Finding the Best Place for a Coffee House in Vienna, Austria

John Oxales

May 29, 2021

1. Introduction

1.1 Background

Vienna's very first coffee house opened in 1683. Even if Vienna was not the pioneer in coffee house culture, it has - over the centuries - established a coffee house tradition like no other city in the world. Coffee and coffee houses are at their best in Vienna!

1.2 Problem

Since so many coffee houses can be already found in any district in Vienna it would be good to know if there is a strong correlation between the presence of coffee houses in the vicinity of sightseeing places or any other venues like offices or shopping malls. It can be assumed that those places are highly frequented. This is a relevant key-indicator to be considered in order to have a profitable business. Furthermore the question for a reasonable rent comes up in order to find the ideal spot for the coffee house. So two main criterias need to be met:

    a) area of interest (representing high frequency of passers-by)
    b) low rental fee

1.3 Interest

These questions could be of high interest for any new investor or entrepreneur who wants to open one or maybe even more coffee houses in Austria's capital. This project can also be part of business analytics for larger companies who consider expanding their business.

2. Data acquisition and cleaning

2.1 Data sources

For this project the following data is going to be used to gain insight and answer the questions:

Datasource:
    - Foursquare API: "https://developer.foursquare.com/"
Purpose:
    - Get all venues in each neighborhood (coffee houses, sightseeing spots, malls etc.)

- Vienna rent statistics: "https://www.immopreise.at/Wien/Wohnung/Miete"

Purpose:
- For practice purposes this data is only going to represent a rough overview of mean rent in each district from this year. This should be sufficient in the beginning.

2.2 Data cleaning

Data will be scraped from both sources Foursquare and Immopreise and are going to be combined into one table.

2.3 Feature selection

After data cleaning the following features are going to be used:
- Neighborhoods (geolocation coordinates extracted with geopy)
- Districts
- Coffee
- Arts (for sightseeing and leisure activity spots)
- Shopping
- Rent prices
- Spatial size (small, medium, big, large)