Project: Manhattan Coffee Shop
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Introduction

Since I live in Manhattan and would like to explore the coffee culture here, the business problem of this project will be "Where to open a coffee shop in Manhattan?". This project is going to target stakeholders who are interested in investing in a coffee shop in Manhattan. A coffee shop promotes the innovation of the understanding of the coffee and provides an atmosphere that comforts customers in the public sector. However, the cost of opening a coffee shop varies based on store locations in Manhattan. It's difficult for us to choose which neighborhood to open a coffee shop. Luckily, we can use the data science tools that covered in the Coursera/IBM course Data Science to make our choices, such as data visualization and machine learning. Moreover, Foursquare location data will be used to locate existing coffee shops in Manhattan. Business strategies will also be used to ensure the opening of our coffee shop, including Porter's Five and the SWOT analysis. Porter's Five analysis will help us to find out the possibility of opening a coffee shop in the current time. The SWOT analysis will benefit us in finding out the competitiveness of our coffee shop, once the first step shows a high possibility. Finally, we will have a consultation on the project and present the project to investors. Especially, showing investors the decided location and the expected returns of the project.

Data

In the data section, we will have a brief literature review of the coffee culture in the US, and academic references of the World coffee industry. After we learn about the background of the coffee market, we will need to know the quantitative impacts of coffee sales to the US economy. Then our journey just began for our exploration of the coffee shops in Manhattan. First, we will look up how many coffee shops in NYC and have a straight sight of why NYC is so-called "The city that never sleeps". Since the scale of the coffee shops in NYC is huge, we will just think about "The City" Manhattan. Second, we will analyze the neighborhoods of Manhattan and create a map that shows coffee shops in each neighborhood. The neighborhoods with a high density of coffee shops will be highlighted in this project for understanding the reasons why so many coffee shops are needed in these locations. Finally, we will use these advantages to locate our coffee shop and show the location on the map of Manhattan.

Ok, let's now have a list of our data source below:

- Geoinformation accessed from the Foursquare API
- Coffee futures contracts from the New York Trading Record (Dow Jones market data)
- Coffee bean market data from the US Department of Agriculture
- Literature reviews of the coffee industry
- Quantitative impacts of coffee sales