

# IBM Capstone Project

Opening an Indian restaurant in Amsterdam,  
Netherlands

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**August 2019**

## **Introduction**

Amsterdam is the capital of Netherlands and is one of the most popular destinations of Europe, receiving more than 4.63 million tourists annually. From its earliest days, Amsterdam has also been a bustling hub of commerce that welcomed other cultures with open arms. It is also popular for its night life and parties. For tourists coming from different parts of the world, shopping and food are one of the key elements of visiting a city, especially for a place like Amsterdam. They would be interested in buying something local (for memory) or would like to dine in a good restaurant for trying out different cuisines. I have lived in Almere for almost a year, which is closer to Amsterdam and have often explored the city over the weekends and have found that there are not many authentic Indian restaurants. Most of them are run by people who are not Indians, and hence it lacks the Indian touch and flavour. Indian cuisines have so much variety that any body would relish the flavours. It includes North Indian, Mughlai, Indo-Chinese etc. Because India has so many states and every state has their own regional cuisines it is very difficult to name everyone here. Opening a restaurant in any popular area requires a meticulous research and is more complicated than it seems such as finding good authentic Indian cooks and what kind of restaurants are operational in that area. Will a new Indian restaurant be a success or failure depends on lot many factors like budget, labour, rent, accessibility to that area, how popular that area is? etc.

## **Business Problem**

This capstone project will answer the business problem: Where would someone open an authentic Indian restaurant in the city of Amsterdam? We will select best locations in the city of Amsterdam and using data science techniques such as clustering will answer the question.

## **Target Group**

This project would be particularly helpful to people who would want to diversify their businesses or get into the food industry. Since Indian cuisines are extremely popular in the world because of its rich variety and flavours, it would be worth the risk as Amsterdam is bustling with tourists throughout the year. As per a recent report issued by Euromonitor, the restaurant business sector in Netherlands was one of the prolific economic segments in 2015 and 2016. The two main factors contributing to the

development of the food sector were: the steady economic growth of Netherlands and the higher consumer confidence.

## Data

We will need the following data:

- List of neighbourhoods in Amsterdam
- Latitude and Longitude of those neighbourhoods for plotting the map and getting the venue data.
- Venue data especially restaurant details and use it for clustering the neighbourhoods.

## Methodology

1. [https://en.wikipedia.org/wiki/Category:Neighbourhoods\\_of\\_Amsterdam](https://en.wikipedia.org/wiki/Category:Neighbourhoods_of_Amsterdam): Web Scraping for getting the neighbourhoods of Amsterdam City.
2. Python Geocoder package for getting the coordinates of neighbourhoods.
3. Foursquare API for getting the venue details of each neighbourhood.
4. k-Means for clustering the neighbourhoods.