IBM Data Science Professional Certificate Capstone

May 2020

1 Problem description

1.1 Introduction

A new accounting company (*TH-squared*) wants to open a business office in a small city called Xanthi, located in the region of Western Thrace, northeastern Greece. Even though the population of the city is small (70,873 inhabitants), the city offers great potential for a new company due to its' geographical location (intersection between the Balkans, Turkey and Europe).

In order to succeed, *TH-squared* needs to eliminate the local competition of the existing accountants. Due to the small size of the city ($495.1 km^2$) the offices of the competitors are rather concentrated in a dense region of the city.

Also, due to a certain flexibility offered by the Greek constitution, there is a certain overlap of the services that can be offered by accounting offices with legal/lawyer offices. Thus, legal offices are also a part of the competition pool.

Lastly, an integral part of the accounting company, is the interaction with the local banks.

1.2 Research question

Where should the business office of TH-squared be located?

2 Data

We will utilize geographical data from the foursquare API to find the optimal location for the new business office of TH-squared. Specifically, we would fetch the data of the competitors (accounting offices and lawyers) and the local banks to find the optimal location for the new business office.