



# CASE STUDY AT MANHATTAN, NEW YORK

SELECTING A NEIGHBORHOOD TO OPEN A NEW JAPANESE RESTAURANT

## BUSINESS PROBLEM

- I would like to open a Japanese Restaurant in Manhattan, New York but I don't know which neighborhood to select.
- It is not wise to open the restaurant in a neighborhood with restaurants that are highly appreciated.
- It is also not wise to open the restaurant in a neighborhood with a lot of restaurants of the same category.



# DATA SOURCE

- Manhattan Geospatial Data: 2014 New York City Neighborhood Names by New York (City), Department of City Planning.  
[https://geo.nyu.edu/catalog/nyu\\_2451\\_34572](https://geo.nyu.edu/catalog/nyu_2451_34572)
- Foursquare API: <https://developer.foursquare.com/>

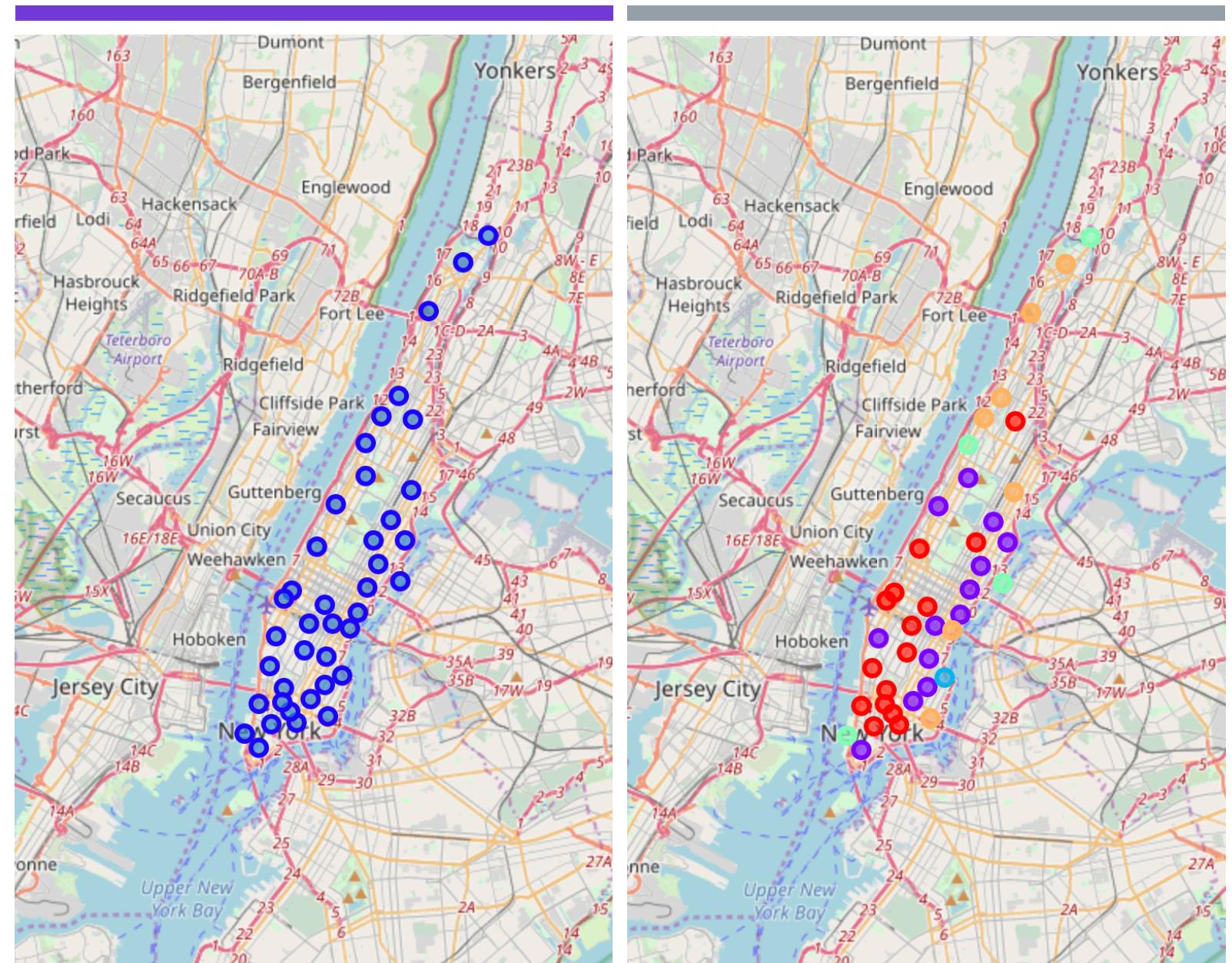


## Neighborhood Map

# MANHATTAN NEIGHBORHOODS AND CLUSTERS

- Cluster 0
- Cluster 1
- Cluster 2
- Cluster 3
- Cluster 4

## Clustered neighborhood



# RESULT

<b>Cluster Labels</b>	<b>Venue Count</b>
<b>1</b>	1      44
<b>0</b>	0      32
<b>3</b>	4      11
<b>2</b>	3      2

Fig 1. Cluster 1 has the most Japanese Restaurant opened

Fig 2. Manhattan Valley has the combine the highest score (Low count and low rating)

	<b>Neighborhood</b>	<b>Venue Count</b>	<b>Mean Rating</b>	<b>Count Score</b>	<b>Rating Score</b>	<b>Score</b>
<b>6</b>	Manhattan Valley	2	7.800000	5	12	17
<b>9</b>	Sutton Place	2	7.950000	5	10	15
<b>0</b>	Carnegie Hill	5	7.880000	3	11	14
<b>11</b>	Upper West Side	2	8.050000	5	9	14
<b>4</b>	Gramercy	1	8.100000	6	7	13
<b>12</b>	Yorkville	5	8.060000	3	8	11
<b>3</b>	Financial District	2	8.600000	5	4	9
<b>8</b>	Noho	2	8.650000	5	3	8
<b>1</b>	Chelsea	2	8.750000	5	2	7
<b>7</b>	Murray Hill	6	8.450000	2	5	7
<b>10</b>	Turtle Bay	9	8.222222	1	6	7
<b>2</b>	East Village	2	9.200000	5	1	6
<b>5</b>	Lenox Hill	4	8.750000	4	2	6

## DISCUSSION AND RESULT

- More parameters, including median or mean income, median or mean rental price, and distribution of ethnicities could be considered
- Alternative accurate statistic tools could be used to validate
- The rent is relatively low and young people take a large percentage of population
- Take strategy of offering a broader and more economical menu



Thank you!

