

Best features recommendation for Airbnb in Amsterdam

Coursera Capstone Project
Luis Santana

A solid green horizontal bar at the bottom of the slide.

The Features of a Property Matters

- Usually the features in a property define whether is good or not.
- It seems that clients are more likely to pay for an Airbnb service with some specific characteristics, of course it varies depending on the client but according to the data extracted from www.insideairbnb.com, we can observe that a property with specific features is significantly more likely to have many more clients.
- With this tool a person who wants to buy or rent a property to start a business with Airbnb will have a really good idea of how the property should be in order to achieve success.

Data Acquisition

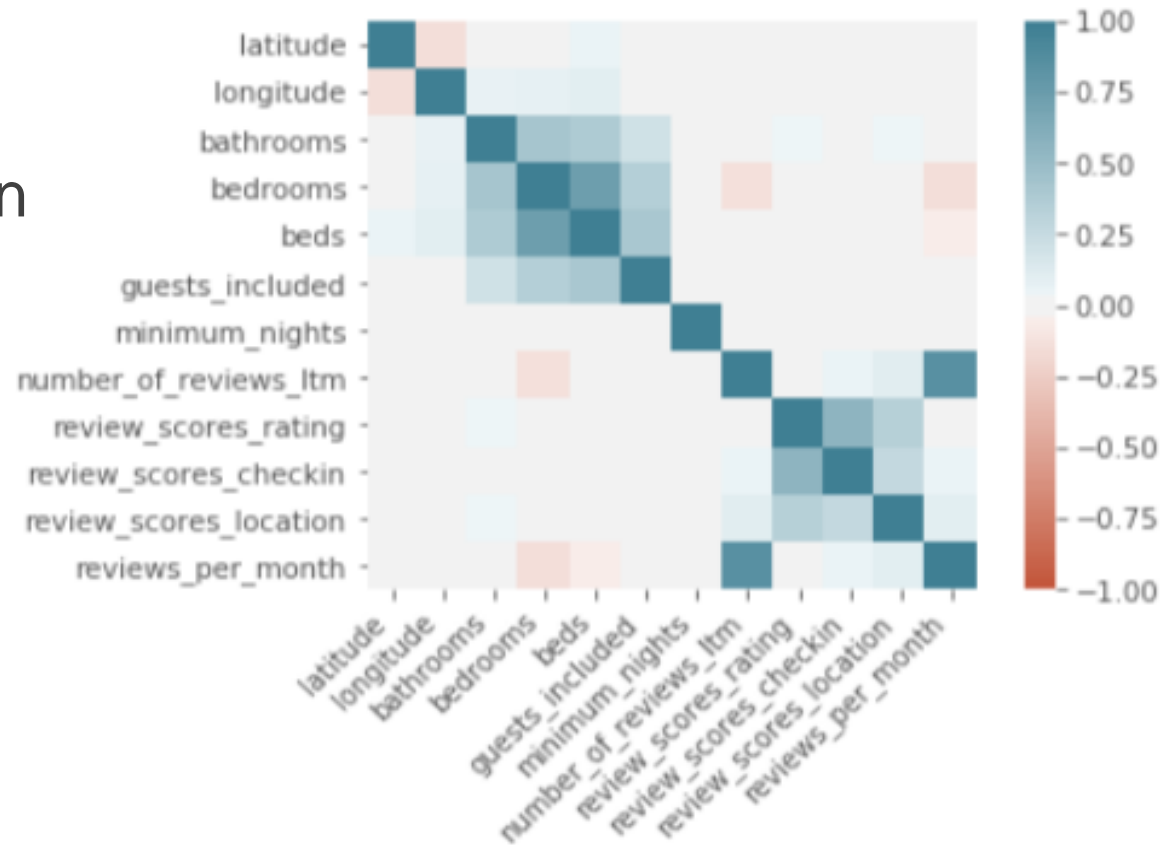
- The data is an open-source non-commercial licensed with many features about Airbnb in the city of Amsterdam extracted from <http://insideairbnb.com/> that offers really valuable information about the topic.
- This dataset contains information of more than 20k Airbnb around Amsterdam, so the metrics will be accurate, but it will be necessary to clean and prepare the data.
- It has 106 different features.

Data Cleaning and Feature Selection

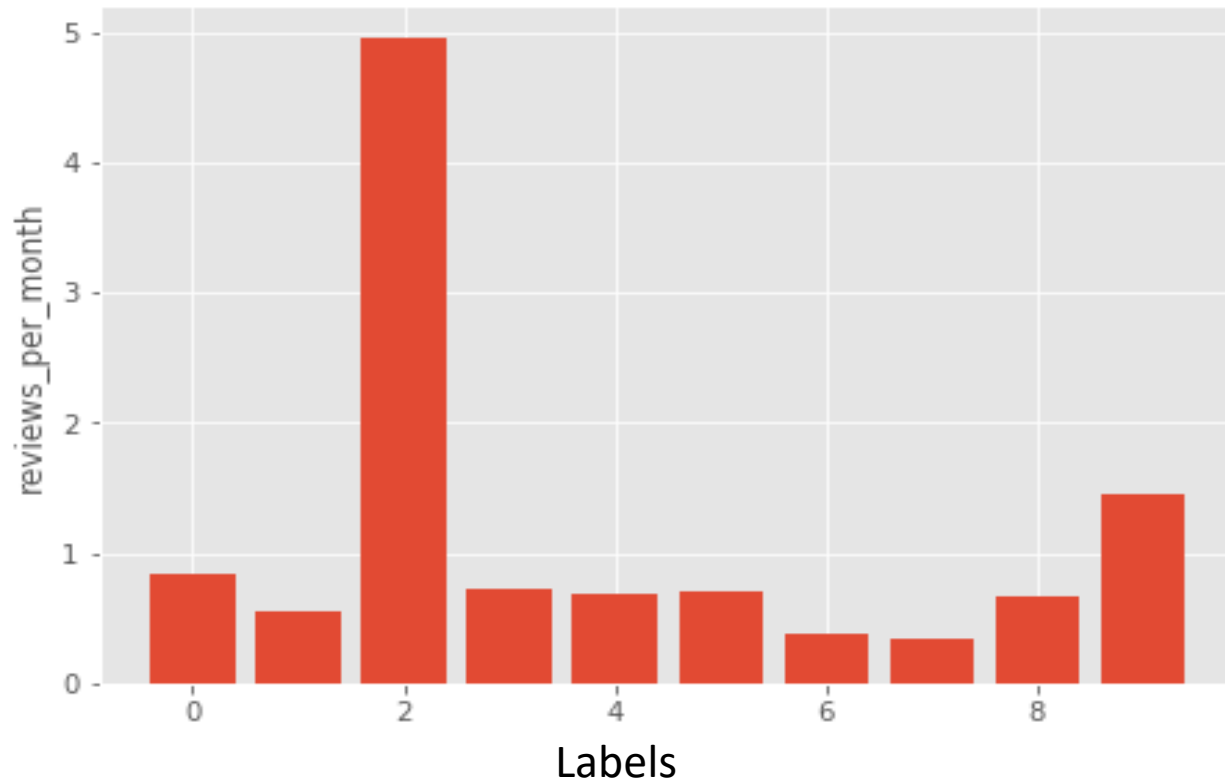
- “Nan” rows were dropped only 17362 left.
- Only 14 features were kept and the others were dropped due to the lack of utility.
- Some features were transformed to numerical values such as “price” and “extra people price”.
- In some features were discard some anormal values for a correct analysis.

Correlation Among Features

- There is a significant correlation in features related to the structure of the property only.



Cluster With the Best Results



- The rating of an Airbnb characteristics is measured with the specifications of the property and ratings of location, general ratings and reviews per month that is the main factor.
- Label “2” had the best results.

Cluster With the Best Results

	bathrooms	bedrooms	beds	Guests included	Minimum nights	Number Of reviews	Number of reviews ltm	Review Scores rating	Extra P.	Review Scores Checking	Review Scores Location	Price	Reviews Per Month
Mean	1.12	0.98	1.43	1.37	1.97	56.08	95.08	9.87	0	9.87	9.84	114	4.95
Median	1	1	1	1	2	53	97	10	0	10	10	95	4.56

Label “2” characteristics

Conclusion and Future Directions

- In this case study it was possible to determine and recommend which characteristics an Airbnb is better to have in order to get more clients and as of course more revenue.
- This approach shows us how little things in a service that many people offer can be beneficial to know for staying ahead of the competitors and the most important thing, that was the purpose of the project, is to give useful information to those who are looking to enter in this service and do not know which features a property should have.
- This project could be extended to determine other useful things for raising the probability of a successful Airbnb by analyzing other types of features such as name of the property, description, summary and mainly in property's pictures because it has been studied a lot how pictures are the best marketing in a wide quantity of business.
