

Determining a Good Location to build a New Nightclub Business in New York City

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1. Introduction

1.1 Background

New York City is the most populated, most popular, and largest city in the United States of America. Immigrants for many years, and still currently, look towards New York City first when interested in starting a new life in the land of opportunity. Along with new opportunities for careers, New York City also boasts new opportunities for socializing through its vast nightlife options.

1.2 Problem

Where would be a good location in New York City to build and start a new night-life business? The stakeholders interested in this idea would be businessmen interested in investing in new business entrepreneurs but unsure as to which entrepreneur will be successful...or businessman trying to figure out the best location in New York City to install a new night-life business. The background of this project stems from the idea that stakeholders are always interested in new business opportunities to invest in, but are often unsure as to which investments are safe and secure. Providing data and an analysis with visuals for the stakeholders to observe will provide them with more comfort on deciding where the best opportunities are for them.

With so many different nightlife businesses already in existence, it can be difficult for newcomers to know where a good location would be to build a new nightlife business in New York City. Different locations in New York City are populated with different cultures that have different preferences.

1.3 Interest

Interest is taking in using data science for this initiative to determine which location in New York City would attract the most customers and produce the most business for a new nightlife venue. Investors can thereby more easily decide whether or not to invest in this new nightlife business that is expected to be built within the next 6 months.

2. Data Acquisition & Cleaning

2.1 Data Sources

Data for this research was gathered from Kaggle.com where 2,440 bars/clubs/restaurants from New York City had already been listed in a CSV file. No other data was claimed necessary for this project. Data necessary for this project could have also been acquired from Foursquare. Data initially chosen for this project was from Foursquare, but after testing and analysis was determined not to be a large enough dataset for this project. Therefore a larger data from Kaggle.com was utilized.

2.2 Data Cleaning

Data was cleaned and inspected before utilizing for analysis in this project. No records required deletion during the cleaning process.

2.3 Feature Selection

After the data was cleaned, 2,440 different venues were put into tables and analyzed beginning with a bar graph. A bar graph was created to view the number of bars/restaurants located in the different major neighborhoods of New York City. A heat map was then created to create a better visual for exactly what parts of those major neighborhoods held the highest concentration of bars/restaurants.

3. Relationships Visualized in the Analysis and Results

3.1 Relationship observed between bar graph and heat map.

The bar graph displayed well that either the neighborhoods of Manhattan or Brooklyn would hold the most bars/restaurants and the most Nightlife activity. The bar graph did not display which parts of Manhattan or Brooklyn the active people were concentrated. Observing the heat map provided better visualizations and made it more clear that Southern Manhattan held a much higher volume of nightlife activity than Central Manhattan. The heat map also displayed that North and Northeastern Brooklyn contained high volumes of nightlife activity.

4. Conclusion

When observing the resulting data in both the bar graph and the heat map, it can be concluded that if a new bar or nightclub wants to be successful, they must try to lease a building located somewhere in Southern Manhattan, Northern Brooklyn, or Northeastern Brooklyn. If the investors want a guarantee in their investment success, then they should not invest in the new nightclub/bar if it chooses a location outside of these three neighborhoods.