INSIGHTS FROM AIRBNB, NYC PRE COVID PERIOD

FOR HEAD OF ACQUISITION & OPERATIONS AND HEAD

OF USER EXPERIENCE

AGENDA

- OBJECTIVE
- BACKGROUND
- KEY FINDINGS
- APPENDIX:
  - DATA SOURCE
  - DATA METHODOLOGY

OBJECTIVE

- IMPROVE OUR SHARED UNDERSTANDING ABOUT THE MARKET CONDITION OF AIRBNB COMMUNITY

- IMPROVE OUR SHARED UNDERSTANDING ABOUT OUR END CONSUMER EXPERIENCE AND PREFERENCES

- PROVIDE EARLY RECOMMENDATIONS TO HEAD OF ACQUISITION & OPERATIONS AND HEAD OF USER EXPERIENCE

BACKGROUND

- FOR THE PAST FEW MONTHS, AIRBNB HAS SEEN A MAJOR DECLINE IN REVENUE

- DUE TO COVID RESTRICTIONS TRAVEL WAS LIMITED

- RESTRICTIONS HAVE STARTED LIFTING AND PEOPLE HAVE STARTED TO TRAVEL MORE AND THUS A THOROUGH ANALYSIS WAS NEEDED TO BE READY TO MITIGATE REVENUE LOSS

TOP CAUSE OF DECLINING REVENUE

○ PROPERTIES ARE NOT FUNCTIONAL THROUGH OUT THE YEAR AND THUS CONTRIBUTE LEAST IN TERMS OF REVENUE

○ PROPERTIES DO NOT ALLOW A MAXIMUM NUMBER OF MINIMUM NIGHT STAY BOOKING

○ MAJORITY OF THE CUSTOMERS PREFER A PRICE RANGE OF 120$ TO 130$ ON AVERAGE FOR A STAY WHEREAS THE MOST TRACTION GENERATING NEIGHBORHOODS I.E. MANHATTAN AND BROOKLYN OFFERS A HIGHER PRICE RANGE
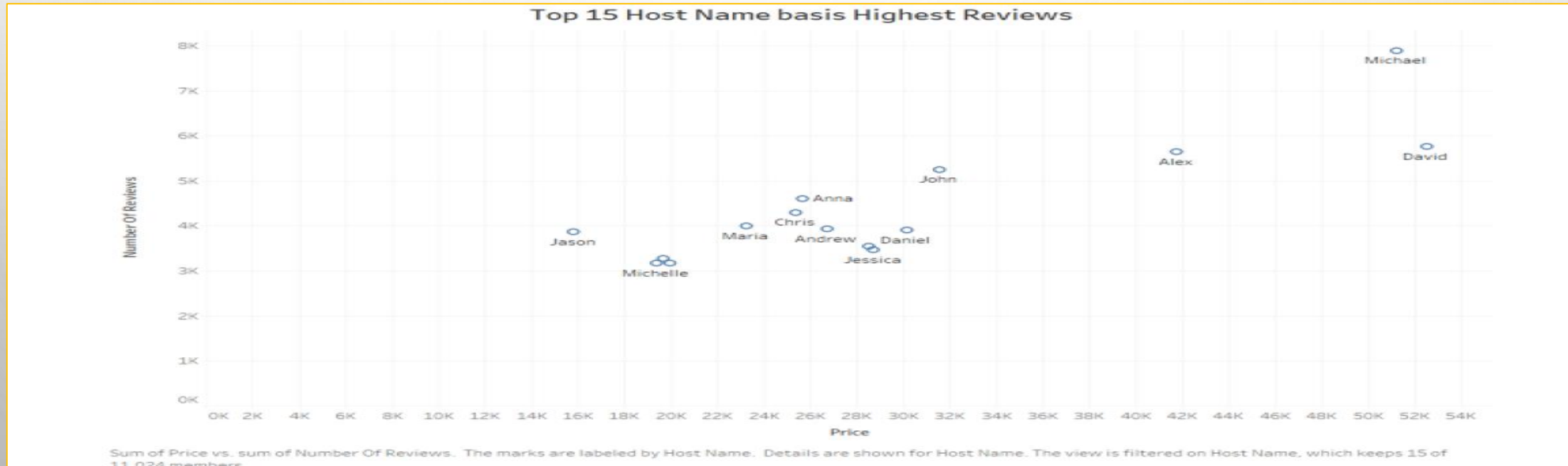
NUMBER OF PLACES HOSTED BY A SINGLE HOST BASED ON THEIR AVG PRICE AND NEIGHBORHOOD

MANHATTAN IS THE ONLY NEIGHBORHOOD IN THE BOROUGH THAT LIES IN OFFERING THE HIGHEST PRICE RANGE PROPERTIES ON THE PLATFORM FOLLOWED BY OTHERS WITH A MEDIUM PRICE RANGE ON AVERAGE. PRICES OFFERED ABOVE 120$ ON AVERAGE ARE HIGH PRICED, BETWEEN 80$ TO 120$, MEDIUM PRICE RANGE AND LESS THAN 80$ TO BE CONSIDERED LOW PRICE RANGE PROPERTY
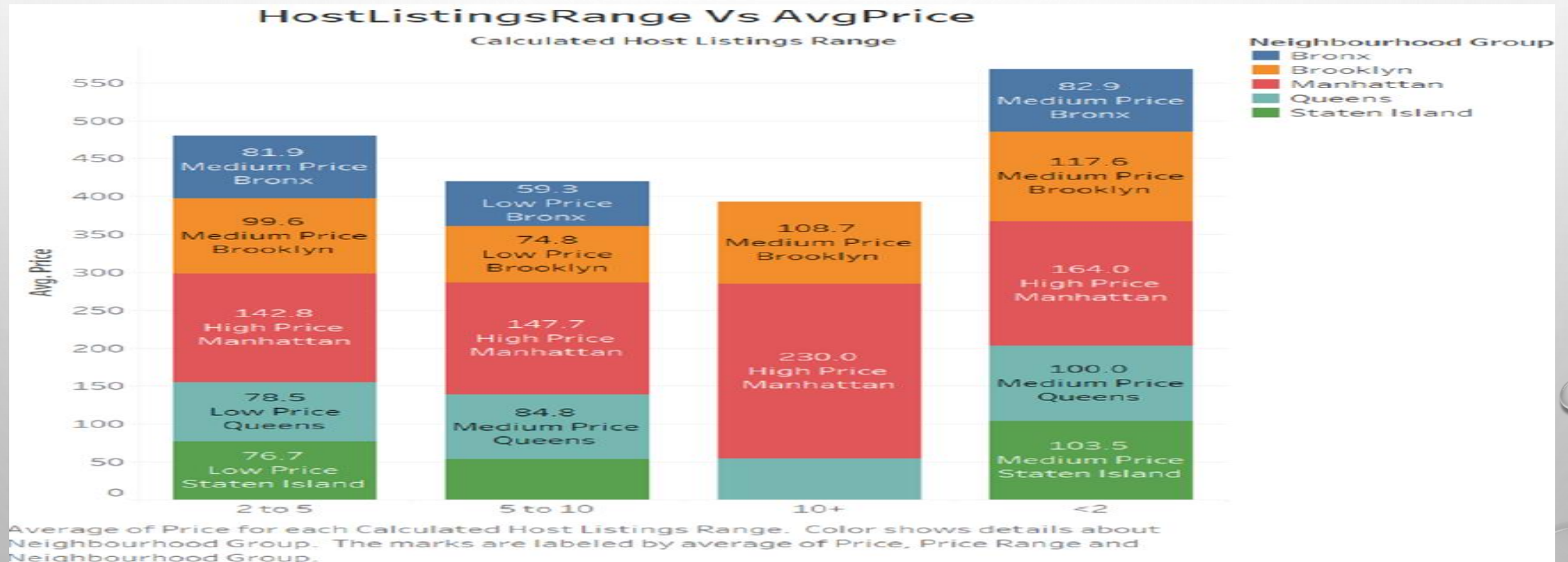
NAME OF THE HOST WHO HAVE RECEIVED HIGHEST NUMBER OF REVIEWS

- MICHAEL, DAVID, ALEX, JOHN AND ANNA ARE THE TOP 5 HOSTS THAT SEEM TO HAVE RECEIVED THE HIGHEST NUMBER OF REVIEWS FOR THEIR LISTED SITES

- THEY HAVE ALSO SITES LISTED WITH HIGH PRICE RANGE

- REMAINING 15 HOST HAD AVERAGE NUMBER OF REVIEW AND PRICE RANGE IS ALSO AVERAGE

Top 15 Host Name basis Highest Reviews

Sum of Price vs. sum of Number Of Reviews. The marks are labeled by Host Name. Details are shown for Host Name. The view is filtered on Host Name, which keeps 15 of 11,024 members.

APPENDIX – DATA SOURCE

- WE CAN ASSUME THAT THE COMPANY USED THE INTERNAL TOOL SUCH AS CRM TO CAPTURE THE DATA

- HERE IS A SNAPSHOT OF OUR DATA DICTIONARY

Column	Description
id	listing ID
name	name of the listing
host_id	host ID
host_name	name of the host
neighbourhood_group	location
neighbourhood	area
latitude	latitude coordinates
longitude	longitude coordinates
room_type	listing space type
price	
minimum_nights	amount of nights minimum
number_of_reviews	number of reviews
last_review	latest review
reviews_per_month	number of reviews per month
calculated_host_listings_count	amount of listing per host
availability_365	number of days when listing is available for booking

APPENDIX – DATA METHODLOGY

- DATA UNDERSTANDING, PREPARATION, AND PRE-PROCESSING :
  - READING DATA
  - ASSIGNING CORRECT DATATYPES
  - TREATING MISSING VALUES
  - TREATING OUTLIER
- VARIABLE TRANSFORMATION :
  - VARIABLE TRANSFORMATION AND APPLYING CATEGORICAL VARIABLE TRANSFORMATIONS TO TURN INTO NUMERICAL DATA AND NUMERICAL VARIABLE TRANSFORMATIONS TO SCALE DATA
- EXPLORATORY DATA ANALYSIS :
  - UNIVARIATE ANALYSIS(NUMERICAL AND CATEGORICAL) IN PYTHON
  - BIVARIATE AND MULTIVARIATE ANALYSIS IN EXCEL AND TABLEAU

TEAM CONTRIBUTION

ADITYA VIKRAM

SHIVAM TYAGI

SHOUVIK SHOME

THANK YOU !!!