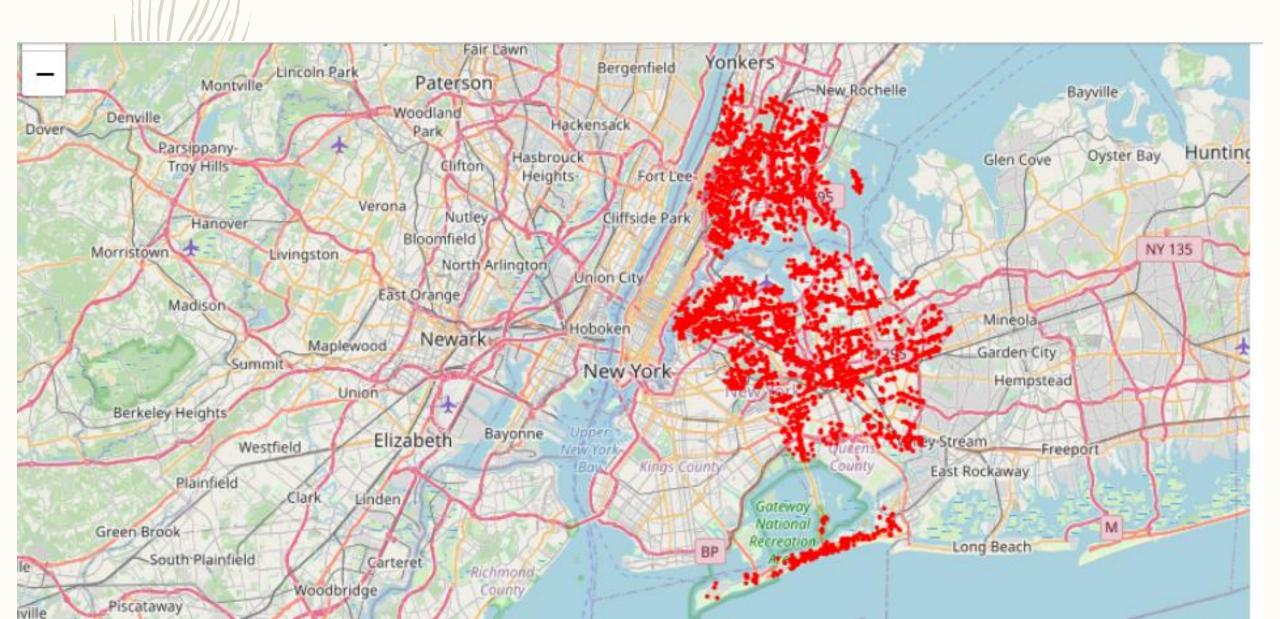
Top 5 clothing brands of Queens

Top 5 clothing brands of Staten Island

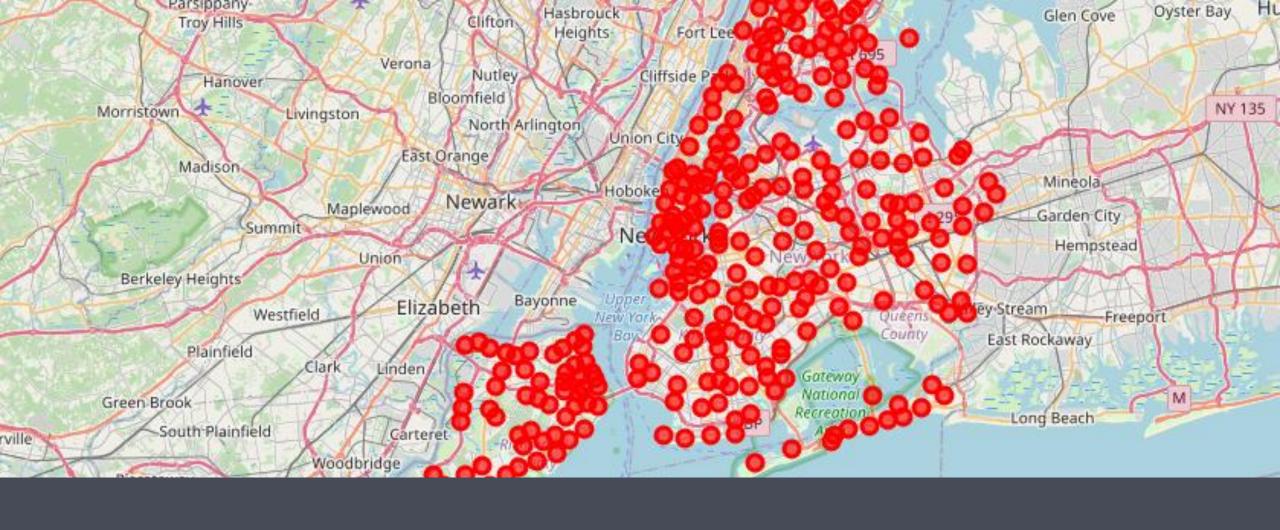Yelp API business listings data of fabric stores in NYC

# Venue Cluster of Queens & Bronx

Venue Cluster of Queens & Bronx

Used Foursquare API to plot

# Conclusion:

– To open a clothing business market trends needs to be considered that what kind of product I am going to sell. After understanding of market trends and frequency of opened outlets in NYC one has to offer something like top 8 brands of NYC as a competitor, but this might require a lot of investment and capital.

– After analyzing the population Bronx ,Brooklyn and Manhattan are top 3 populous boroughs which means that higher population higher consumer demand ,to target a lot of customers this can be one option to consider about starting business in these neighborhoods.

– The number of top 3 outlets opened in NYC in last five years are higher in Manhattan and Queens which means there is already a lot of competition to start a new clothing line.

– Along with clothing lines if wholesale fabric is considered as a competitor then Bronx, Brooklyn and Bronx has higher number of stores .

– Based on all factors above we can consider the cluster 0 of untapped markets with less competitors  and same practice can be performed rigorously for other boroughs too.

– In the end to start a new business with less capital and less competitors Staten Island is the good option to experiment as it has lowest number of both wholesale fabric and clothing line stores.