Airbnb Hosting made easier

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CLIENT:

People who are hosting their property on airbnb.

Abstract

Developing a recommendation system for the host helping them to increase revenue and occupancy rate of their listing. Also recommendation on features that need to be added for a happier customer/guest.

Constraint: Recommendation only on features which are under the host control.

Impact: Higher revenue, occupancy for the people hosting on airbnb.

Happier customers staying in these properties

Data Description:

Data is obtained from airbnb: http://insideairbnb.com/get-the-data.html

To begin targeting New York City, Manhattan borough for a period of 3 months. Both Airbnb Listing data and calendar data containing future availability will be used.

Design:

Exploratory Analysis to describe data we have and analyze which features are correlated to the price of the property. Run a Simple regression Model to analyze features driving the price of the host property.

Unsupervised Clustering to better understand Property prices,location, property features,amenities offered etc.

Algorithm:

- K- mean clustering to identify amenities driving listing prices
- Predictive model to identify features driving listing review/rating

Criteria for Success:

Similar occupancy rate with Price Increase on Host Property. Price increase is achieved by improving property features.

Assumption and Risks:

- 1. Airbnb customers are not extremely price sensitive and looking for better value through property
- Airbnb Host will follow through recommendation consistently to achieve desired results

Tools:

Excel

Tableau

Python