# AirBnB Analysis

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### **Business Problems**

- This Analysis provides data-based insight to a client that wishes to invest in an AirBnB hotel in Amsterdam. The data represents the AirBnB market in Amsterdam and its neighborhoods. Pertinent question regarding performance are:
- Potentially lucrative property types
- What Neighborhoods host the most listings
- Where is the demand?

### Data Set

Cleaned Data Set—What was not used

Duplicate entries were explicitly removed

Listings without any reviews were not considered

City, state, zip code, country, latitude and longitude were considered extraneous, as were the types of accommodations, and most "review metrics," with the exception of "number of reviews"

Data Set—What was used from data set

Host id, to calculate number of host listings, as well as casual or commercial.

Neighborhood

Property Type

Price and minimum nights, to calculate the revenue per stay

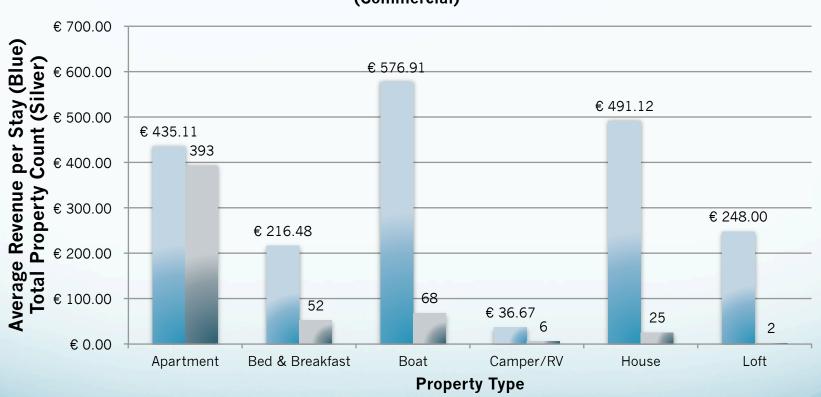
Calculations: Next

### Calculations

- Commercial host has >= 5 listings, otherwise Casual
- Revenue per stay = (Cost) X (minimum number of nights)
- Total revenue per listing = (rev per stay) X (# of stays)
- Assume 50% leave comment to determine times stayed.
  - Therefore (number of stays) = (number of comments) X 2
  - Also assume if (# of stays) > 0, then property is "active"
  - Neighborhoods where property was > 80% "active" are "active" neighborhoods
  - After this, neighborhoods with less than 100 active listings were filtered.

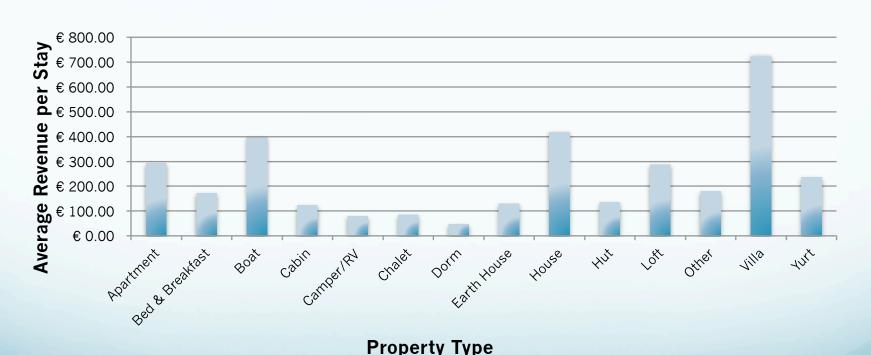
# Potentially Lucrative Property types 1

Average Revenue per Stay and Property Count, by Property Type (Commercial)



# Potentially Lucrative Property Types 2

Average Revenue per Stay, by Property Type (Casual)



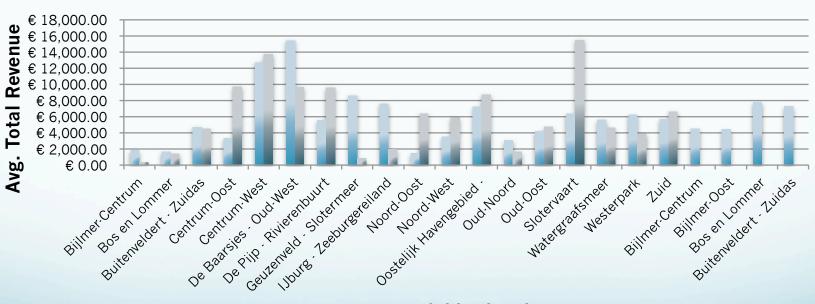
# Majority Property Types

 It appears that, for Commercial and Casual listings, Apartments, Houses, Boats, and Bed and Breakfasts made up the majority properties with respect to Average Revenue by Property type. Although pricy, Villas were an outlier because there were only six of them on the entire market, and several other property types were considered extraneous because of their low property count.

# Potentially Lucrative Neighborhoods

#### Avg. Total Revenue, by Neighborhood

- Avg. Revenue by Neighborhood (Casual)
- Avg. Revenue by Neighborhood (Commercial)



Neighborhood

#### Active Neighborhoods (Conclusion)

## Average Total Revenue by Neighborhood (Dormant Properties Excluded, >100 Listings)



Because All of the "Ratio of Active to Total Listings" are the same (about 82% or 83%), it would be fair to invest in any of these Neighborhoods with apartments, houses, boats, and bead and breakfasts, However, Bos en Lommer's Avg. Total Revenue is considerably lower. If demand is a good indicator of future revenue, then these neighborhoods would be reasonable.