Evaluation of Cities for a Tutoring Business

Sudha Kolathu Parambil

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1.0 Introduction

1.1 Description of the problem

Everyone wants to get a good grade in their school and get into an awesome University to eventually get their dream job. Some students prefer to have extra coaching out of the classroom to achieve their ideal GPA. There are several tutoring centers available close to schools to help such students to achieve their goals. As a Mathematics Professor, I am interested in analyzing the accessibility of a tutoring center between two different cities to help me to decide where I should start a Tutoring center to help those who are unable to reach one.

1.2 Discussion of the background

I first needed to decide if I wanted to be based on the East or West of the country. I narrowed down my choices to two states, California and Ohio. According to Forbes in 2016, Ohio was listed as one of the top states in the nation to raise a family. Therefore, I would imagine that many parents would want to provide extra tutoring for their children if given the opportunity. In California, there is an abundance of high-ranking universities. The academic expectations of these universities would mean that there is a chance of there being students interested in extra help outside of the classroom.

Personally, I made the move from Ohio to California a few years ago. Based on my experience with these two cities, I narrowed my study to focus on Roseville, California and Columbus, Ohio.

1.3 Who will be Interested

I believe that this data analysis will be useful for franchise tutoring businesses, ACT-SAT coaching centers, and after-school tutoring centers who would need help deciding where to open their businesses. In addition, schools may be interested in using this data analysis to help determine the need for a tutoring center located within school.

2.0 Description of the data and How to solve the problem

2.1 Source of Data

I need to locate the city of Roseville in California and Columbus city in Ohio using the geolocator. Using Foursquare API I can explore the schools and tutoring centers in both the cities. I extracted the Ohio-school-enrollment data from department of education of Ohio and the Roseville school enrollment data from Placer county school of education.

2.2 Solving the problem

First, I want to analyze the opportunity of a Tutoring Center business in each area by locating nearby schools in each city. Next, I would need to consider the likelihood of competing with other tutors in the area. In each city, I can approximate which city would be the most appropriate to start my tutoring center based on the geographical representation of schools and their current surrounding tutoring centers. I would then need to find the exact number of elementary, middle, and high schools present and the number of Tutoring centers in each region respectively. I can then compare the total number of tutoring centers to the total number of schools in each city and derive a ratio that can be compared. The percentage obtained from the ratio can be analyzed as such that a smaller percentage ratio would mean it would be more beneficial to open my business in that city. This data can be analyzed using a histogram or bar graph.

I would then take the total number of students enrolled in each school to compare with the total number of enrolled students in each respective city. An area with a larger student population would mean more opportunity and possibility of success as a profitable business.

If I cannot make a decision based on these factors, then I would have to look deeper into the differences of standardized test scored such as ACT/SAT scores of each school in each city as another parameter.