



AIRBNB REPORT

LISBON

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INTRODUCTION

Air Bed and Breakfast, or Airbnb, is an online platform that connects people who want to rent out their properties with people who are looking for a unique accomodations anywhere in the world. Since 2008, Airbnb has already reached over 100,000 cities, 220 countries and 150 million users (last update 2018).

The COVID-19 pandemic struck hard the tourism industry. Airbnb, a company that has consolidated its position in the market for the last few years suffered a loss of 85 percent in new bookings. Even though, in 2020 generated \$3.4 billion in revenue and launched its IPO the last December. As the pandemic ends, its expected that the tourism industry recover its loss so a notable question to a stakeholder is the best place to invest in properties now.

The data used in this report is available on Inside Airbnb website, that contains data from all properties available in some regions on the platform. To support the analysis will be used the Foursquare to get information from the nearby region, like supermarkets, restaurants, shopings, etc. Foursquare is a independet location data platform for understanding how people move through the real world and its used for many popular services like Uber and Apple Maps.

OVERVIEW

10,500

Airbnb listings

4640

Hosts

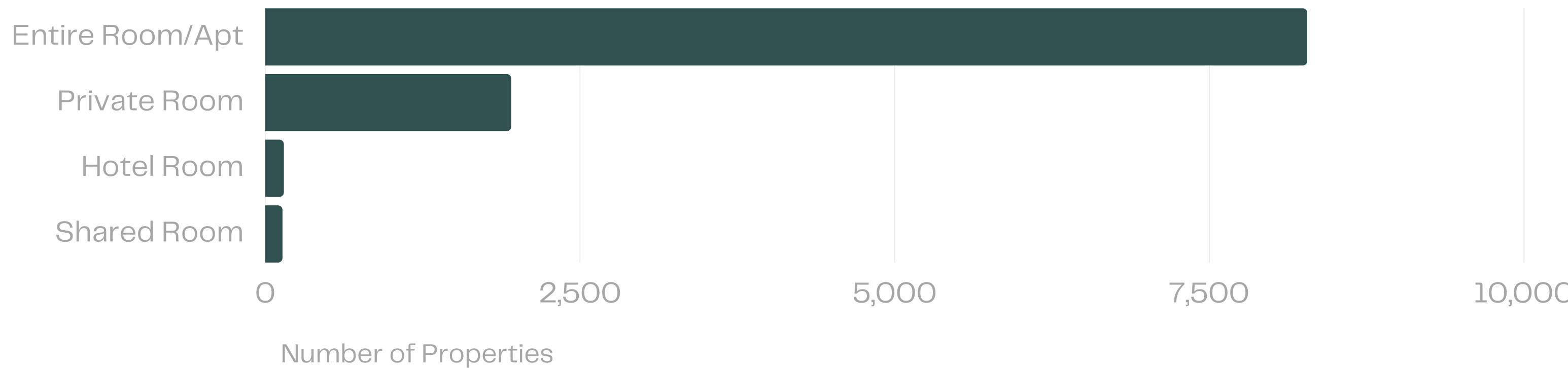
1605

Superhosts

2.3

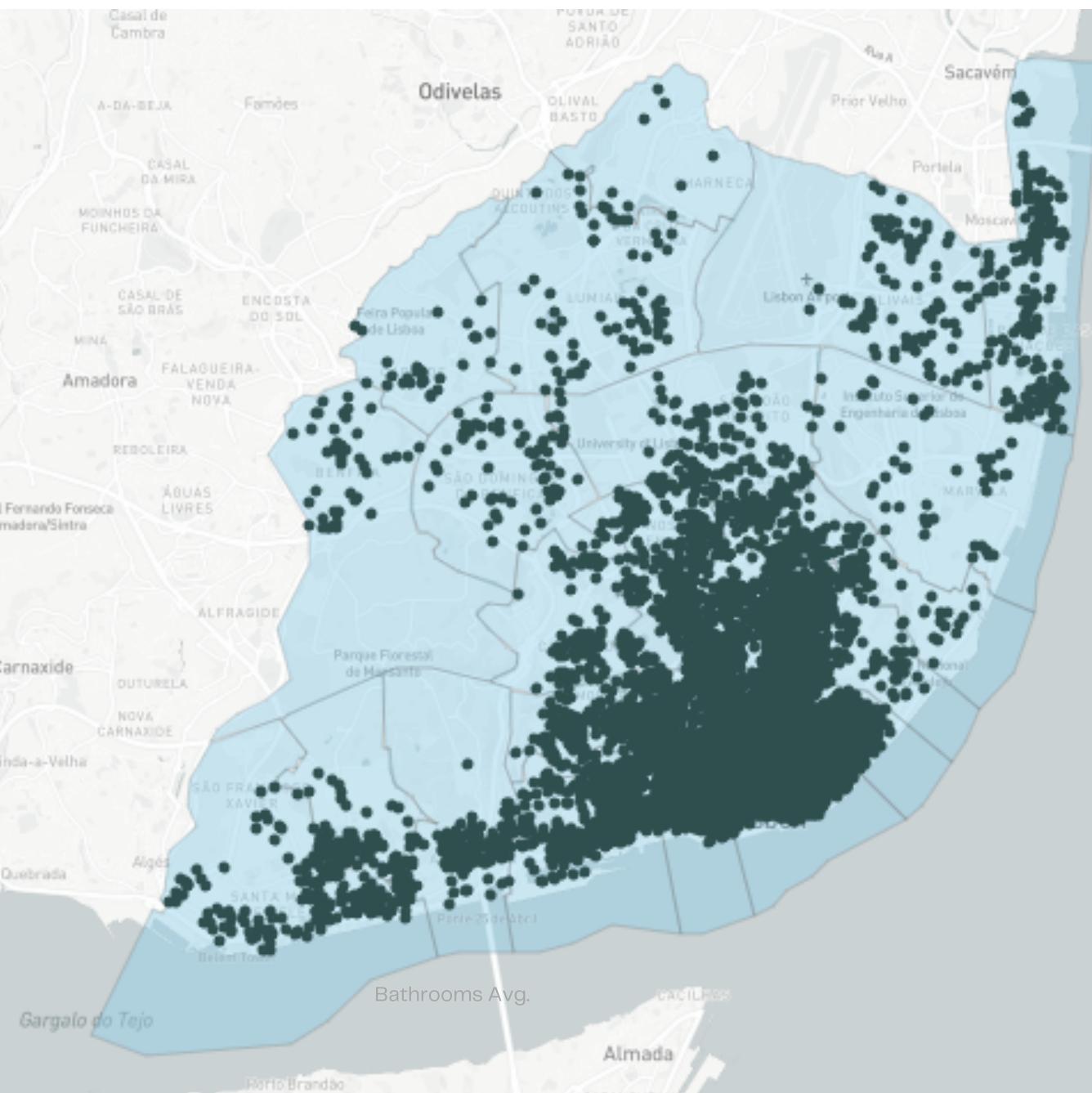
Listings / Host

Room Type

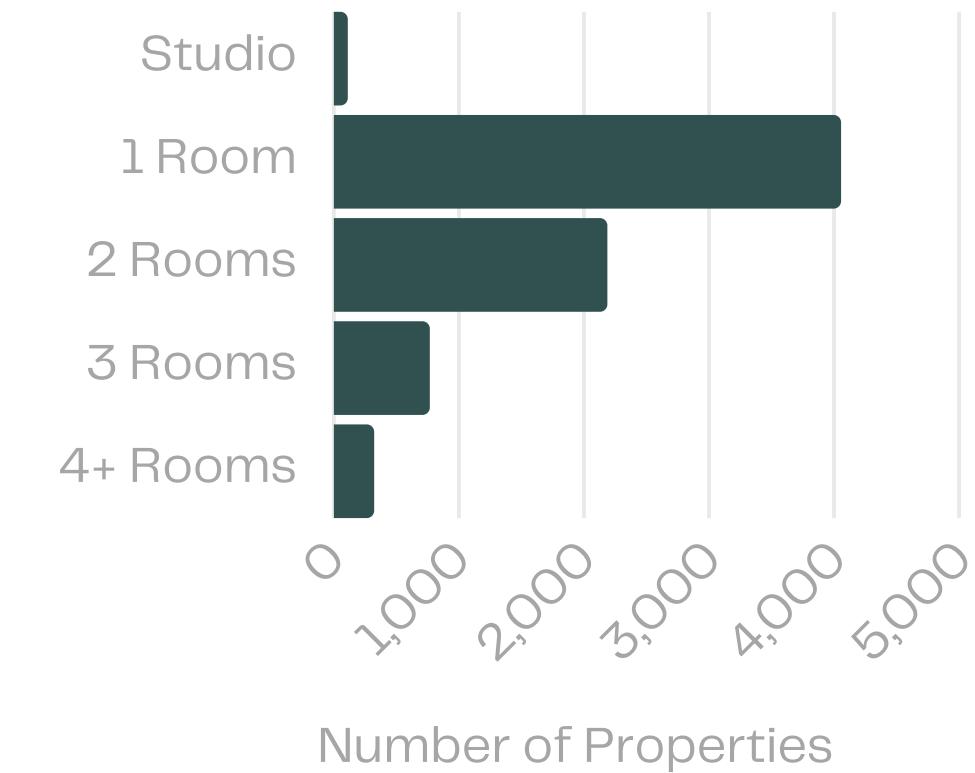


OVERVIEW

Lisbon Neighbourhoods



Rental Size



1.7

Bedrooms Avg.

2.4

Beds Avg.

1.4

Bathrooms Avg.

4.9

Guests Avg.

SEGMENTING AND CLUSTERING

The listings were divided into five groups using the k-means clustering model and some features, like price, review score, and if is super host. Because of the shape of our data, the venus was not considered to cluster the data, but even so, it shows good results. Above it's the groups and the summaries, like the average price, overall rating, percentage of the total listing, and the percentage of super hosts. With this summary, we can gather some insights.

Group 1	€72.50 Avg. Price	95.50 Overall Rating	38.6 % Total Listings	0 % Superhosts
Group 2	€55.00 Avg. Price	86.00 Overall Rating	21.7 % Total Listings	2 % Superhosts
Group 3	€288.20 Avg. Price	94.30 Overall Rating	4.4 % Total Listings	35 % Superhosts
Group 4	€70.20 Avg. Price	96.20 Overall Rating	33.3 % Total Listings	100 % Superhosts
Group 5	€66.40 Avg. Price	56.90 Overall Rating	2.0 % Total Listings	2 % Superhosts

CONCLUSION

The 24 freguesias contain some differences, primarily the price and venues. Few freguesias have higher prices and have not direct relation to the density of the listings. The review score and super host appear to not have a strong impact.

The groups of the k-means model contain interesting results. Group 1 and 4 are the groups that contain more listings and they are opposite in the percentage of the super hosts but have a similar result in the price and review score. Even that this report does not try to estimate the revenue, it's interesting that the price is lower in the super host group.

Group 3 shows the highest average prices in Lisboa. Around 4.4% of the listings in the top five freguesias have high prices, great rating and 1/3 is a super host.

Even that the overall rating in Group 2 is higher than Group 5, the average is not. An overall rating of 56.90 is awful, but only 2% of the total listings.

The main diversity of venues in Lisboa is the Restaurants, having cuisines from all over the world. And about diversity, Lisboa contains some appealing listings and very different, like a boathouse, bus, and a CASTLE!!