

Airbnb NYC Data Analysis

**Presentation II for Head of Acquisitions and Operations,
NYC & Head of User Experience, NYC**

PRESENTED BY: KARTIK UKHALKAR

POOJA JOSHI

HARSHINI KOTAPATI

Objective & Agenda

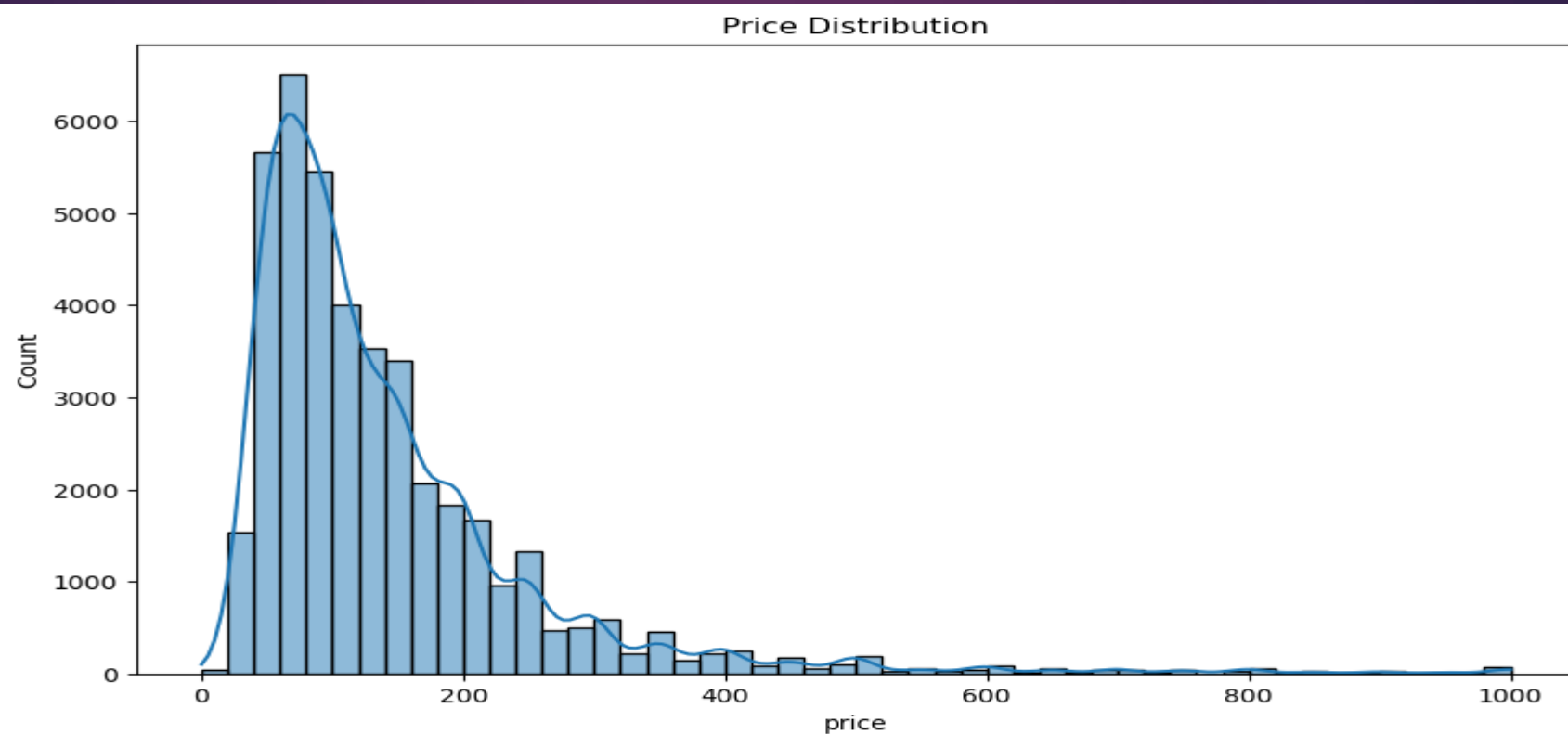
- Objective: Provide insights on NYC Airbnb listings to enhance decision-making.
- Agenda:
 - Data Overview
 - Key Insights
 - Pricing & Availability Trends
 - Neighborhood & Host Analysis
 - Recommendations

Dataset Overview

- Airbnb NYC dataset (2019)
- Contains details on listings, hosts, prices, and availability
- Key Variables: Price, Room Type, Neighborhood, Availability, Host Listings

id	name	host_id	host_name	neighbourhood_group	neighbourhood	latitude	longitude	room_type	price	minimum_price	number_of_reviews	last_review	reviews_per_month	calculated_host_cancellation_rate	availability_365
2539	Clean & quiet apt home by the park	2787	John	Brooklyn	Kensington	40.64749	-73.9724	Private room	149	1	9	19-10-2018	0.21	6	365
2595	Skylit Midtown Castle	2845	Jennifer	Manhattan	Midtown	40.75362	-73.9838	Entire home/apt	225	1	45	21-05-2019	0.38	2	355
3647	THE VILLAGE OF HARLEM....NEW YORK !	4632	Elisabeth	Manhattan	Harlem	40.80902	-73.9419	Private room	150	3	0			1	365
3831	Cozy Entire Floor of Brownstone	4869	LisaRoxan	Brooklyn	Clinton Hil	40.68514	-73.9598	Entire home/apt	89	1	270	05-07-2019	4.64	1	194
5022	Entire Apt: Spacious Studio/Loft by central park	7192	Laura	Manhattan	East Harle	40.79851	-73.944	Entire home/apt	80	10	9	19-11-2018	0.1	1	0
5099	Large Cozy 1 BR Apartment In Midtown East	7322	Chris	Manhattan	Murray Hil	40.74767	-73.975	Entire home/apt	200	3	74	22-06-2019	0.59	1	129
5121	BlissArtsSpace!	7356	Garon	Brooklyn	Bedford-St	40.68688	-73.956	Private room	60	45	49	05-10-2017	0.4	1	0
5178	Large Furnished Room Near B'way	8967	Shunichi	Manhattan	Hell's Kitch	40.76489	-73.9849	Private room	79	2	430	24-06-2019	3.47	1	220
5203	Cozy Clean Guest Room - Family Apt	7490	MaryEllen	Manhattan	Upper We	40.80178	-73.9672	Private room	79	2	118	21-07-2017	0.99	1	0
5238	Cute & Cozy Lower East Side 1 bdrm	7549	Ben	Manhattan	Chinatowr	40.71344	-73.9904	Entire home/apt	150	1	160	09-06-2019	1.33	4	188
5295	Beautiful 1br on Upper West Side	7702	Lena	Manhattan	Upper We	40.80316	-73.9655	Entire home/apt	135	5	53	22-06-2019	0.43	1	6
5441	Central Manhattan/near Broadway	7989	Kate	Manhattan	Hell's Kitch	40.76076	-73.9887	Private room	85	2	188	23-06-2019	1.5	1	39

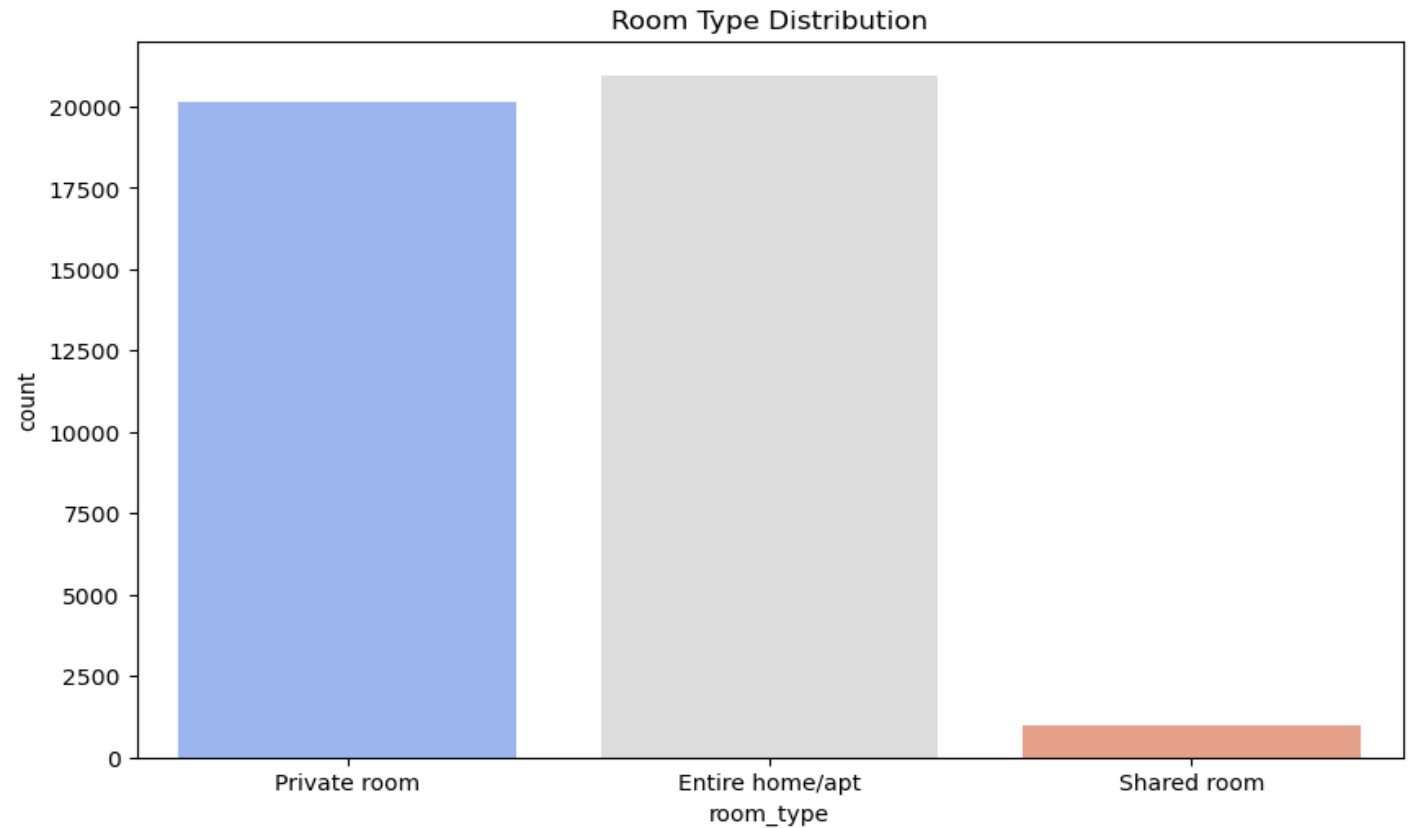
Price Distribution



- ▶ Most listings priced under \$200/night
- ▶ Right-skewed distribution; luxury properties influence high-end pricing
- ▶ Median price around \$100

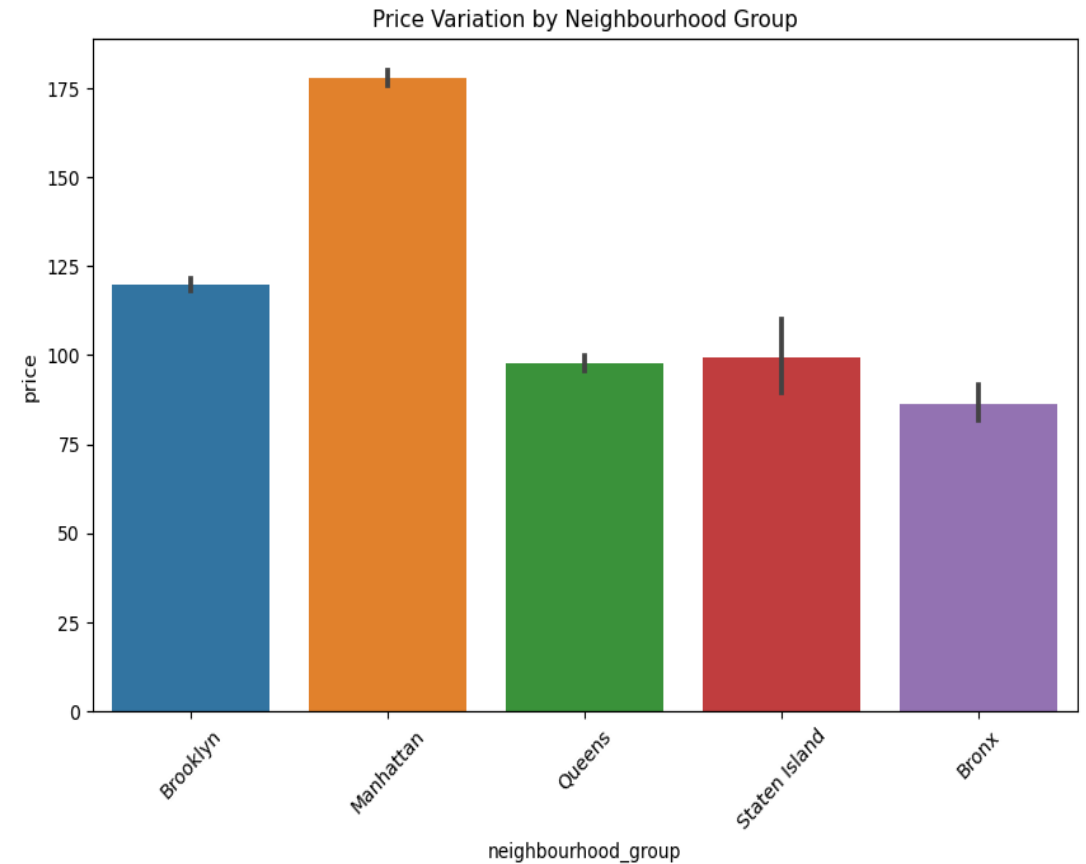
Room Type Distribution

- Majority of listings are Entire Home/Apt (~\$190 avg.)
- Private Rooms (~\$80 avg.) attract budget travelers
- Shared Rooms (~\$60 avg.) are least common



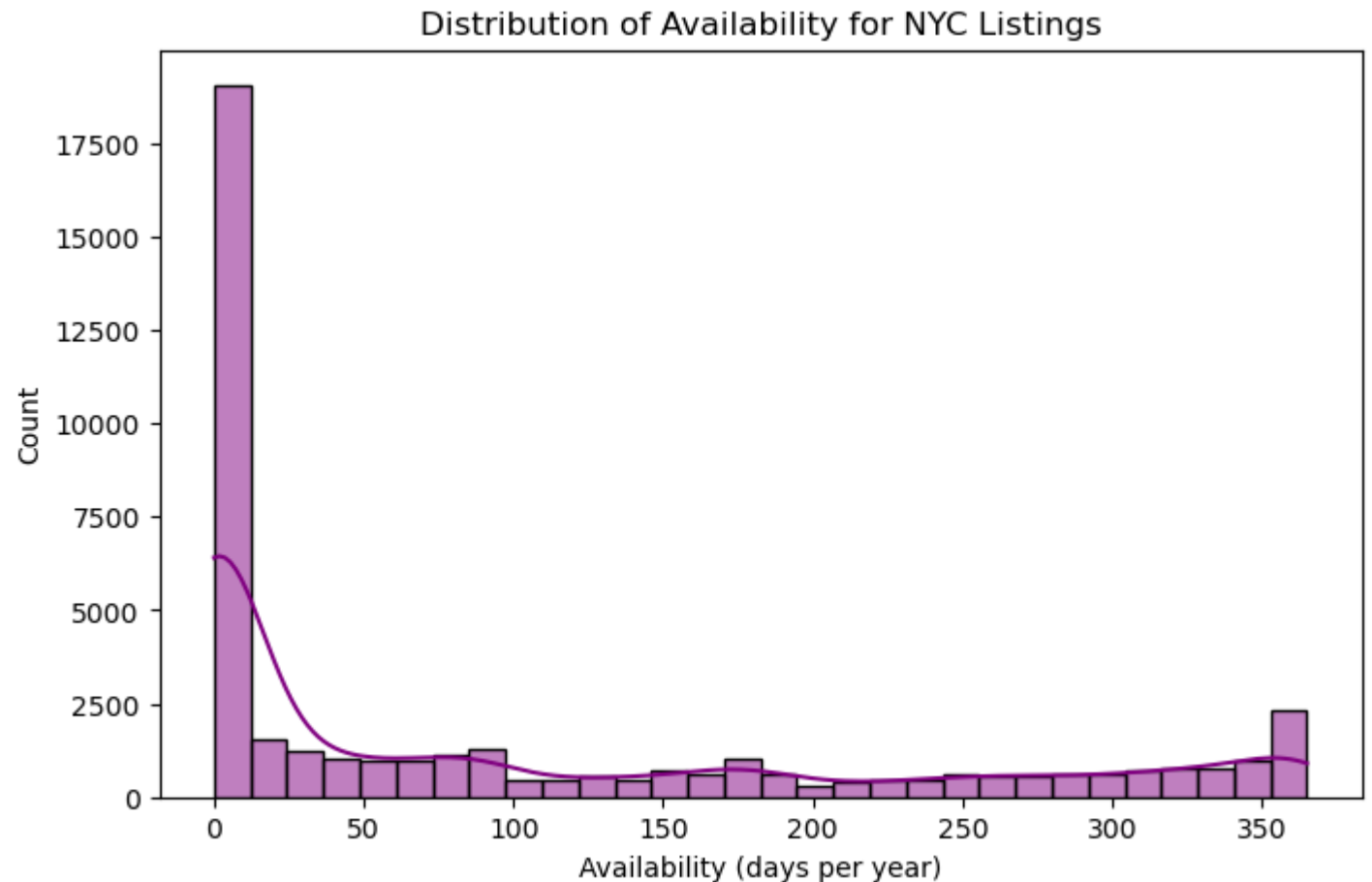
Neighborhood Trends

- Manhattan & Brooklyn dominate listings
- Manhattan has the highest avg. price (~\$180)
- Queens, Bronx, Staten Island more affordable (~\$80–\$100)



Availability & Host Insights

- ▶ Most listings have low availability (0–50 days/year)
- ▶ Some properties are available year-round (365 days)
- ▶ Top hosts manage 300+ listings, indicating commercial-scale operations



Key Business Insights

- ▶ Target high-demand neighborhoods (Manhattan, Brooklyn)
- ▶ Expand private room offerings for budget travelers
- ▶ Encourage underutilized listings to increase availability
- ▶ Monitor high-volume hosts to balance commercial vs. personal listings

Appendix (Methodology Document)

- ▶ [Methodology Document.docx](#)