Finding the Best Location for New Phở Restaurant in New York City

Capstone Project for IBM Data Science Professional Certificate

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1. Introduction

   1.1. Background

      1.1.1. According to PhoFever.com, "Phở was born in Northern Vietnam during the mid-1880s. The dish was heavily influenced by both Chinese and French cooking. In fact, it is believed that "phở" is derived from "pot au feu" a French soup. Vietnamese cooks blended the Chinese, French and native influences to make a dish that is uniquely Vietnamese... Refugees fleeing Vietnam in the Spring of 1975 brought with them their hopes and dreams of a better life. They also brought their cultures and cuisine, of which phở has become the most popular among Americans. Today there are almost 2,000 phở restaurants spread across the United States and Canada."

      1.1.2. Phở is a hearty soup consisting of a homemade broth made from stewing bones, oxtail, flank, or chicken bones and other spices over a long period of time. After straining that into a clear liquid, each bowl is prepared by adding rice noodles, green onions, the customer's meat of choice and served with a plate of sides (usually jalapeno, lime, basil, cilantro, bean sprouts) that can be added to the bowl based on their taste. The phở can then be further customized by adding sauces such as sriracha or hoisin.

   1.2. Opportunity

      1.2.1. Because this dish is still relatively new to the American palate (it didn't enter our mainstream until the 1990s), the proliferation of Vietnamese pho restaurants is still lower than for other dining establishments. The market is relatively untapped, and the growth is undeniable. In the last 30 years, the national revenue for pho restaurants has been estimated at over $500 million as recently as 2013.

1.2.2. The entry equipment expenses for pho restaurants is low compared to many other restaurants and is easily scalable to meet demands so opportunity for profitability is high.

1.2.3. The cost is in the same category as most other casual dining establishments. Lunch portions are generally sold for under $10 and dinner for $15. My focus when analyzing the data will be in finding a location where the pricing can fall in this range for accessibility while maintaining profitability.

2. Data

2.1. To find the best location, I will be using the Foursquare API to determine current locations of all Asian restaurants in New York City and then find the location of all current Vietnamese restaurants and correlating those to neighborhoods.

2.2. After determining the current location of those restaurants, I'll consider whether there is an oversaturation of Asian restaurants in each neighborhood. I also will consider whether having an abundance of Asian restaurants in each neighborhood means that it would be a good location for a pho restaurant especially if there is a scarcity of Vietnamese options in that area.

2.3. My goal is to find the top 5 neighborhoods for a new pho restaurant and deliver this report to a real estate agent who will help me find the best available location in the neighborhoods I've identified based on real estate cost and other factors.