



IBM Data Science Professional Certificate

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The Battle of Neighborhoods

Capstone project

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Abstract

TBD.

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Introduction**Background**

McDonald's is worldwide maybe the most well-known fast food franchise formula. In the Netherlands it has about 250 restaurants, weekly they serve together over 3 million guests. Restaurants are owned by a franchisee or by the McDonald's itself. The company is still looking to expand their businesses and therefore looking into possible new venues constantly. New restaurants have a need for a minimal floorspace and a minimal number of inhabitants in the area.

Problem

For this project we are exploring the possibility if and where McDonald's could open a new restaurant in the city of Amsterdam, the Netherlands, with regards to the specified requirements. As floor surface a minimal of 500 square meters is necessary and 35000 inhabitants/potential customers per venue. McDonald's already has 17 active venues in the Amsterdam area so it will be a real challenge to find a new spot.

Interest

This project and it's result are interesting for the McDonald's corporation as well as a potential franchisee looking to start a new venue in Amsterdam.

Data

To analyse this problem we are looking into several different datasets. Firstly divide Amsterdam into clusters of 35,000 inhabitants. For this a dataset from the municipality of Amsterdam is available with all the buildings in the city and their latitude and longitude location data. The set also describes if a specified address it is a house or a shopping venue and the size of the building in square meters. In the data set are 466,478 living accommodations present and according to the website of the municipality the average persons per household in Amsterdam is 1.8. That leads to a total of inhabitants of 839,660 (on the time of the dataset) Based on the buildings dataset we form clusters of 19,444 addresses ($35000/1.8$)

Secondly, in the found clusters we check if there already is a McDonald's present, utilizing the Foursquare API. If a cluster does not have a restaurant we try to find a possible address in this cluster, from the building dataset to be presented as a possible new restaurant.

The dataset used for this analysis can be downloaded from:

<https://api.data.amsterdam.nl/dataselectie/bag/export/>

Methodology

TBD

Results

TBD

Discussion

TBD

Conclusion

TBD

References

Het huidige document heeft geen bronnen.