Effects of COVID-19 on Customer Preferences

AGENDA

- Objective
- Background
- Key findings
- Recommendations
- Appendix:
  - Additional Insights
  - Data methodology
  - Data model assumptions

OBJECTIVE

- Enhance our post-COVID business revival strategies
- Explore customer preferences and user experience trends for the Airbnb NYC business
- Offer early recommendations for new acquisitions and enhancements to improve the overall customer experience

BACKGROUND

- The Airbnb business was significantly impacted by the COVID-19 pandemic, primarily as a result of travel restrictions

- The most substantial decline in revenue occurred in NYC during Q2 of 2020

- With the easing of travel restrictions, there is an opportunity to operate the business strategically to recover from the losses

Airbnb could enhance its revenue by directing its attention towards Staten Island and the Bronx

- The predominant focus of Airbnb properties is on Manhattan and Brooklyn.

- To increase visibility for less popular properties, Airbnb could shift attention to neighborhoods such as Staten Island.

- Prioritizing premium properties in Manhattan proves beneficial, as they consistently attract high bookings despite their higher price points.

Manhattan boasts higher prices, rendering it one of the more attractive areas
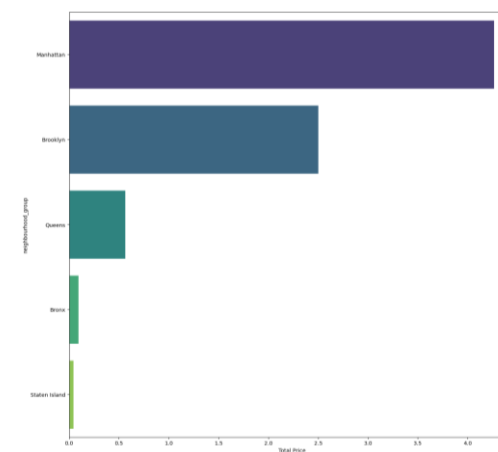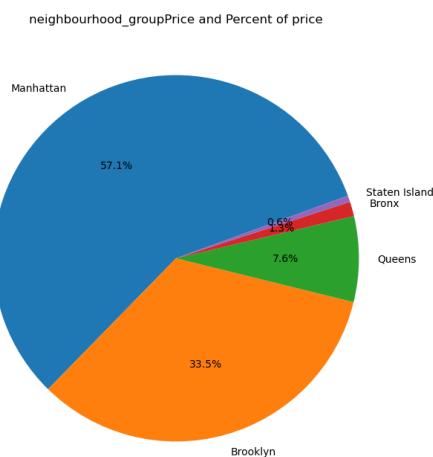
The emphasis for new acquisitions should be on prioritizing entire apartments.

- Approximately 98% of Airbnb properties consist of private rooms and entire homes, with the latter commanding higher prices.

- To boost revenue, Airbnb should strategically prioritize acquiring entire homes and apartments.

- Given that only 2% of guests show a preference for shared rooms, it suggests that shared rooms may be less appealing and could be deprioritized in the acquisition strategy
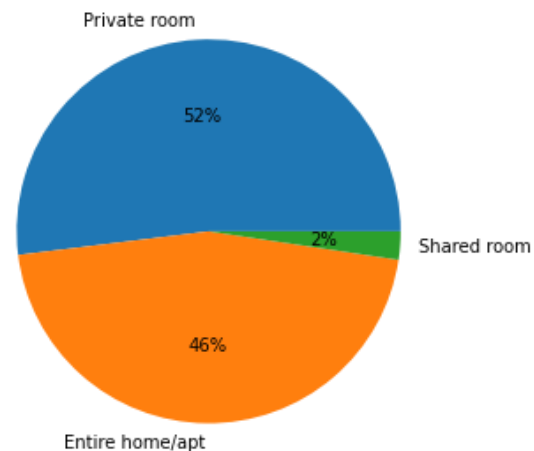
Maximize bookings by offering properties with minimal minimum nights stay

- Currently, prioritizing the acquisition of premium properties is discouraged due to their high prices

- As the minimum nights to stay increase, the associated price rises, leading to a natural decline in bookings

- Past observations indicate that hosts who offer a minimal number of nights to stay have historically received the highest number of bookings

Anticipated sustained high demand for entire apartments and private rooms post-covid based on customer preferences

- Among the three listing options, customers show a preference for Entire home/apt or Private room

- The categories 'Entire home/apt' and 'Private room' collectively make up a significant majority of the listed properties, comprising approximately 97.6%

- Shared rooms, in contrast, represent a minor portion, accounting for only 2.4% of the total listed properties

APPENDIX- Additional Insights

- The majority of listings are individually hosted by a single host.

- Manhattan exhibits a 14.7% higher contribution of 'Entire home/apt' compared to the overall percentage of 'Entire home/apt.'

- Queens demonstrates a 23.2% higher contribution of 'Private room' compared to the overall percentage of 'Private room.'

APPENDIX – Data Methodology Overview

- **Data Source:**
  1. Dataset: AB_NYC_2019.csv
  2. Tool: Jupyter Notebook

- **Dataset Import:**
  1. df = pd.read_csv('AB_NYC_2019.csv')
  2. Rows: 48,895, Columns: 16

- **EDA and Data Manipulations:**
  1. Addressed missing values and outliers.
  2. Converted data types and handled null values

- **Feature Addition:**
  1. Categorized key columns for analysis

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APPENDIX – Analysis and Visualization

- **Univariate Analysis:**
1. Explored unique counts and distributions
2. Analyzed 'neighbourhood group,' 'room_type,' and more

- **Bivariate Analysis:**
1. Explored correlations and relationships
2. Analyzed 'neighbourhood' vs 'prices' and 'room_type' vs 'number_of_reviews_categories.'

- **Multivariate Analysis:**
1. Explored mean of 'reviews_per_month' vs 'availability_365_categories' and 'price_category.'

- **Conclusion:**
1. Provided insights into unique counts, distribution patterns, and correlations
2. Informed decision-making for subsequent analysis and recommendations

APPENDIX - Data Assumptions

- We operated under the assumption that the data before the COVID-19 period reflected the attainment of the desired revenue
  - We assumed the company currently has no plans to expand into new territories in NYC
  - The company's strategies are formulated with the expectation that travel will increase in the post-COVID period

Thank you!