Opening a New Franchise

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Table of Contents

- **Introduction**
  - Business Problem
  - Pros and Cons
- **Data**
  - Sources of the data used
  - Data Description
- **Analysis**
  - Mapping the location
  - Identifying the surroundings
  - Forecast sales based on annuals expenses behavior and sociodemographic data
- **Insights and Findings**
  - Which Pros were right
  - Which Cos were right
- **Conclusion**
  - Would another Little Caesars franchise be open in Zapopan?

Introduction

Applied Data Science

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~~ Business Problem ~~

We were contacted by an group of investors, who wants to open a new Little Caesars franchise in Zapopan, Jalisco, Mexico. They think it would be profitable, but they are uncertain due to the location.

The location, where they want to establish it, is surround by low-medium social class neighborhoods. However, the volume of the population is huge, and the closest Little Caesars franchise is 10km away. That would be a 20 minutes car ride or 40 minutes bus ride.

We will look at the Pros and Cons stated by this group of investors, to find out if they are real or are just mere guesses. We will use the data obtained through the Foursquare API and the sociodemographic data retrieved from INEGI[1] and IIEG[2].

1. *INEGI stands for Statistic and Geographic National Institute (Instituto Nacional de Estadística y Geografía)*
2. *IIEG stands for Statistic and Geographic Information Institute of Jalisco (Instituto de Información Estadística y Geográfica de Jalisco)*

~~ Pros and Cons ~~

1. **Pros**
   - People would have to travel less to get the pizza.
   - It seems there is not presence of the main competitors (Dominos Pizza) in the area.
   - Pizza price is low, so it would be affordable for all nearby neighbors.

2. **Cons**
   - People in this area spends more money in groceries than in fast food restaurants.
   - The exact location would not be centered, so most of the neighborhoods would still think it is far away.
   - The majority of houses nearby has not even the basic services.

~~ Source of the data ~~

- Sociodemographic indeces by district in Jalisco, data from 2010: https://www.iieg.gob.mx/contenido/PoblacionVivienda/IIEGIterVivLoc.xls
- Sociodemographic indeces by neighborhood in Jalisco, data from 2010: https://datos.jalisco.gob.mx/sites/default/files/recursos/archivos/colsociodemo2010amg.xls
- Expenses indeces in Mexico, data from 2013: https://www.inegi.org.mx/contenidos/programas/engasto/2013/tabulados/engasto2013_tabulados.xls
- Foursquare API, data from March 2019

~~ Data Description ~~

- Sociodemographic indeces by district in Jalisco, data from 2010:

  From this dataset we will get the latitude and longitude of the neighborhoods nearby the location of the new franchise. And also, we will be able to determine if the area is a low-medium class based on the access to public services, characteristics of the houses, good economic goods and access to technology.

- Sociodemographic indeces by neighborhood in Jalisco, data from 2010:

  We will use this dataset to get an estimate of the population of the neighborhoods nearby the location of the new franchise. Based on this info and in the average of expenses we would be able to forecast sales of the primary product: Peperoni Pizza with a cost of $79.00 MXN.

~~ Data Description ~~

- Expenses indeces in Mexico, data from 2013:

  From this database we will be able to determine portion of the total of expenses on groceries and in fast food restaurants based on the total expenses by house and by person in Jalisco, and also we will estimate the percentages of expenses by aging group, in order to forecast the anual sales.

- Foursquare API, data from March 2019:

  Using the Foursquare API we will get the nearby Pizza restaurants in a range of 5km, and also the location of the others Little Caesars Franchise. We will map them in to separate charts, in order to check the distances from each franchise, and find out if the main competitors are presence in the area.


धन्यवाद
Hindi
多謝
Traditional Chinese
ขอบคุณ
Thai
Спасибо
Russian
Gracias
Spanish
شكراً
Arabic
Thank You
Obrigado
Portuguese
Grazie
Italian
Danke
German
Merci
French
多谢
Simplified Chinese
Multumesc
Romanian
감사합니다
Korean
ありがとうございました
Japanese