

Opening a new **Azerbaijani-Turkish restaurant** in **Amsterdam, Netherlands**



Main idea

In this project I will try to find an optimal location for a new **Azerbaijani restaurant** in **Amsterdam, Netherlands**.

Azerbaijani cuisine has been shaped
by Persian, Caucasian and Turkish cultures,
but we will examine **the last 2 categories** only to reveal the
optimal area for opening brand-new restaurant in Amsterdam.

Data

- List of neighborhoods in Amsterdam, Netherland
 - 105 neighbourhoods
- Latitude and Longitude of the neighborhoods
[kaggle.com](https://www.kaggle.com)
- Venue data related to restaurants in the area
 - 4150 venues
 - 286 venue categories

Neighbourhoods

In our dataset we have 105 unique neighbourhood:

```
print(ams_df.shape)
ams_df.head()
```

```
(105, 3)
```

	Neighbourhoods	Latitude	Longitude
0	Admiralenbuurt	52.372734	4.856363
1	Amsteldorp	52.360540	4.905160
2	Amsterdam Oud-West	52.365390	4.870220
3	Amsterdam Oud-Zuid	52.352350	4.877880
4	Amsterdam Science Park	52.354320	4.958030

Venues

We obtained 4150 unique venues from Foursquare:

```
: #Check size of resulting dataframe  
print(ams_venues.shape)  
ams_venues.head()
```

(4150, 7)

	Neighborhood	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
0	Admiralenbuurt	52.372734	4.856363	Radijs	52.371049	4.856756	Bistro
1	Admiralenbuurt	52.372734	4.856363	Rein Cityspa	52.371217	4.855969	Spa
2	Admiralenbuurt	52.372734	4.856363	Sapporo Ramen Sora	52.371294	4.855144	Ramen Restaurant
3	Admiralenbuurt	52.372734	4.856363	Maz Mez	52.371231	4.857968	Lebanese Restaurant
4	Admiralenbuurt	52.372734	4.856363	Café Cook	52.371208	4.852792	Pub

Venue Categories

We have 286 unique venue categories according to Foursquare segmentation:

```
#Number of unique venue categories  
print('There are {} uniques categories.'.format(len(ams_venues['Venue Category'].unique())))  
  
There are 286 uniques categories.
```

Category check

```
# check if the results contain "Caucasian Restaurant"  
"Caucasian Restaurant" in ams_venues['Venue Category'].unique()
```

True

```
# check if the results contain "Azerbaijani Restaurant"  
"Azerbaijani Restaurant" in ams_venues['Venue Category'].unique()
```

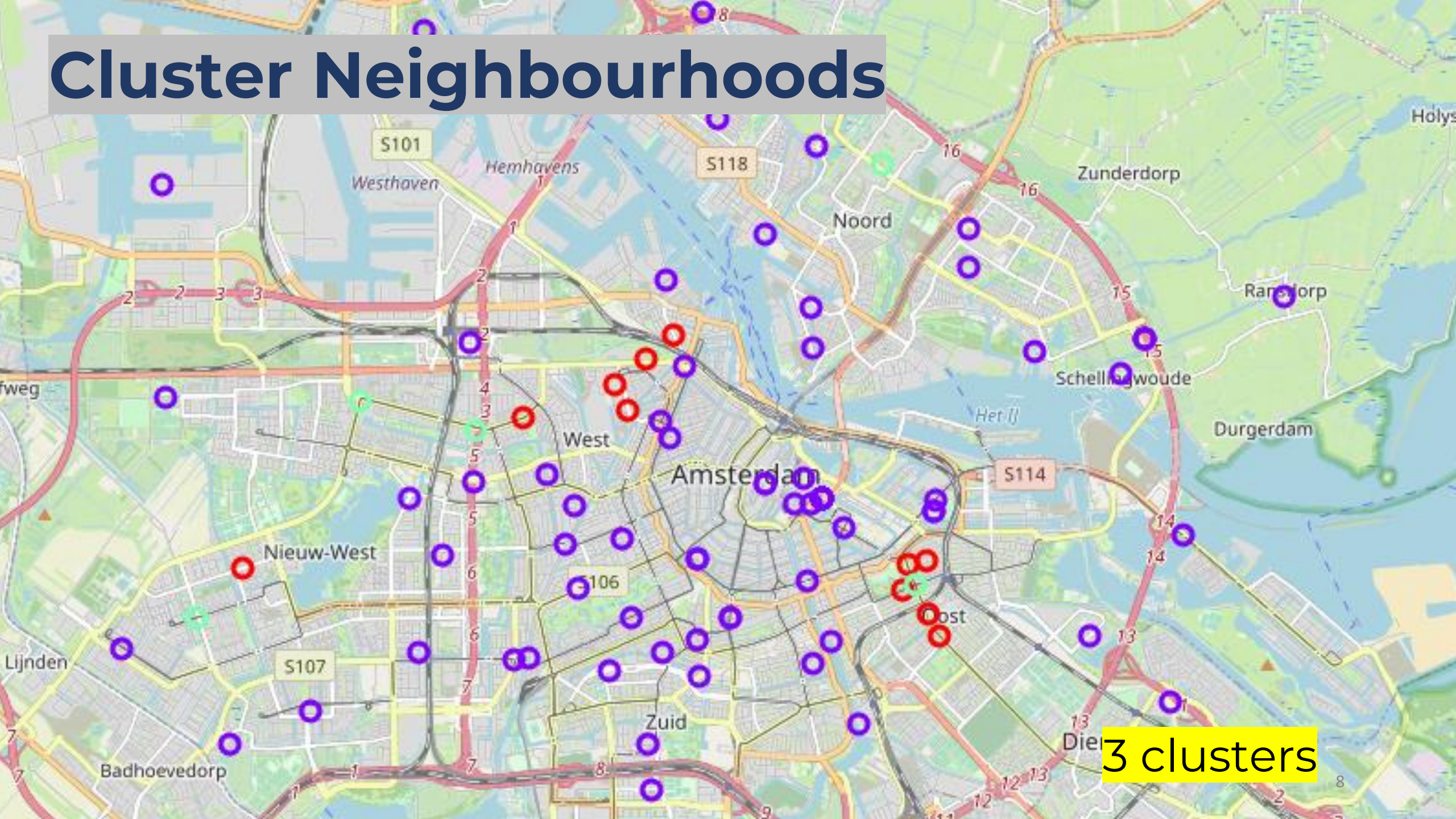
False

```
# check if the results contain "Turkish Restaurant"  
"Turkish Restaurant" in ams_venues['Venue Category'].unique()
```

True

Eventually we focus on “Turkish Restaurant” category, due to numbers.

Cluster Neighbourhoods



3 clusters

Results

- ✓ Most of the Turkish restaurants are in **Cluster 0** and **Cluster 1** neighbourhoods:
 - **Amsterdam-West and Amsterdam-Oost areas**
- ✓ Optimal recommended area to open:
 - **Cluster 1 neighbourhood - Overtombuurt**

Future directions

- Use census data for deeper analysis
- Customer research and segmentation for forecasting the new venue and Azerbaijani cuisine demand in the area

Thank you!