What's the best place to open a CrossFit gym?

Joana Chong

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1. Business introduction

1.1. Background

Cardiovascular diseases, type 2 diabetes, high blood pressure and high cholesterol rates have been increasing over the past decades and are some of the most frequent causes of death. As it's known, our daily life has become more and more sedentary, stressful, everything is getting easier to buy (i.e. home delivery services), the need to use our body to do what was meant to do – move – is decreasing and the development of tasty processed food is not encouraging nor helping us maintaining our physical health. However, there is a solution to reverse this situation: diet and exercise – and for this to be successful in the long run, is absolute key to do them both in a balanced way.

1.2. Problem

The reality previously described has spread out over the world and gyms/health centres are getting very popular and frequently attended. However, the monotonous conventional gym doesn't make lots of people happy to exercise and neither do the group dance classes … And there is where CrossFit appears, which is a constantly varied training methodology with high-intensity functional movements.

1.3. Stakeholders

So, given the problem of people getting bored with conventional gyms, CrossFit gyms have been increasingly seeked and this high demand constitutes a really good business opportunity with a promising potential. This data science project will be targeted to stakeholders interested in opening a CrossFit gym in Lisbon.

2. Data Sources

Based on the business introduction, the factors that will influence the goal of finding the best place to open a CrossFit gym are: **(1)** Finding a place with a low number of CrossFit gyms/health centres, **(2)** ideally with healthy restaurants nearby and if possible **(3)** close to the city centre.

To do so, the following data sources will be required: **Foursquare API** to find the number of CrossFit gyms/health centres, ideally close to healthy restaurants, and their locations in every neighbourhood of Lisbon, and **geopy.geocoders** to convert the addresses into latitude and longitude values.

1. A description of the problem and a discussion of the background. (15 marks)

2. A description of the data and how it will be used to solve the problem. (15 marks)