Storytelling Case Study: Airbnb, NYC

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AGENDA

Objective

Background

Key Findings

Recommendations

Appendix:

- Data sources
- Data methodology
- Data model assumption

OBJECTIVE



BACKGROUND





To deliver valuable insights into the existing market landscape.

Improve strategies for property and host acquisitions, operations and customer preferences.

Present actionable insights to refine operations and user experience.

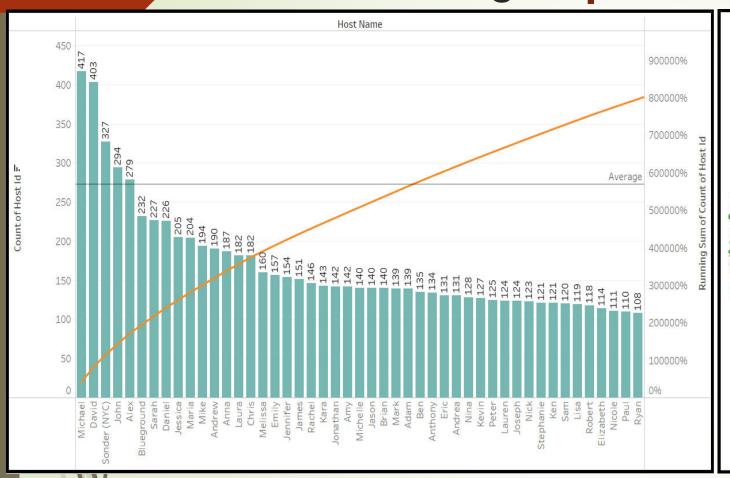
Airbnb has seen a major decline in revenue in recent months.

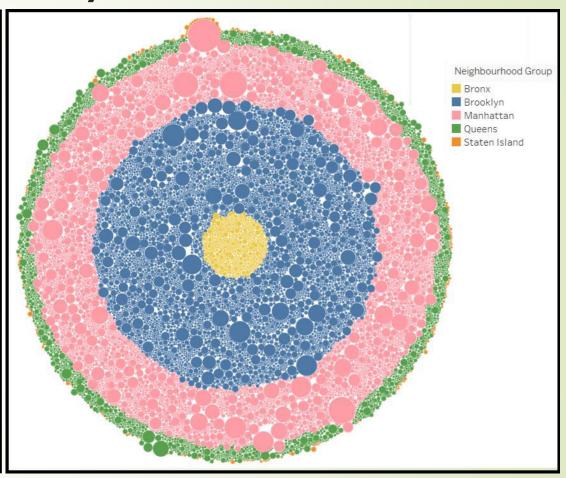
With travel resuming, the company needs to prepare strategically for market recovery.

Analysis is based on a dataset of Airbnb listings in New York to uncover key trends.

Strategic Host Acquisition:

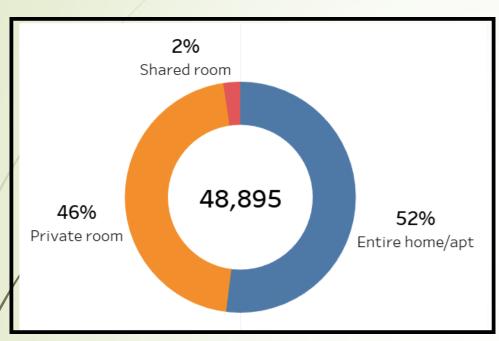
Maximizing Impact in Key Markets



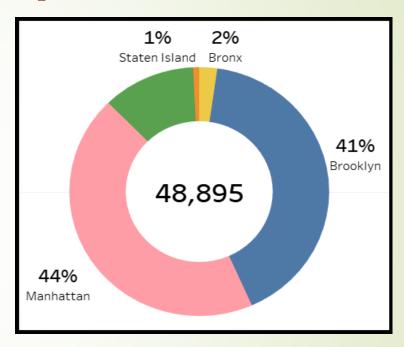


- Focus on acquiring high-performing hosts with multiple listings for maximum impact.
- Prioritize Manhattan and Brooklyn targeting Entire home/apt listings to drive growth.

Market Trends: Where Demand Meets Expansion Potential

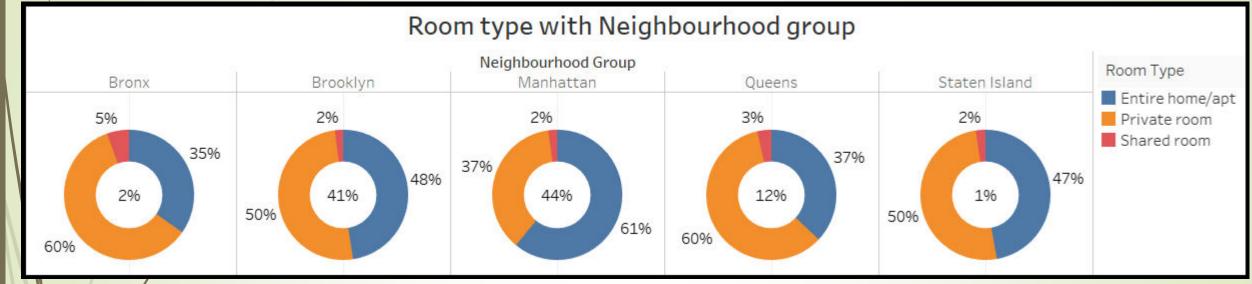


Entire homes/apartments (52%) receive the highest bookings, followed by Private rooms (46%), while Shared rooms (2%) remain the least preferred option.



Manhattan (44%) and Brooklyn (41%) dominate with 85% of listings, while Bronx (2%) and Staten Island (1%) offer expansion opportunities in underrepresented areas.

Discover the most popular Room Types in Neighbourhood Groups



- Manhattan and Brooklyn are the most popular neighbourhood groups with most people opting to book either an Entire home/apt or a Private room.
- Manhattan leads in the share of Entire home/apartment properties, representing 61% of the total listings in Manhattan.
- Maximum number of **Private rooms** are available in **Bronx** i.e. around **60%** of total listed properties in **Bronx**.
- Each neighbourhood group has very few shared rooms available.

Customer booking wrt min nights min_nights_cat 13K Neighbourhood Group 12K Brooklyn Manhattan 11K Staten Island 10K 88% 9K 5 8K No. of bookings 7K 36% 11.08% 4K 9880 3K 2.55% 5.82% 4.45% 84% LO \sim >31

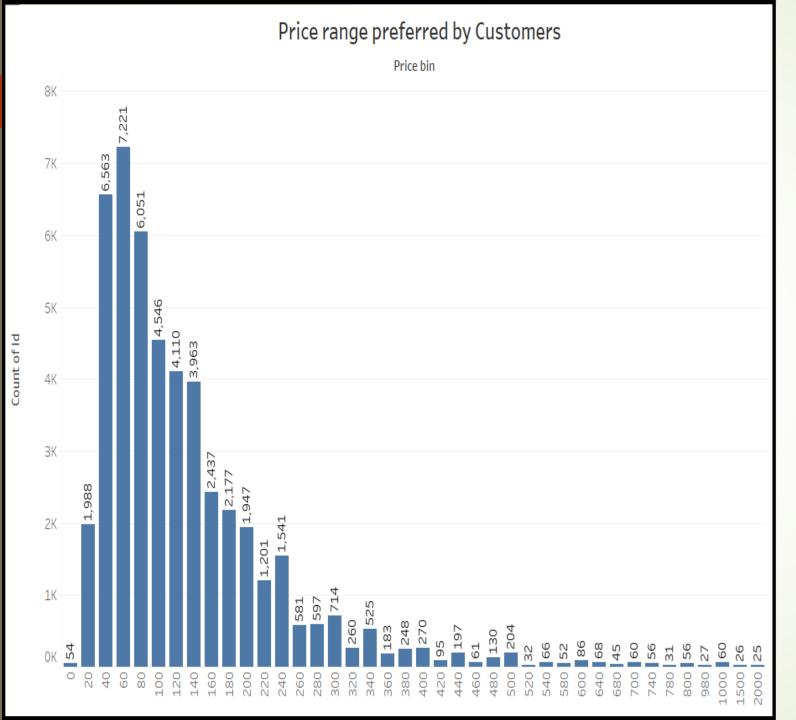
Strategic Analysis of Booking Trends Based on Minimum Night Requirements

- Properties with a minimum stay of 1-5 nights experience the highest booking volume with a notable increase in bookings at the 30-day mark likely driven by demand for monthly rental options.
- After the 30-day period, smaller spikes are observed indicating ongoing interest in longer stays particularly for monthly rentals.
- Manhattan and Queens report a higher frequency of 30-day bookings relative to other areas likely due to extended stays from tourists or business/official travelers seeking more affordable lodging options for official trips.

Neighbourhood vs Availability Neighbourhood 450K 550K 400K 500K 350K 450K 400K 300K Availability 365 350K 250K 300K 200K 250K 200K 150K 150K 100K 100K 50K 50K 0K 0K Financial District Jpper East Side Hell's Kitchen Williamsburg

Strategic Insights on Neighborhood Availability and Pricing Dynamics

- Bedford demonstrates the highest availability with relatively lower pricing, positioning it as a highly attractive option for customers.
- Harlem follows a similar trend offering high availability at competitive pricing.
- The Upper West Side, while offering limited availability is characterized by premium pricing.
- Conversely, Williamsburg features higher price points alongside moderate availability.



Price Range for Maximizing Bookings

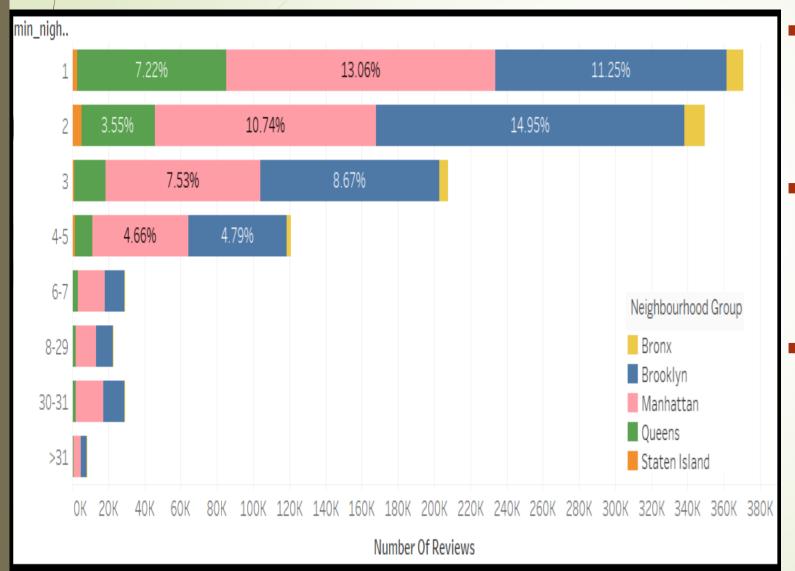
- We analyzed pricing preferences by examining the volume of bookings within specific price ranges.
- The optimal price range based on customer preferences is \$20 - \$200 as it attracts the highest volume of bookings.

Room Types and Neighborhoods on Pricing Strategies

Understanding Price Variation wrt Room Type & Neighbourhood						
Entire home/apt Manhattan 249.2	Entire home/apt Brooklyn 178.3	Entire home/apt Staten Island 173.8	Private room Manhattan 116.8	Private room Brooklyn 76.5	Shared room Manhattan 89.0	
					Shared room Queens 69.0	Shared room Bronx 59.8
			room i Queens i	Private room Bronx 56.8		
Entire home/apt _{Queens} 147.1	Entire ho Bronx 127.5				Shared room Staten Island	Shared room Brooklyn 50.5
				Private room Staten Island 62.3		

- The Entire home/apt in Manhattan averages \$250 reflecting strong demand for premium properties.
- Private rooms in Manhattan and Brooklyn command the highest average price indicating strong demand in these areas.
- The Shared Room type in Brooklyn is the most affordable with an average price of \$50.50.

Short Stays, High Impact: Majority of Reviews Focus on 1-3 Nights



- Short-term stays (1-2 nights) dominate; Manhattan (13.06%) & Brooklyn (14.95%) lead. Optimize pricing and availability to maximize revenue.
- Brooklyn outperforms Manhattan in mid-range stays (2-3 nights). Promote Brooklyn listings more for weekend travelers and short vacations.
- Long-term stays (30+ nights) have minimal traction. Avoid over-investing in extended-stay properties due to low demand.

CONCLUSION



RECOMMENDATION

Optimize Pricing
Strategy for Maximum
Bookings

The most preferred price range is \$20 - \$200 attracting the highest volume of bookings.

Implement **dynamic pricing** strategies to maintain competitive rates within this range while optimizing revenue.

Leverage High-Demand Neighborhoods for Growth

Manhattan and Brooklyn dominate with 85% of total listings while Bedford-Stuyvesant and Harlem show high availability and strong customer interest.

Focus on expanding listings in high-demand areas like **Manhattan**, **Brooklyn and Queens** while enhancing marketing efforts in emerging hotspots like **Harlem and Williamsburg**.

Enhance Long-Term Stay Offerings Properties with **1-5 night stays** see the highest bookings with **30-day stays** showing a strong spike especially in **Manhattan and Queens** for business and long-term travellers.

Develop **monthly rental promotions** and offer incentives for long-term bookings to attract business travellers and extended-stay tourists.

Diversify Room Type
Offerings Based on
Market Demand

Private rooms (46%) and Entire homes (52%) are significantly more preferred than Shared rooms (2%) with Bronx leading in private room availability.

Encourage hosts to list more **private rooms and entire apartments** in high-demand locations while
ensuring quality standards for **shared rooms** to
improve their appeal.

Strengthen Customer Experience & Host Engagement

High review counts in **Manhattan** and **Brooklyn** with short-term stays (1-3 nights) indicate strong customer satisfaction.

Prioritize quality assurance and host support programs in top-performing neighbourhoods to maintain positive guest experiences and sustain high review ratings.

APPENDIX

Please find the enclosed document for Appendix.



Adobe Acrobat Document