Analysis of new Restaurant Location in Attica, Greece

Nikolaos Syrios April 2020

1. Introduction

1.1. Background

Opening a new restaurant is an investment that has a lot of variables to be considered. The type of the restaurant, the cuisine, the employees are some of the most important aspects of it. However before making the very first recruitment, the location must be taken into consideration. The choice of the location can be proven very advantageous for a business, especially for a restaurant that needs to be known by customers and be relatively accessible. Therefore, the ability to predict to some extent, the possibility of a successful business with regards to the location chosen can be crucial in the beginning of operations as well as in the prospects.

1.2. Problem

As it was briefly outlined in the introduction, the success of a restaurant relies heavily on its location. Opening a restaurant in Attica, Greece is certainly a move in the right direction, considering the cultural and historical value it has to offer. Tourism alone can offer up to 5 million travelers each year consisting of about 16% of Greece's total tourism. [1] The question posed is which municipality of Attica would be beneficial, yet financially reasonable to set up the new business.

1.3. Interest

Obviously, this comprises a proof of concept of an analysis made before opening a new business. The outcomes do not provide any immediate call to action, but they give a general impression of the nature of the process and the potential of such analysis.

2. Datasets

2.1. Data sources

The dataset consisting of the Municipalities of Athens and their respective location coordinates has been acquired from Wikipedia using web-scraping techniques in each Municipality webpage. The overview page, containing the individual links can be found here: https://en.wikipedia.org/wiki/Category:Municipalities of Attica.

The Foursquare API provided valuable information about venues in these Municipalities and their categorical hierarchy regarding their frequency. Finding the top 10 common venue categories proved to be a vital part of the analysis, as it enabled the subsequent clustering of the Municipalities according to their similarity. Picking the right cluster (set of Municipalities) is important for later analysis.

The data of property pricing in these areas as well as the property index fluctuation of the past few years has been provided by https://www.spitogatos.gr, the leading real estate website in Greece. These data reflect the actual value of properties sold or rented based on the real world transactions made using the website from 2011 till this day.