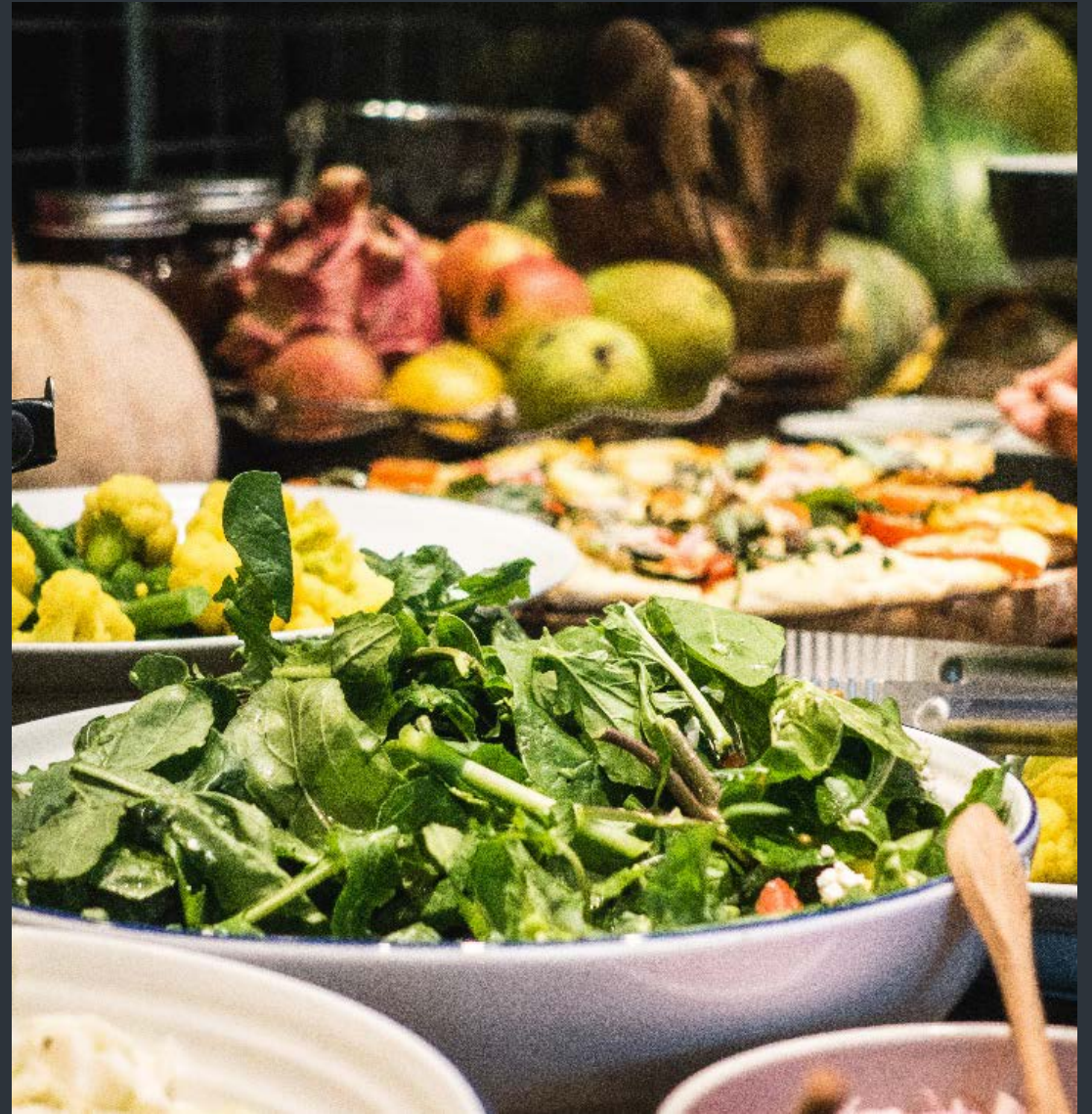


# Finding optimal salad bar location

IBM Applied Data Science course  
Capstone Project





# Problem

- ▶ What is the optimal neighbourhood to start a new salad bar, based on a comparison between neighbourhoods in the four cities considered using demographic and income data combined with data on other venues in the area, based on the following requirements and background:
  - ▶ Only Amsterdam, Rotterdam, Utrecht and The Hague
  - ▶ Target group: single household females
  - ▶ Areas with abundant availability of other restaurants are preferred
  - ▶ Preferably none or few competing salad bars in the area.

# Data used



DATASETS FROM THE DUTCH  
CENTRAL BUREAU OF STATISTICS ON  
DEMOGRAPHIC AND INCOME  
DATA

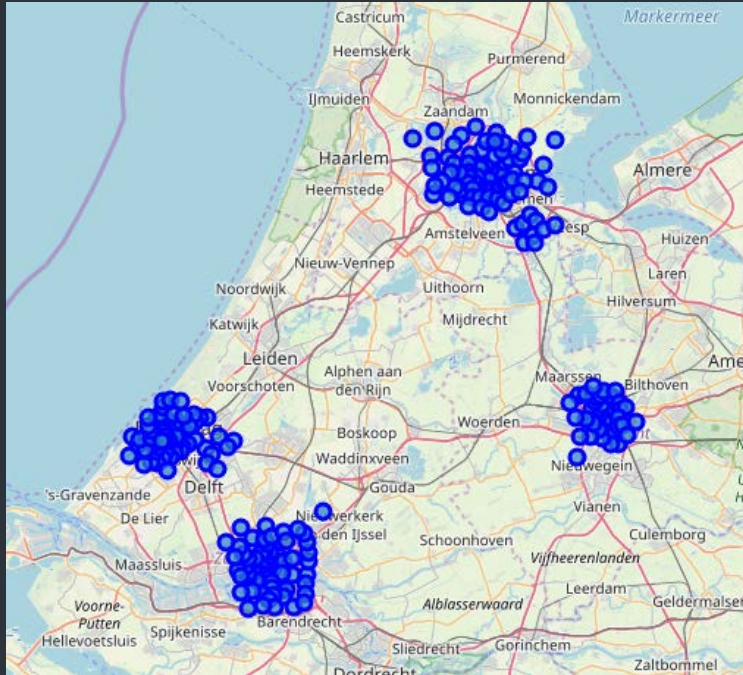


COMBINED WITH FOURSQUARE  
DATA ON VENUES PRESENT



COMBINED IN A DATASET PER  
DUTCH FOUR DIGIT POSTAL CODE

## Methodology



Cluster postal code areas based on venue type, demographic data and income data



Deselect areas with Potential competing salad bars already present



Selecting postal code with highest percentage of females

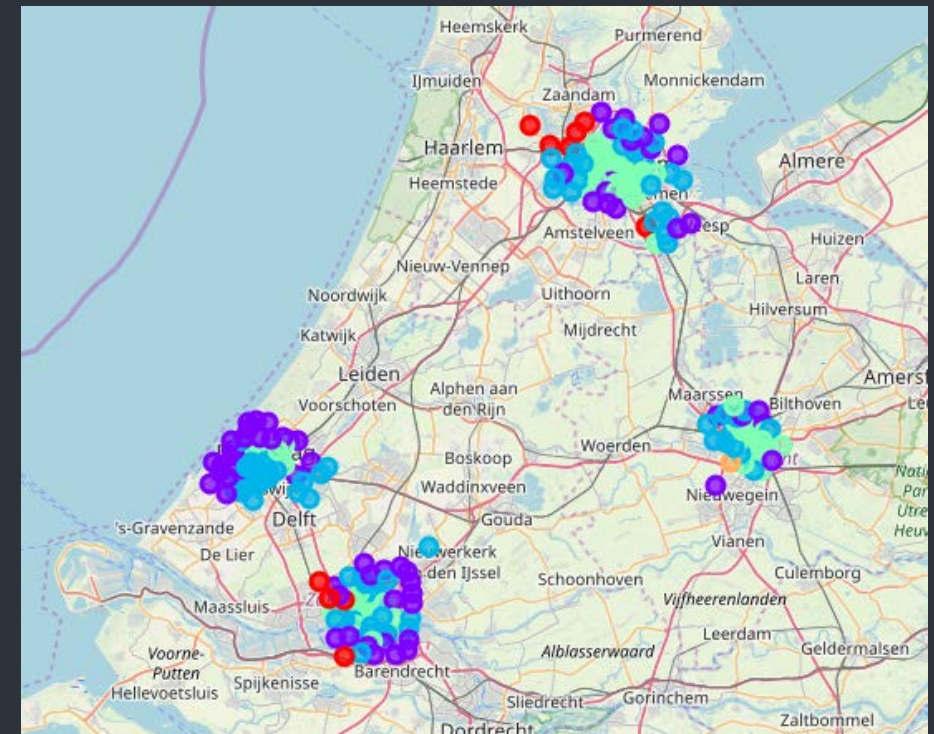


Final check on selected postal code

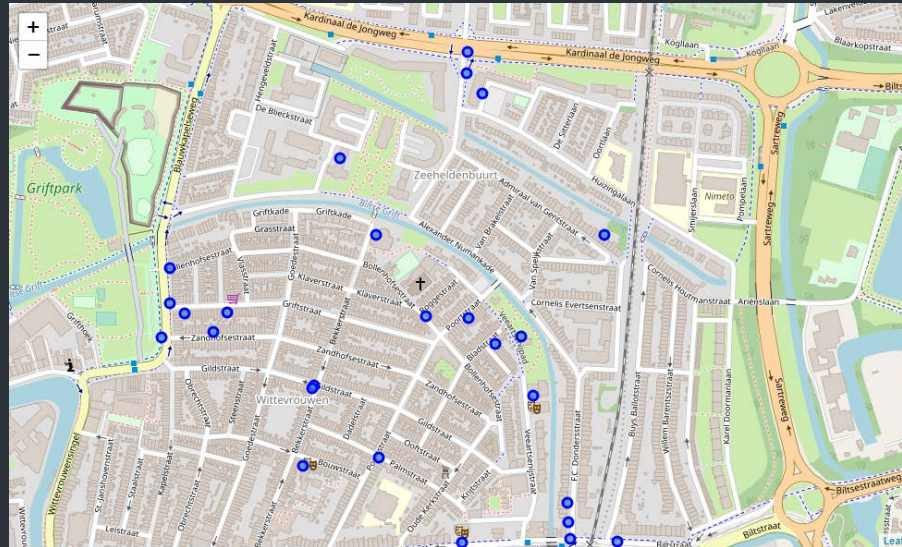


# Results: Selected cluster 3

- ▶ Cluster 3 is selected: cyan cluster on map
- ▶ Characteristics of cluster 3
  - ▶ Population density higher than average
  - ▶ Relatively low migration background, higher than average income
  - ▶ Venues includes shops and many restaurants
  - ▶ Very many single person households
- ▶ Conclusion:  
Busy area with many restaurants. Very high on single person households. Very good candidate for opening salad bar.



# Results: Selected postal code 3572

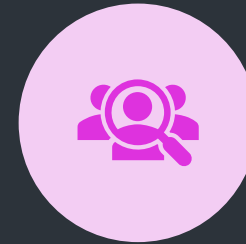


- Highest percentage of females in selected cluster
- High percentage of single households, further meeting our target group.
- No competing salad bars, but abundance of other restaurants

# Conclusion



*Only locations in the four biggest cities in the Netherlands are considered, being Amsterdam, Rotterdam, Utrecht and The Hague*  
✓ Met. Selected location is in the city of Utrecht.



*From market research a projected ideal target group is defined: single household females*  
✓ Met. The selected postal code has a very high number of females meeting this target group.



*Areas with abundant availability of other restaurants are preferred as experience indicates that this attracts more potential customers to new restaurants*  
✓ Met. The selected postal code has numerous other restaurants.



*Preferably none or few competing salad bars in the area.*  
✓ Met. No other salad bars present according to Foursquare.