

# Insights from the Airbnb, NYC Analysis

For Head of Acquisition & Operations and Head  
of User Experience



# Agenda

1. Recommendations
2. Objectives
3. Background Summary
4. Important Findings
5. Appendix - Data Methodology
6. Team Background and Details



# Recommendations

- One to one interaction with some property owners in Staten Island, Queens and Bronx to identify their challenges for being fully functional for maximum number of days in a year and allow a booking of more than 10 days of minimum night stay.
- Create some sort of interaction between the Top 5 host to share their experience with rest of the community for better improvement and value generating ideas.
- Provide discounted commission rates to property owners on keeping the minimum night stay booking window for more than 10 days and property functional for maximum number of days in a year.



# Objectives

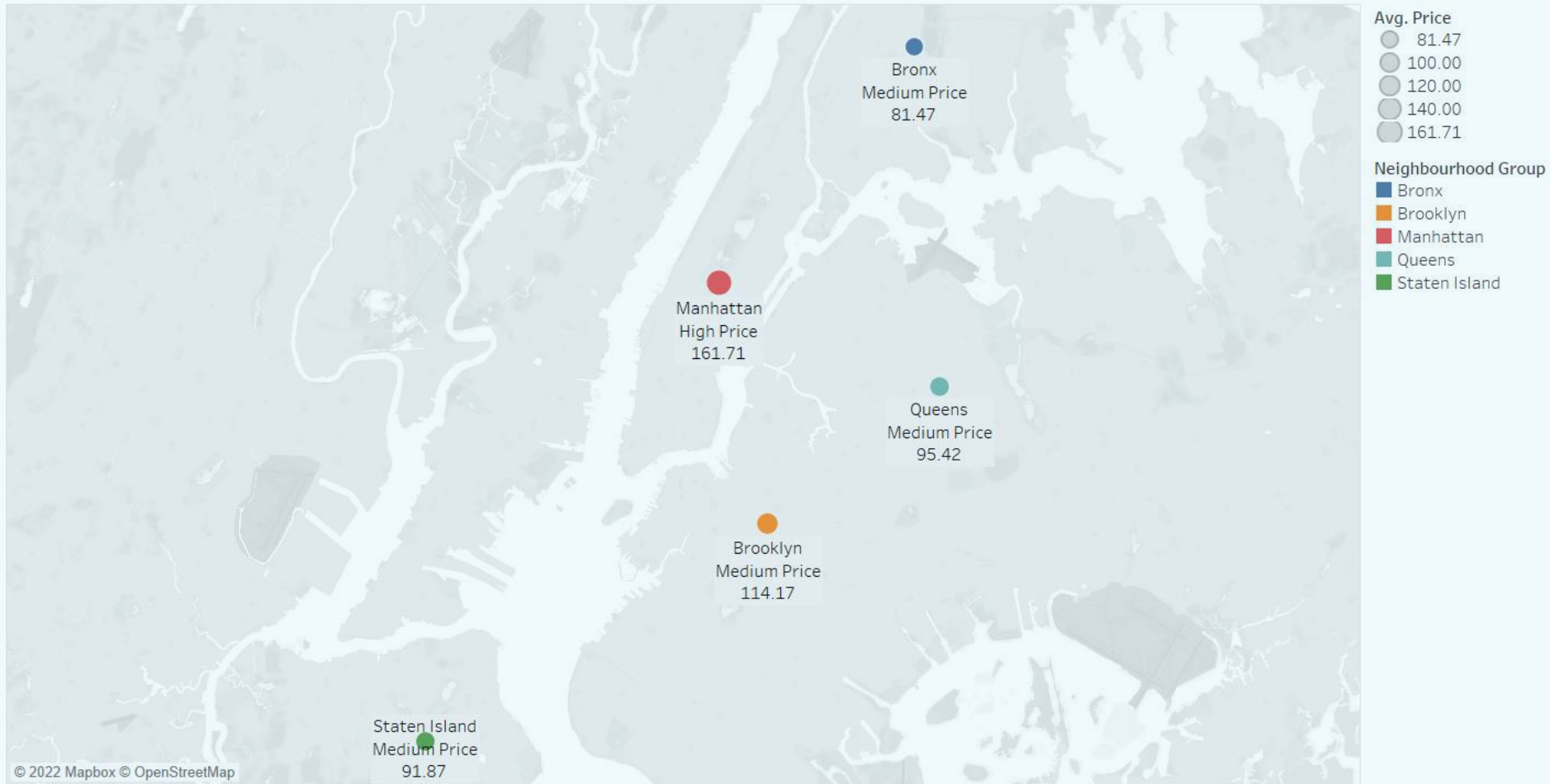
- Improve our shared understanding about our end consumer experience and preferences.
- Improve our shared understanding about the challenges and gap faced by the customers hosting their personal space on the platform.
- Provide early recommendations to our Head of Acquisitions and Operations to exemplify the smooth equation between both the customers in Airbnb community.



# Background Summary

- All the five neighbourhood's borough (New York City) – the Bronx, Brooklyn, Manhattan, Queens and Staten Island – have contributed around \$105 million in economic activity and supported 950 jobs in the outer boroughs past year<sup>1</sup>.
- In the last few months, Airbnb has seen a major decline in revenue due to lockdown imposed during pandemic.
- Hence provided the information in hand based on previous data captured, we need to analyse the patterns for declining profits and recommend certain suggestions to overcome.

## Neighbourhood Groups Basis Price Range



Map based on average of Longitude and average of Latitude. Color shows details about Neighbourhood Group. Size shows average of Price. The marks are labeled by Neighbourhood Group, Price Range and average of Price.



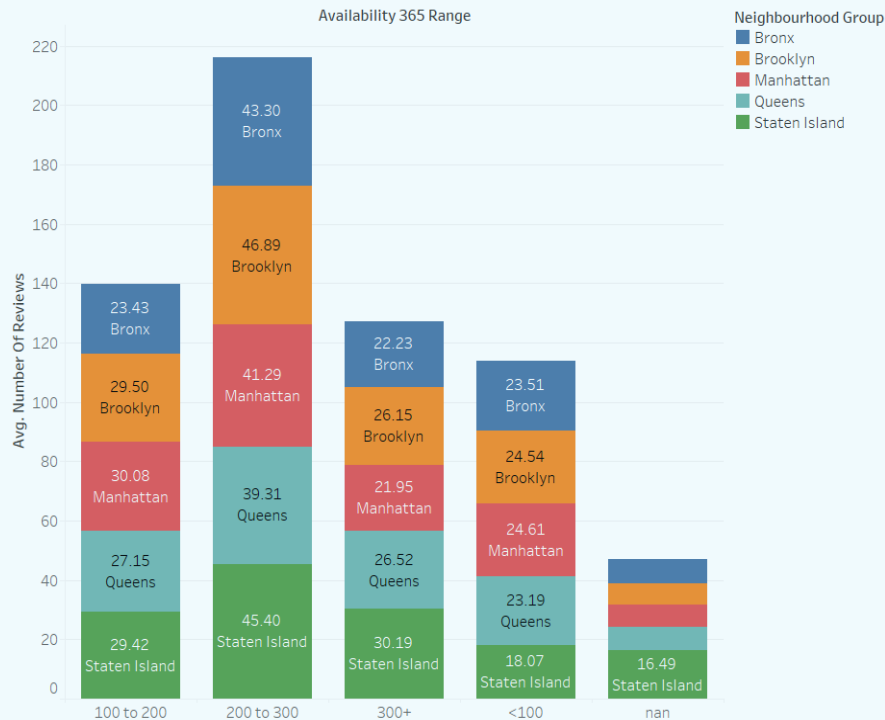
## Top causes for declining revenue are

- Properties are not functional from more number of days in a year.
- Properties do not allow a maximum number of minimum night stay booking window to the end user.
- An average price range preferred by a customer is between 120\$ to 130\$ whereas the most traction generating neighbourhoods i.e. Manhattan and Brooklyn offers a higher price range which might demotivate the customer to book.

# Average number of reviews given to places based on their number of days availability in a year.



Availability365Range Vs AvgReviews



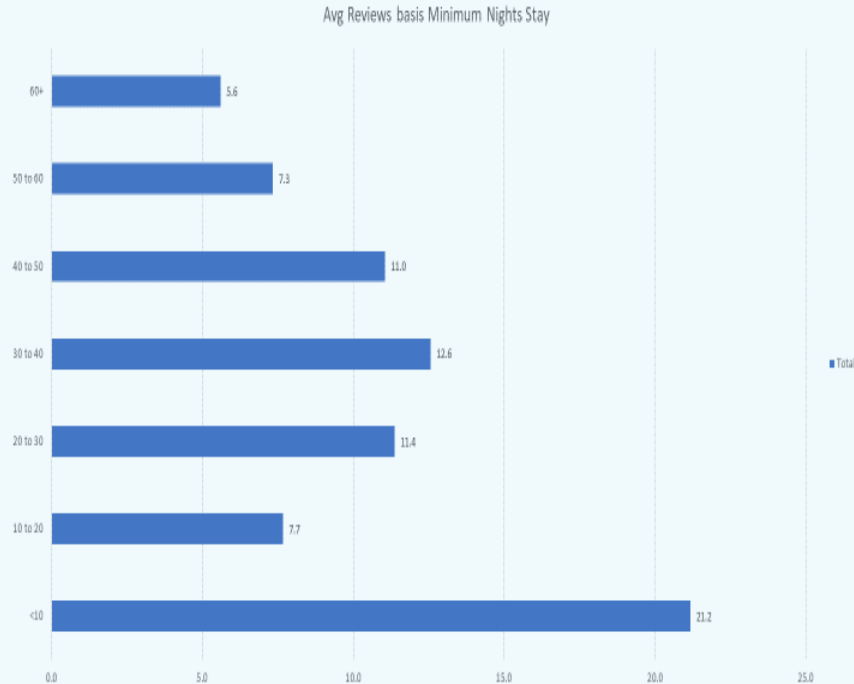
- Brooklyn has received the highest number of reviews based on the availability to stay open for more than 200 days in a year.
- On the other hand, there are some sites in Staten Island which are not open for a single day at all and hence could be the reason they have received very low reviews from the end consumer.

**We need to check which are these places and what issues are they facing?**

Average of Number Of Reviews for each Availability 365 Range. Color shows details about Neighbourhood Group. The marks are labeled by average of Number Of Reviews and Neighbourhood Group. The view is filtered on Neighbourhood Group, which keeps Bronx, Brooklyn, Manhattan, Queens and Staten Island.



# Does higher number of Minimum night stay receive the highest number of reviews?



- On an average Entire home/apt types are preferred more by the customers followed by Private rooms and then the Shared Rooms. Mostly because they are also available for a higher number of minimum nights stay window booking as compared to Private and Shared rooms.
- "Brooklyn-Williamsburg", "Brooklyn-Bedford-Stuyvesant", "Manhattan-Harlem", "Brooklyn-Bushwick" and "Manhattan-Upper West Side" are some places providing the highest number of minimum nights window to book making Manhattan and Brooklyn the top neighborhoods in offering maximum minimum nights stay.
- We can confirm that the greatest parameter for any customer to prefer a property and provide a review is having a maximum or minimum night stay window booking and their probability of being open for more days in a year to some extent.



# Appendix – Data Methodology

- **Methodology Approach**
  - Research Problem
  - Business Understanding
  - Type of Data Require
  - Data Source
  - Whom are we presenting?
  - Analysis Done
  - Recommendations
- **Method of Analysis along with code**
  - Data Understanding and Preparation
  - Variables overview
  - Handling missing values and outliers
  - Feature selection / engineering
  - Analysing methods
  - Matrix used Analysis
  - Evaluation of Methods
- **Finding and Insights**



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**Thank You**