

1. Problem Statement and Background

Manhattan is an epicenter of business, financial, and cultural matters. Easily one of the most well-known cities, it draws a lot of tourists from all over the world. In Manhattan, hotels are spread far and wide, accommodating anyone who is in need of a place to stay. These hotels used to be the only option for travelers until the rise of Airbnbs. The continuous increase in the popularity and use cases of the Internet has allowed for an online marketplace for arranging and offering lodging. While the cost of staying in an Airbnb is drastically lower than staying in a hotel, the number of choices out there becomes daunting. To resolve this, for someone who is looking for a place to stay in Manhattan to get a bang for their buck, an in-depth analysis of the available Airbnbs will be undertaken to recommend several places.

2. Data

Leveraging location data, recommendations will be made as to which Airbnb rental will yield the most bang for buck. The data to be used will come from two main sources: Foursquare and the New York City Airbnb Open Data. Foursquare data will contain establishments that are within the vicinity of the Airbnb rental. The more establishments, the better as there will be more choices for entertainment and enjoyment. To augment this information, the NYC Airbnb Open Data contains details on the rentals such as price, reviews, location, amenities, and required length of stay. These restrictions may or may not affect a customer's choice but nonetheless it is important to analyze. By merging these two data sets and leveraging insights gathered, the customer can then make an informed decision on where to stay in Manhattan.