

An aerial photograph of a dense city skyline, likely New York City, serves as the background. The image is overlaid with five semi-transparent red circles, each containing a white text label. The labels are arranged in a circular pattern: 'Introduction' on the left, 'Methodology' at the top center, 'Conclusion' at the top right, 'Results Discussion' at the bottom right, and 'DATA' at the bottom left.

Methodology

Conclusion

Introduction

Results
Discussion

DATA

The background of the slide is a dark, aerial photograph of a city skyline, likely New York City, with numerous skyscrapers. Overlaid on this image are two large, semi-transparent circles. The larger circle on the left is red and contains the title 'Introduction' and a bulleted list. The smaller circle on the right is blue and contains the text 'Important features'.

Introduction

Important
features

- In this project, we are trying to find a solution to the stakeholders that want to open a Turkish Restaurant in Amsterdam.
- Since there are lots of parameters to find a best place to open a Turkish Restaurant, we can use data science techniques to handle with this problem.



Important Features

How many
restaurants are in
a special
neighborhood?

What type of
restaurants are
there?

Is a neighborhood
special or not with
people's culture who
lives there?



Conclusion

Methodology

Introduction

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DATA



API's used

- Pgeocode
- Foursquare

Features

- Postal code
- Neighborhood Latitude
- Neighborhood Longitude
- Venue Name
- Venue Latitude
- Venue Longitude
- Venue Category

The Brief

There are totally 633 restaurants and 56 unique restaurant types in Amsterdam.



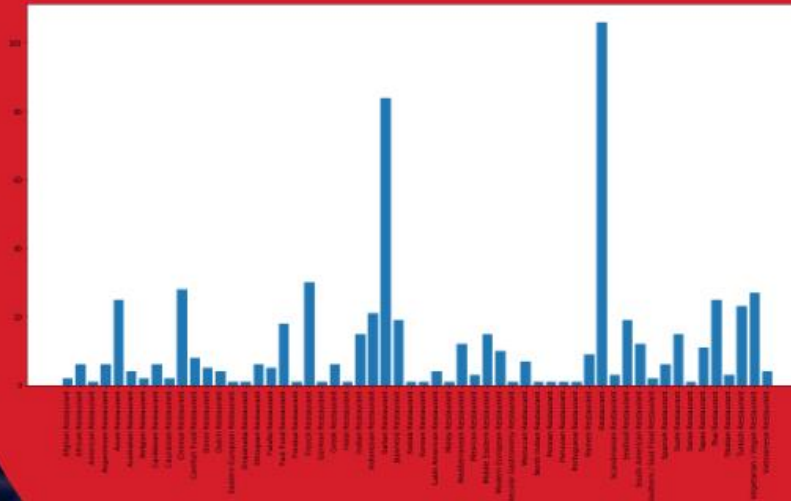
Frequency
of Rests

Turkish
Rests

Clustering

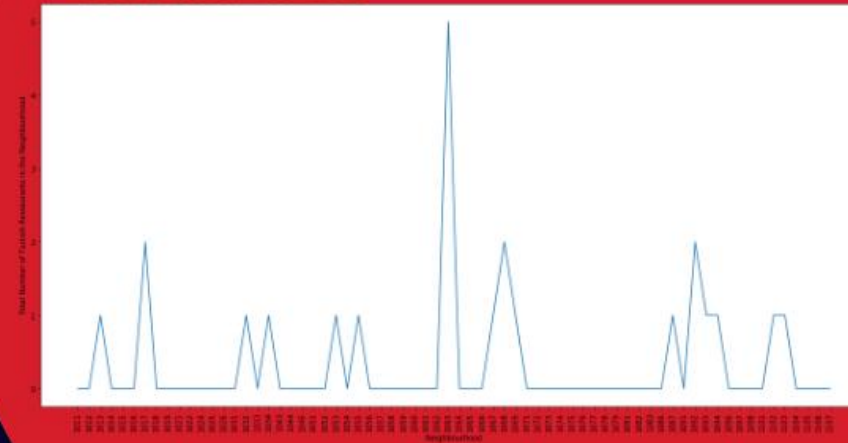
Best
Place

Frequency of Restaurants



Turkish Restaurants

1063 has highest number of Tr.
Restaurants



Features

We will use restaurant types as features.
and then we will implement k-means
clustering

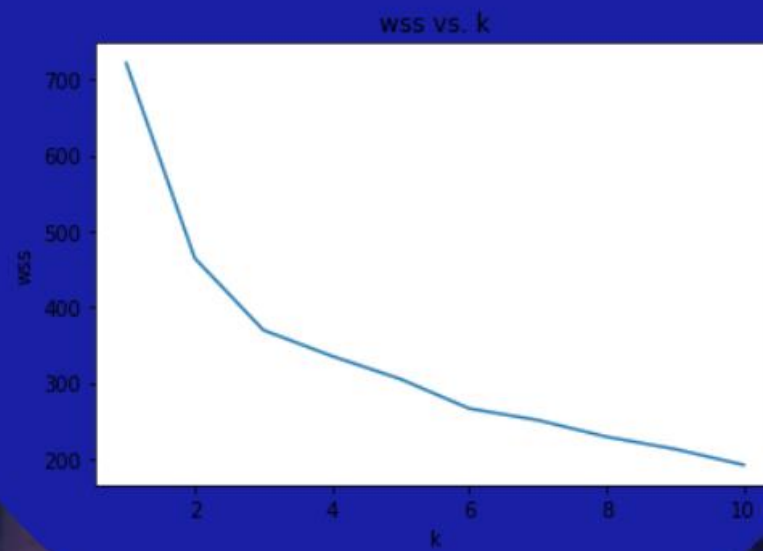
- French Restaurant
- Chinese Restaurant
- Vegetarian / Vegan Restaurant
- Thai Restaurant
- Asian Restaurant
- Turkish Restaurant
- Indonesian Restaurant
- Japanese Restaurant
- Restaurant
- Italian Restaurant

Best K

Clusters

Best K

As you can see with elbow method. Best k equals to 6.



Clusters

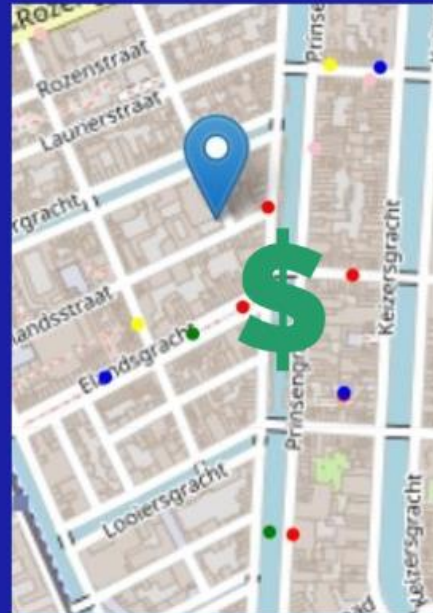
- While cluster 0 is so common, there is not many restaurants in that areas. So we can think that we don't suggest these neighborhoods to the stakeholders.
- Cluster 1 has more average restaurants than cluster 0. But it is really low when we compare with other clusters.
- Cluster 2 has the highest average number of Turkish Restaurants. So, maybe these neighborhoods are places where Turkish people live.
- Cluster 3 has more restaurants than Cluster 2. But there are a lot of restaurants without any specific category. So, this cluster needs more research.
- Even though cluster 4 has a lot of restaurants, it has a huge number of Italian Restaurants. I can assume that the people lives in those areas really like Italian cuisine. So opening a Turkish restaurant in these neighborhoods may not be a good idea.
- When we look at the cluster 5, it can be seen that there are many asian restaurants. So the same situation exists like cluster 4

Best Place

- After clustering, we can see that cluster 2 and cluster 3 is more suitable when compared with other clusters.
- When we look at the distance from Amsterdam center feature, there are only 3 neighborhoods with distance less than 2 km. They are neighborhoods with 1013, 1016 and 1051 postal codes. But 1016 has highest number of restaurants.
- So the attraction point where we are looking for should be 1016

1016

Restaurants
and attraction
area in 1016



An aerial photograph of a city, likely Amsterdam, serves as the background. Two large, semi-transparent red circles are overlaid on the image. The left circle contains the 'Results' section, and the right circle contains the 'Discussion' section. The text is white and clearly legible against the red background.

Results

- Even though there are 81 neighborhoods across Amsterdam, many of them have a small number of restaurants. We think that it is because of the attraction of city center. So we focused on neighborhoods that are closer to city center.
- Also there is a neighborhood with 5 Turkish Restaurants, we don't prefer to open another Turkish restaurant there. We assume that it is a place where mostly Turkish people live. Despite it looks good to open a Turkish Restaurant in a place where mostly Turkish people live, the market is shared by only 5 Turkish restaurants.
- Italian restaurants are very popular in Amsterdam thanks to the Italian Cuisine

Discussion

Discussion

There are also missing points to lighten for opening a Turkish Restaurant

- What are the rental costs for restaurants compared with the market in that region?
- Is there any good place to rent in these neighbourhoods for a restaurant?
- Why are specific types of restaurants so common in some neighbourhoods? What are the exact reason? In this project, we only assumed some of these reasons



Conclusion

We try to find the best place for a Turkish Restaurant and understand the characteristics of neighbourhoods by looking the venues according to foursquare venue data.

There are some neighbourhoods with mostly one specific type of restaurants in contrast to neighbourhoods that have different kinds of restaurants.

When the distance from the city center and the total number of restaurants of the neighbourhoods is taken into consideration, Neighbourhood with 1016 postal code is the best place to open a Turkish Restaurant.

We come to a point but it still needs more research to decide the optimal place for a Turkish Restaurant