

### Motivation



3,000,000 listings



191 countries



150,000,000 guests

#### Motivation

# Did You Know That the Most Profitable Airbnb City Is Barcelona?

Dec 16, 2016 / By: Polona Golob / In: Cultural Facts / 0 Comments

#### From rags-to-riches

Some time has passed when Airbnb was calling itself a startup, offering airbeds and competing with couchsurfer.com, while today it's value is estimated at \$30 billion. The reasons behind Airbnb's phenomenal business jump are due to several intertwining factors from co-creating the new shared service economy to utilizing their global SEO

## Help Airbnb Hosts

**Earnings & Popularity** 



Price



Reviews



Location

#### Data





**388,184** reviews

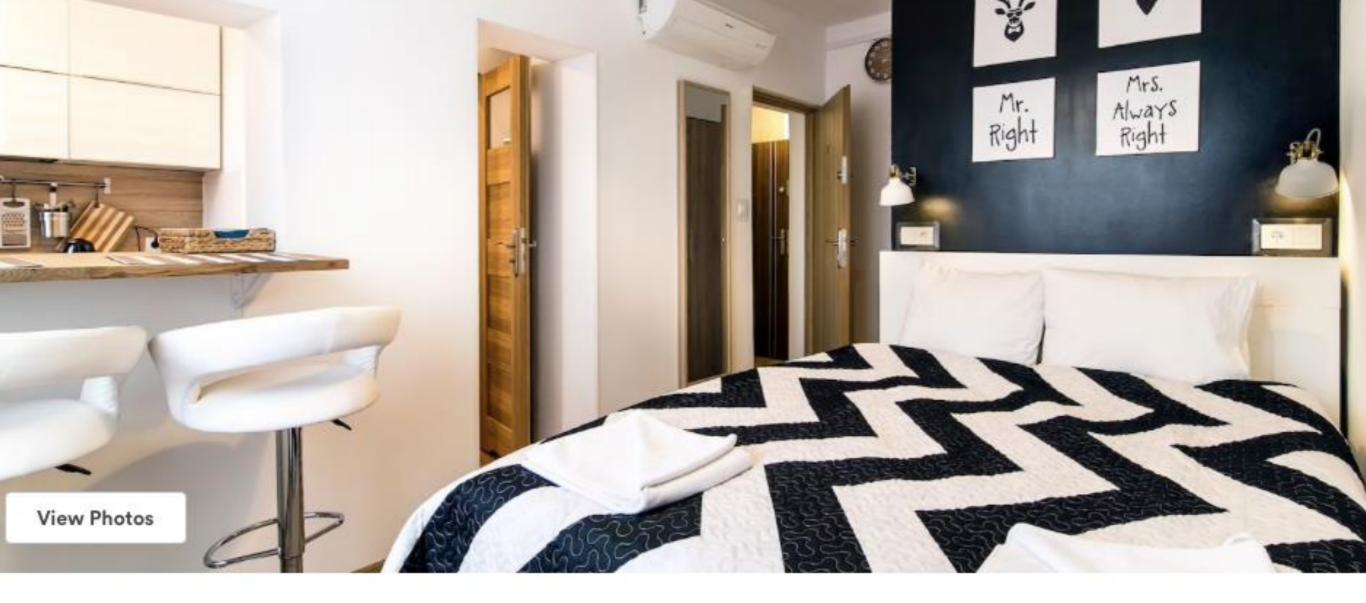
**17,369** listings

**579** attractions

## Software







#### **Pfenning - Smart Studio**

Gdańsk, pomorskie, Poland 🔺 🖈 🖈 🛨 20 reviews





Entire home/apt



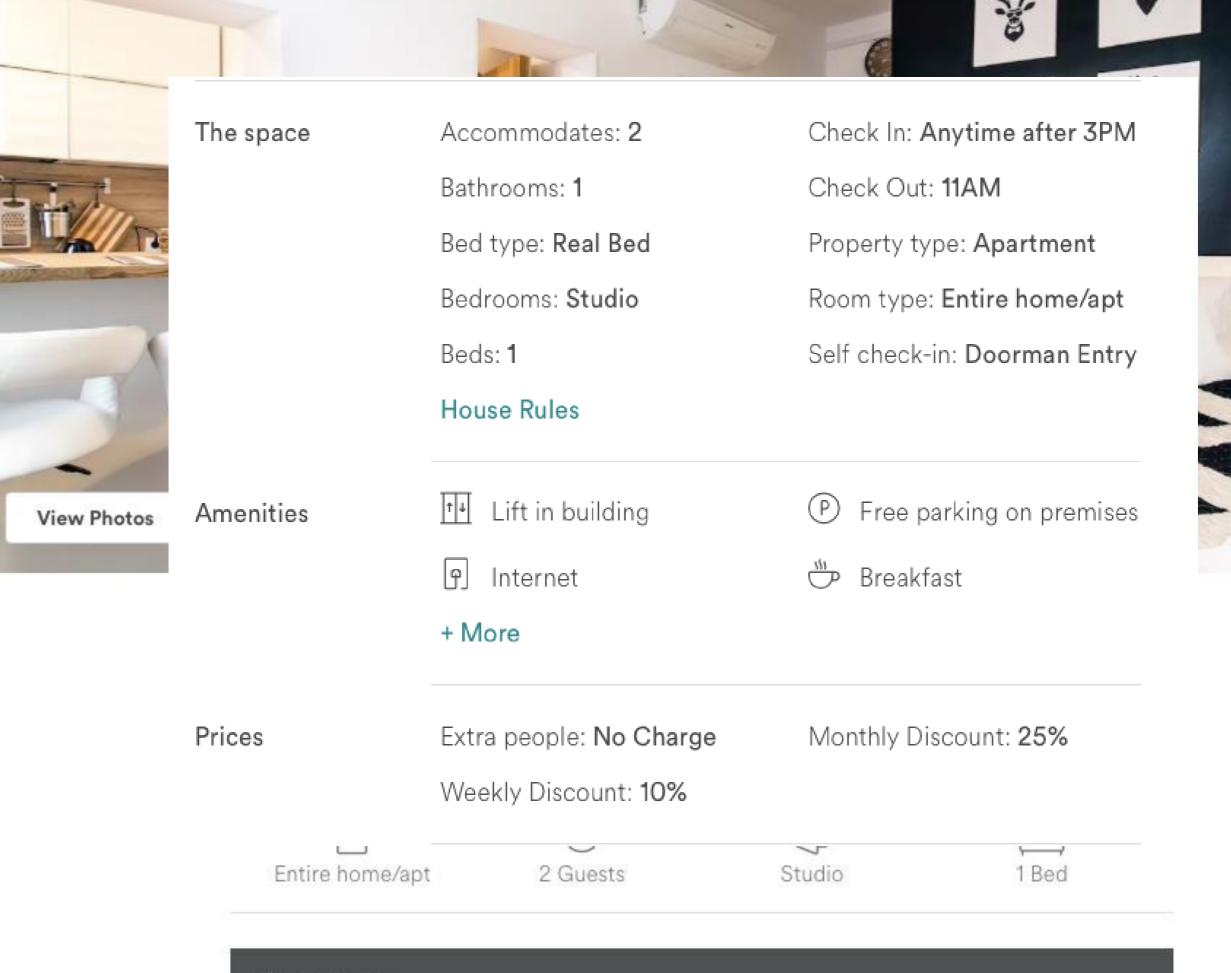
2 Guests



Studio



1 Bed





House Rules No smoking

Not suitable for pets

No parties or events

Check in is anytime after 3PM

Cancellations

Strict

Cancel up to 7 days before your trip and get a 50% refund plus

service fees back.

View details

Safety features Smok

Smoke detector Carbon monoxide detector

Prices

Extra people: No Charge

Monthly Discount: 25%

Weekly Discount: 10%

Entire home/apt

2 Guests

Studio

1 Bed



View Phot

20 Reviews ★★★★

Search reviews

Accuracy

\*\*\*\*

Location



Communication



Check In



Cleanliness



Value





Corinne · Washington, DC January 2017

The house was really nice and clean. The host was incredibly nice, picking us from the train station and allowing us to store our luggage after we checked out. He gave us tips on places to go and things to eat, and even provided supplies for breakfast. The house is really close to the city centre, which is really convenient:)

P Report





Nicky · Warsaw, Poland March 2017

Awesome host! Awesome appartment and location. Clean, nice interior, great view. Will come again in the future!



# Analysis

Predicting Price of Listings

Determine Popularity of Listings

**Understanding Guest Sentiments** 

# Predicting Price of Listings

# Price Prediction of Listings

**Linear Regression** 

57 Features

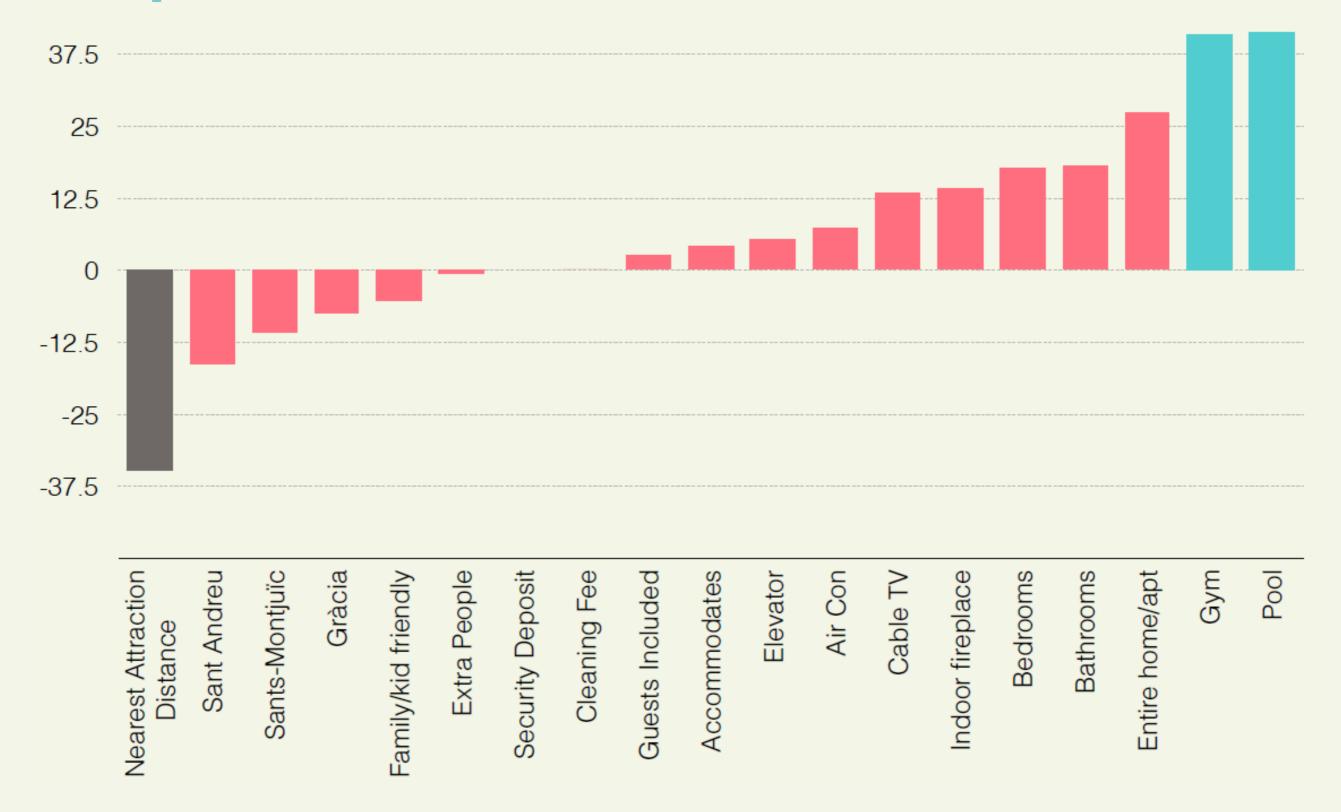


Feature Selection



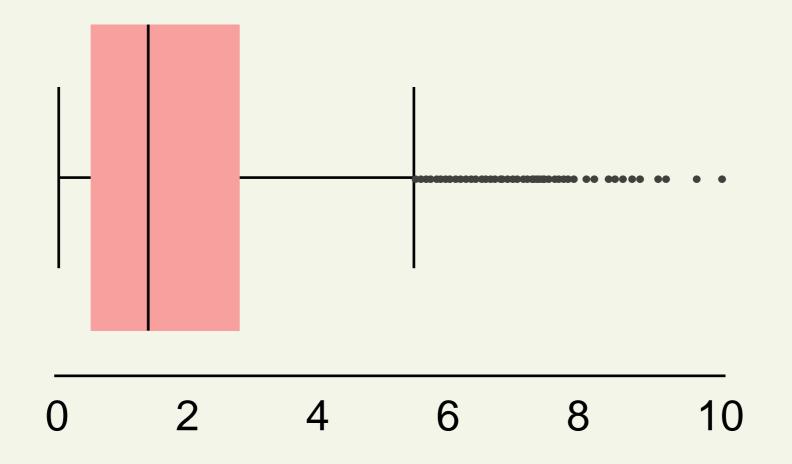
19 Features

# Important Features



# Popularity of Listings

## Reviews Per Month









# Popularity of Listings

#### **Decision Tree**



Minimum nights



Instantly Bookable



Price

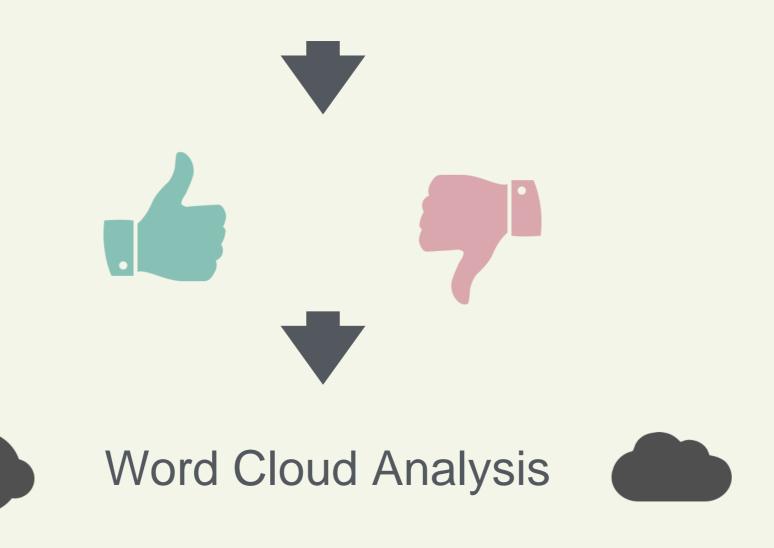


Nearest Attraction Distance

# Understanding Guest Sentiments

# Understanding Guest Sentiments

Sentiment Analysis



## Visualisation