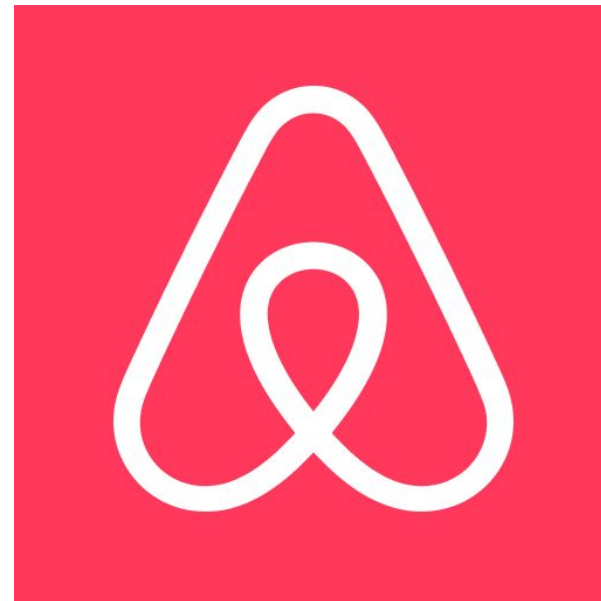


DSO 574 - Using Big Data: Challenges and Opportunities

Analyzing the Impact of COVID-19 on the Airbnb Market in Los Angeles

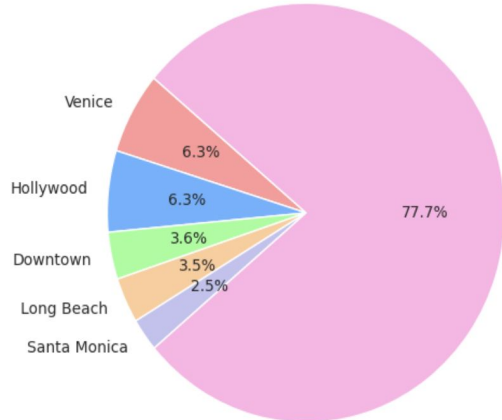
By Campbell Duncan, Krisha Gandhi, Nida Iqbal



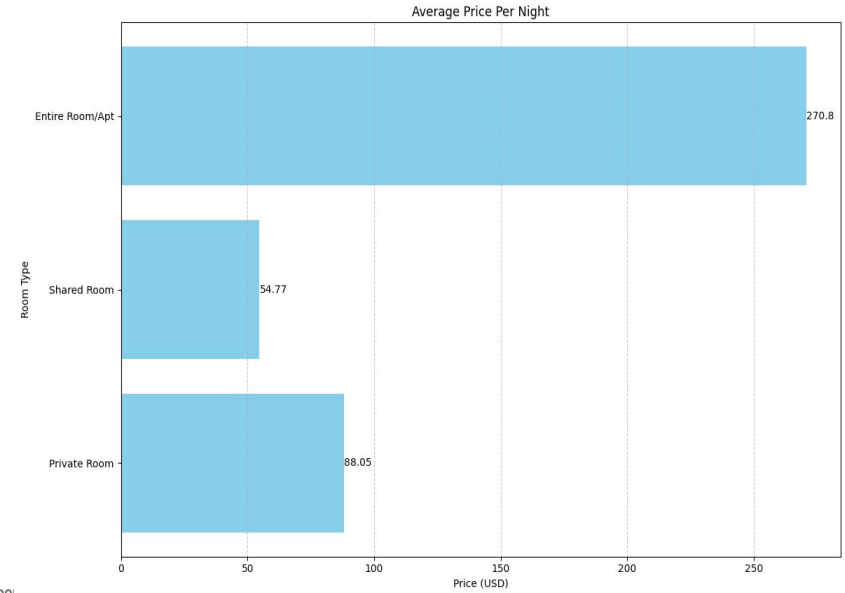
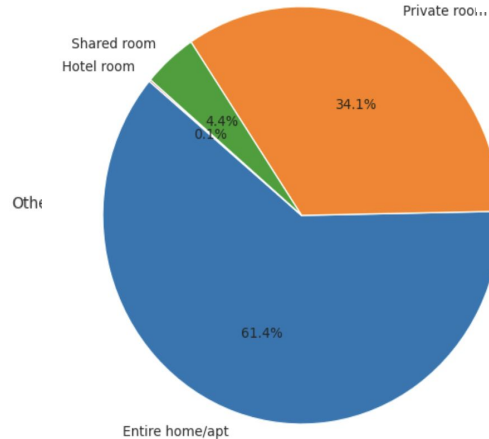
Understanding the Airbnb Market Before COVID-19

Analysis of data from Jan 2016 through Dec 2019. We defined the beginning of COVID-19 to be Jan 2020.

Top 5 High Volume Neighborhoods



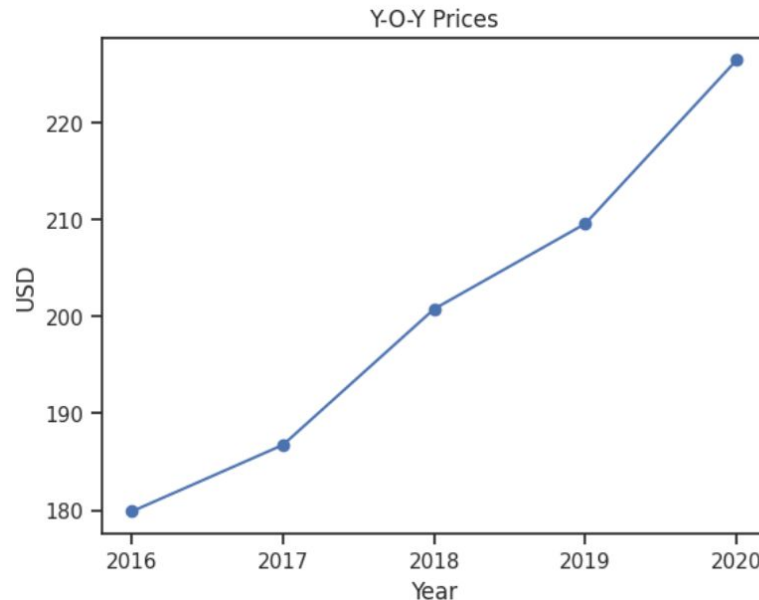
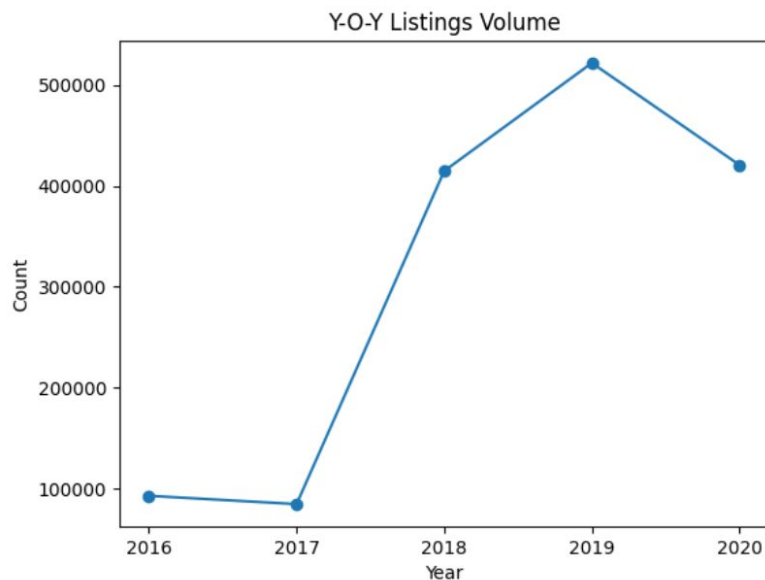
Distribution of Room Types



Given the small proportion of hotels as seen in the distribution graph, we decided to not include it in our analysis. Hotel samples were infrequent and had irregular price spikes.

Effects of COVID-19 on Listing Price

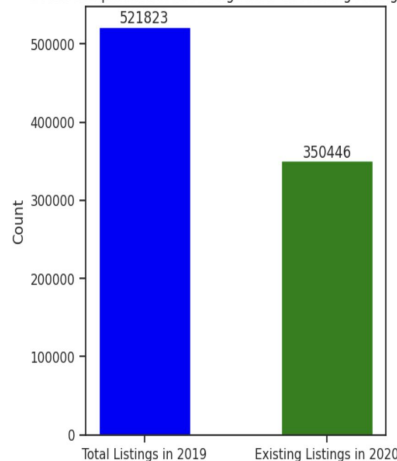
Analysis of data from Jan-2016 through Dec-2020.



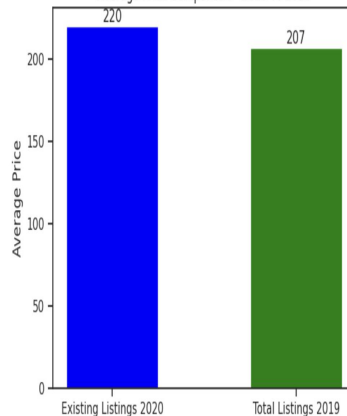
From 2019 to 2020, the total number of listings decreased but the average price increased. This means that during COVID-19, listings got more expensive on average.

What factors are driving up average prices in 2020?

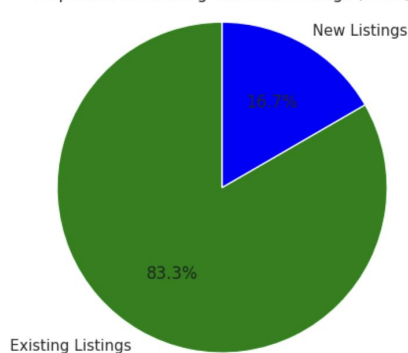
Count Comparison: Total Listings 2019 vs Existing Listings 2020



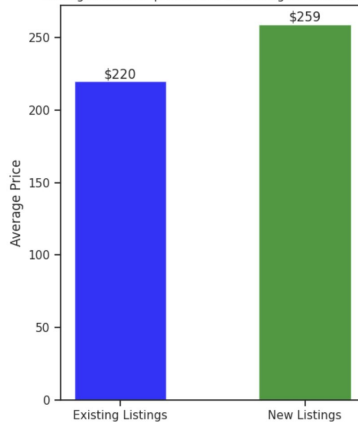
Average Price Comparison - 2019 vs 2020



Proportion of Existing and New Listings (2020)



Average Price Comparison 2020: Existing vs. New Listings



- Out of a total of about 42k listings, 7k appeared for the first time in 2020 (new listings).
- The average price of new listings in 2020 was higher than the average price of existing listings >> new listings were pushing up prices!
- The number of existing listings were lower than the listings in 2019, but the mean price of the existing 2020 listings was higher >> existing listings also got more expensive, thereby pushing the average price up.



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Thank You

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