Finding the optimal spot to open a hotel in Vancouver

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1. Introduction

1.1 Background

Vancouver is a city on the west coast of Canada, and is the 3rd largest city in Canada. It is a very diverse city. Every year, nearly 10.4 million overnight visitors come every year to Vancouver. This is a big market for hotels.

1.2 Problem

The problem I will be solving with the Foursquare location database will be to help a firm confirm if the optimal location to open a hotel in Vancouver, BC is off the street from Canada Place, in Downtown Vancouver.

I will need to use the Foursquare Api to find main tourist destinations like stadiums, beaches, trails, hockey arenas, parks, art galleries, plazas, waterfronts, sculpture gradens, outdoor sculptures and scenic lookouts within 15km of the proposed site of the hotel.

1.3 Interest

The target audience are the shareholders of the firm trying to open the hotel. They required my services to confirm if they have selected a good place to open the hotel.

2. Data acquisition and cleaning

2.1 Sources

My data was retrieved from the Foursquare api. I searched for different venues around Canada Place in Vancouver, BC, Canada.

2.2 Data cleaning

To clean the data, I had to create a function which would give me the category of each location. I made a separate dataset with some specific rows in which the categories column includes main tourist destinations like stadiums, beaches, trails, hockey arenas, parks, art galleries, plazas, waterfronts, sculpture gardens, outdoor sculptures and scenic lookouts. I also dropped all the columns except for the name, categories, latitude and longitude columns.

3. Methodology

What I did with the data was that I filtered it to include some specific columns. Once that was done, used dataset.index to find the number of rows in the dataset. Each row represents one tourist destination close to the proposed site of the hotel. I also created a folium map to visualize the different destinations.

4. Results

After using dataset.index, I found that there were 25 rows in our dataset. Each row represented a major tourist destination. So there were 25 different tourist destinations close to the proposed site of our hotel.

5. Discussion

After finding that there were 25 different tourist destinations within driving distance (15km) of the proposed site of the hotel. We needed at least 20 tourist destinations around the area, however we got 25. 25 tourist destinations is enough to recommend the location for the hotel.

6. Conclusion

I was hired by a Vancouver based firm to confirm if near Canada Place was the optimal location to open a hotel. I set a base number of at least 20 main tourist destinations like stadiums, beaches, trails, hockey arenas, parks, art galleries, plazas, waterfronts, sculpture gardens, outdoor sculptures and scenic lookouts. If there were over 20 main tourist destinations, then I could confirm if the location was a good place to open a hotel. So I then used the Foursquare API to query for venues nearby. I then filtered the dataset to only include the main tourist destinations I specified above so I could get an idea for how many destinations were there. I found that there were 25 of such destinations within 15km of the proposed site of the hotel. I could now recommend the proposed site for a hotel.