Short Summary

In this dataset, a different pattern is observed in **Manhattan** County regarding the demand for various types of accommodation.Since **Brooklyn**, which has similar conditions to Manhattan, does not suffer from this issue, it could indicate the presence of a **key variable** influencing the demand for different room types.In this visualization, an attempt has been made to identify the reasons behind this phenomenon by using the available variables in the dataset and verifying their impact on demand.

Link: airbnb | Tableau Public

Introduction

In this story, the reason behind the **unique pattern** of accommodation demand in Manhattan, based on room type, compared to other counties, especially Brooklyn, is examined.

Summary of the results:

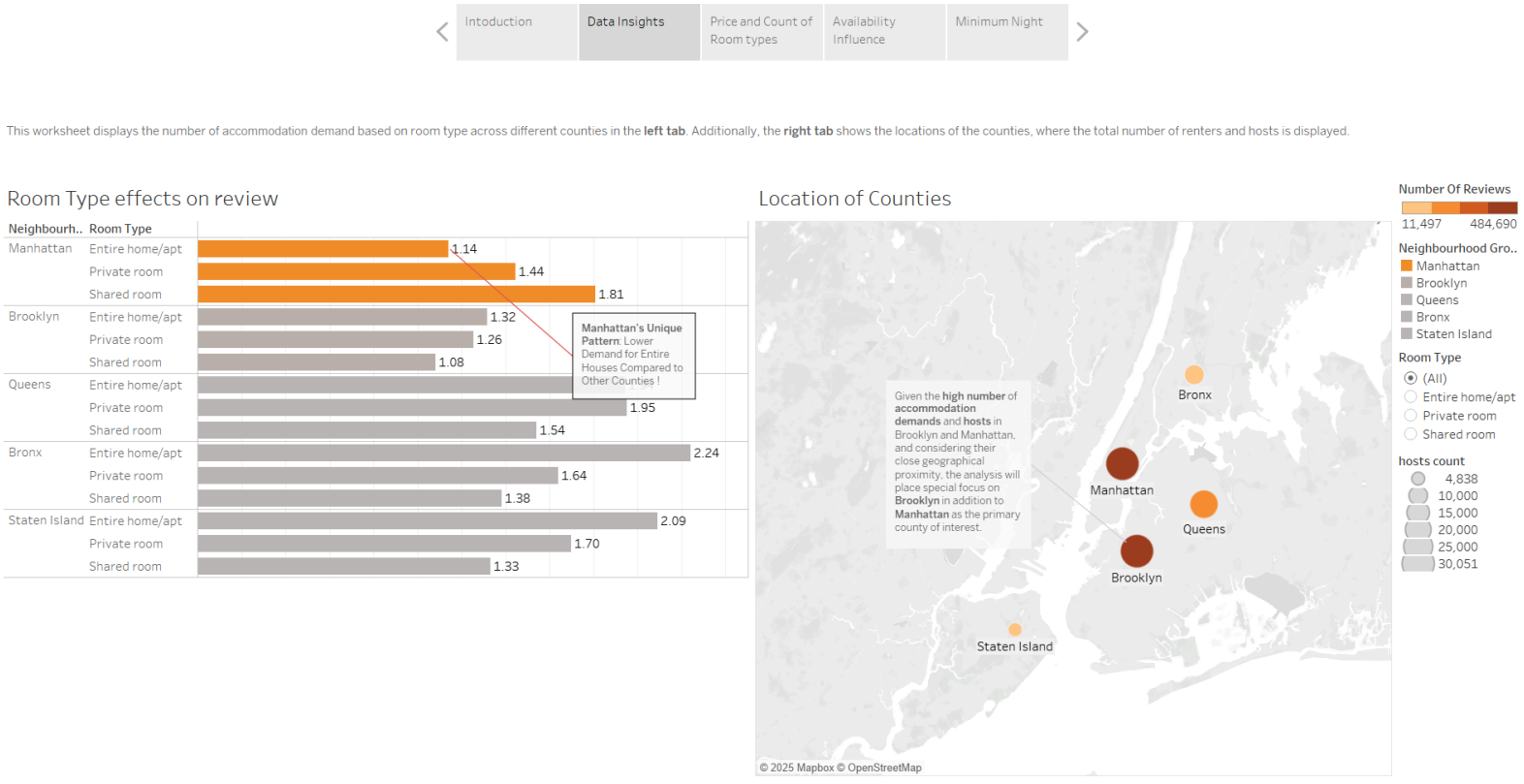
- The difference cannot be attributed to price or demand volume.
- The number of available days cannot have an impact on the accommodation demand.
- The reason can be traced to the high minimum night requirements for entire houses in Manhattan.

Note: In this analysis, the number of renters is not directly available in the dataset. Since we know that not all renters leave a review, if we assume the ratio of those who do to the total number of renters remains constant, we can use **reviews per month** as a proxy for the number of renters per month.

In this **dashboard**, Manhattan's different pattern is displayed, and in the **right tab**, the geographical similarity, popularity, and number of hosts are analyzed.

Vars: Room Type, hosts count, number of reviews, reviews per month and Neighbourhood Group

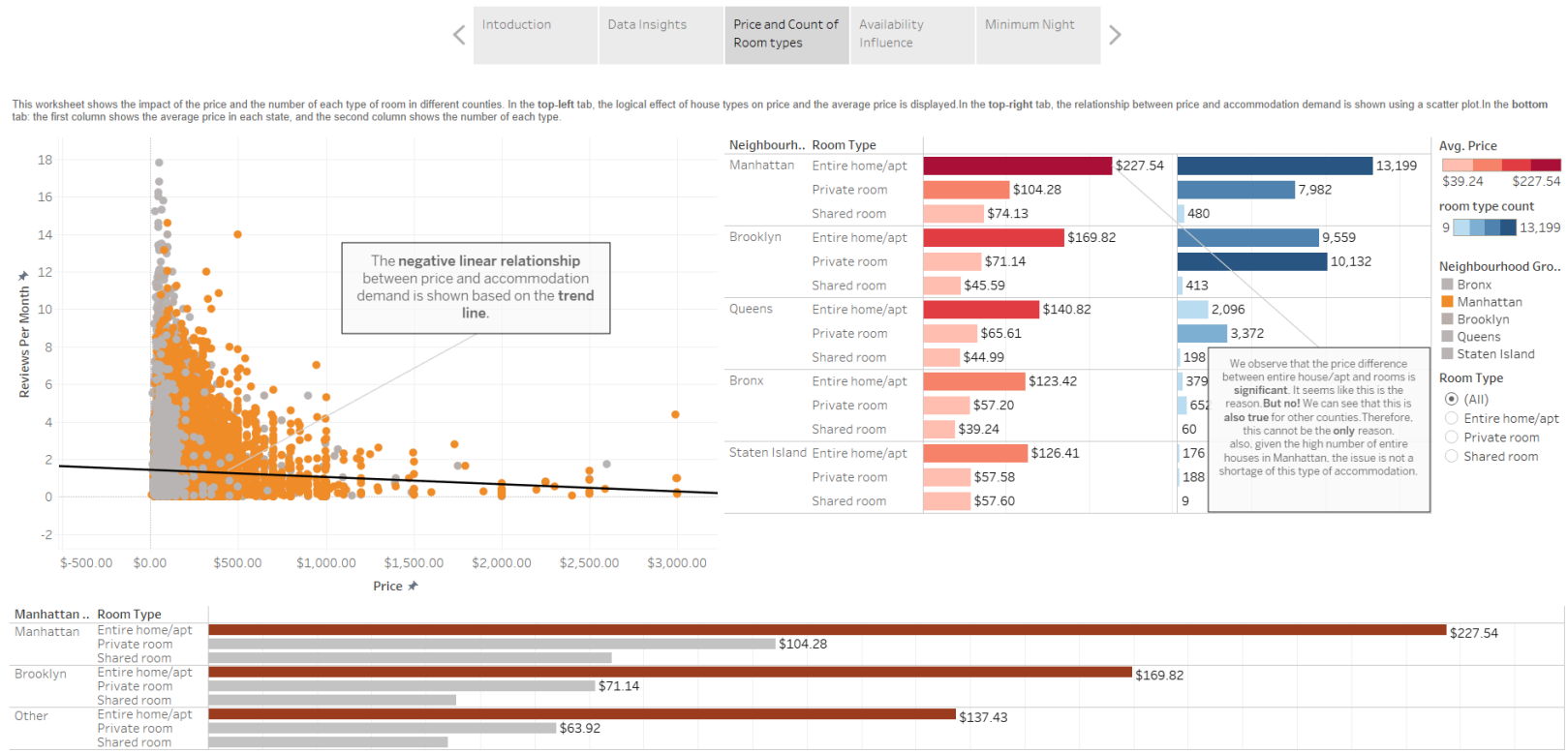
Kpi: reviews per month



This dashboard shows that the reason for the mentioned issue is not the price or the number of houses in Manhattan.

Vars: Room Type, average price, Room Type count, Neighbourhood Group and reviews per month

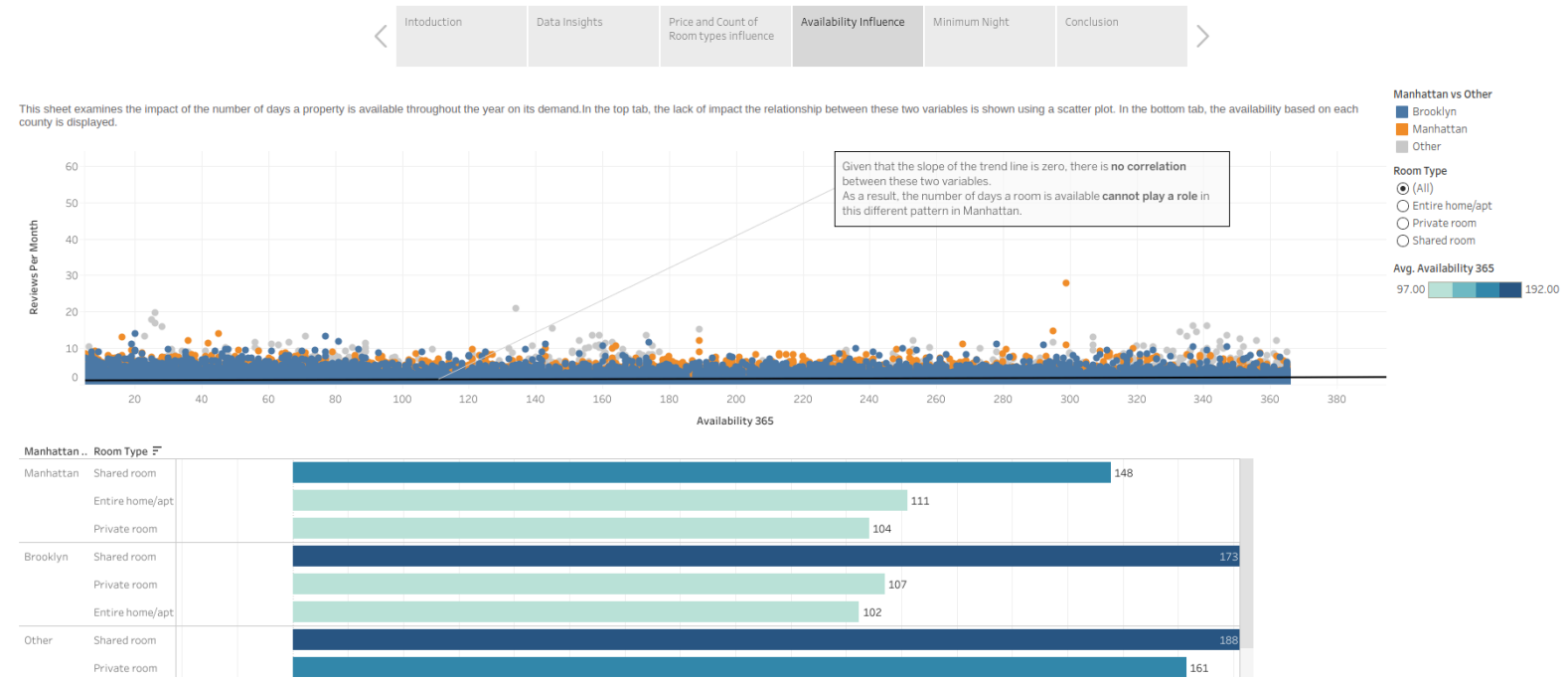
Kpi: avg price and Room Type count



This sheet examines the impact of the number of days a property is available throughout the year on its demand.

Vars: Room Type, average Availability 365, Room Type count, Neighbourhood Group and reviews per month

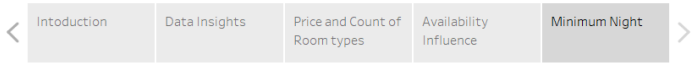
Kpi: average Availability 365



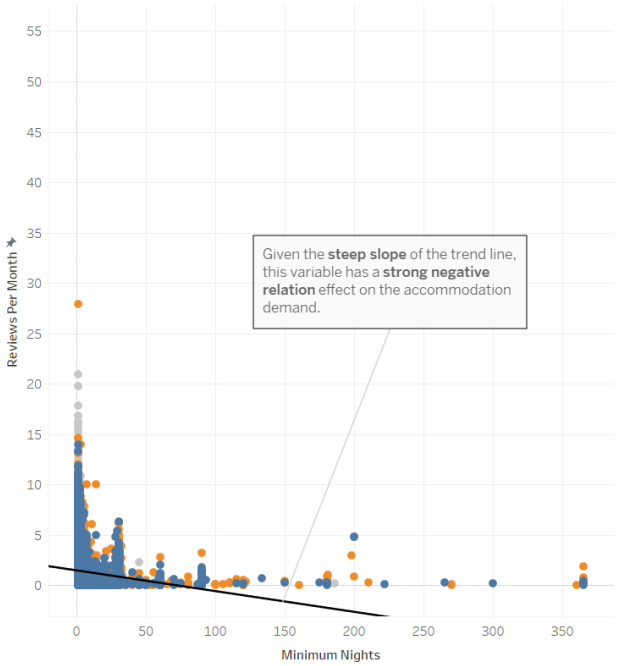
This dashboard shows the significant impact of the minimum number of nights on demand and its high average for the entire house/apartment in Manhattan.

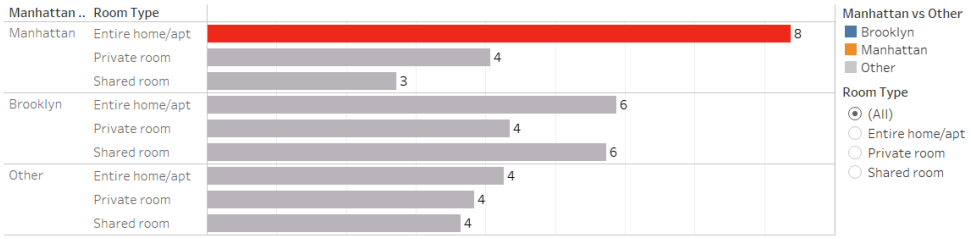
Vars: Room Type, average Availability 365, Room Type count, Neighbourhood Group and reviews per month

Kpi: average Availability 365



This worksheet examines the impact of the minimum nights for accommodation on the accommodation demand.In the **left** tab, the relationship between these two variables is shown using a scatter plot.In the **right** tab, the average minimum nights for Manhattan, Brooklyn, and others are displayed.



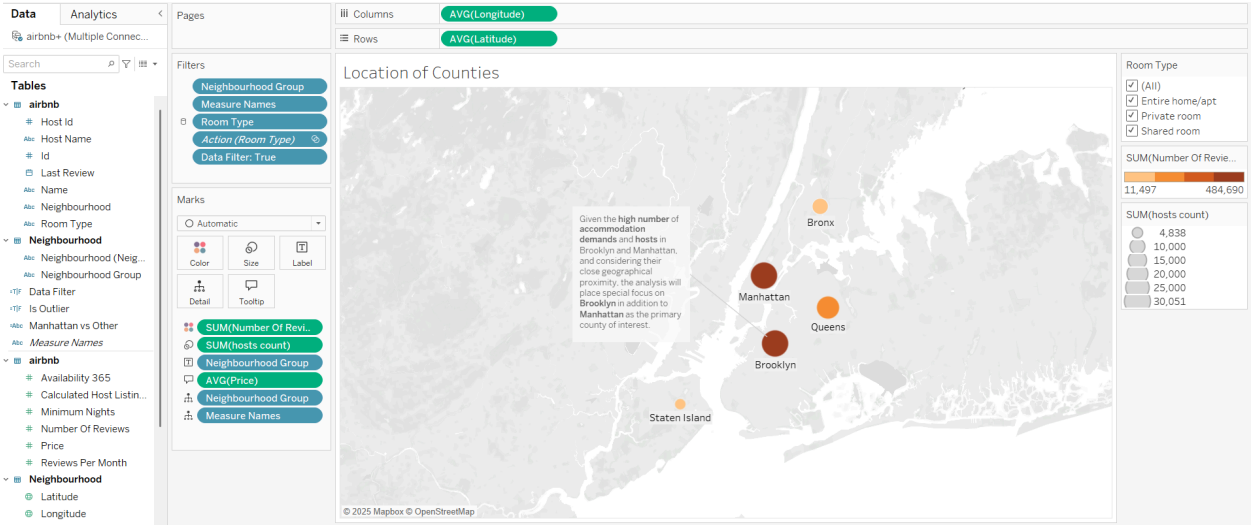


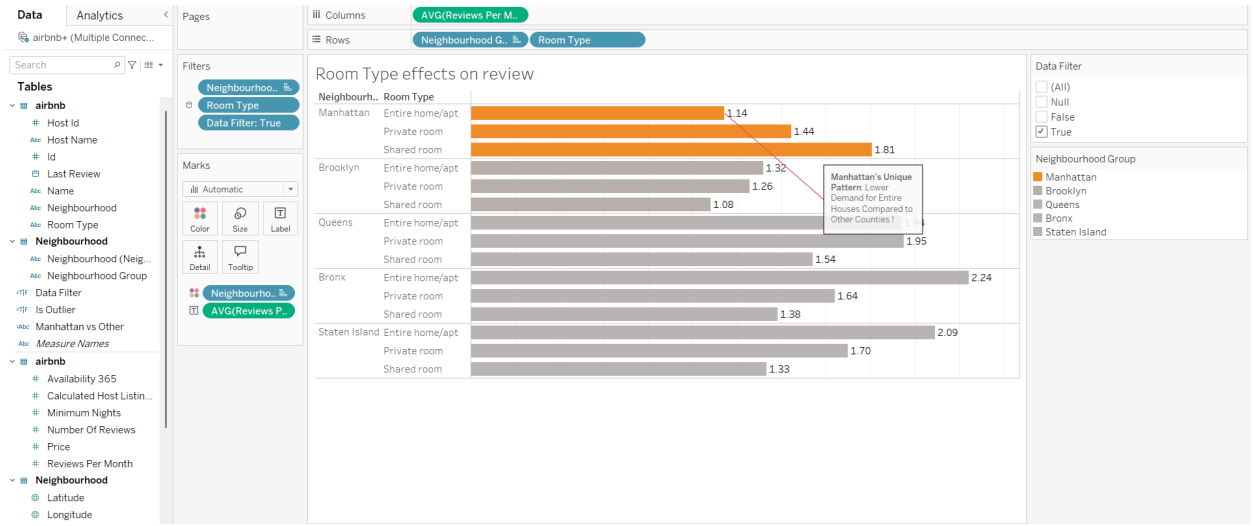
The high average of minimum nights in Manhattan!
As we observed in the scatter plot on the left, the impact **of minimum nights** on accommodation demand is **significant**, so it can be concluded that this is the **main reason** for the different pattern in Manhattan compared to other counties.
This is **not the case in Brooklyn**, and the difference in patterns between these two counties is due to this reason.
note: even tho R squared is low can we still say the relation between minimum nights and demand is significant because of a low p-value.

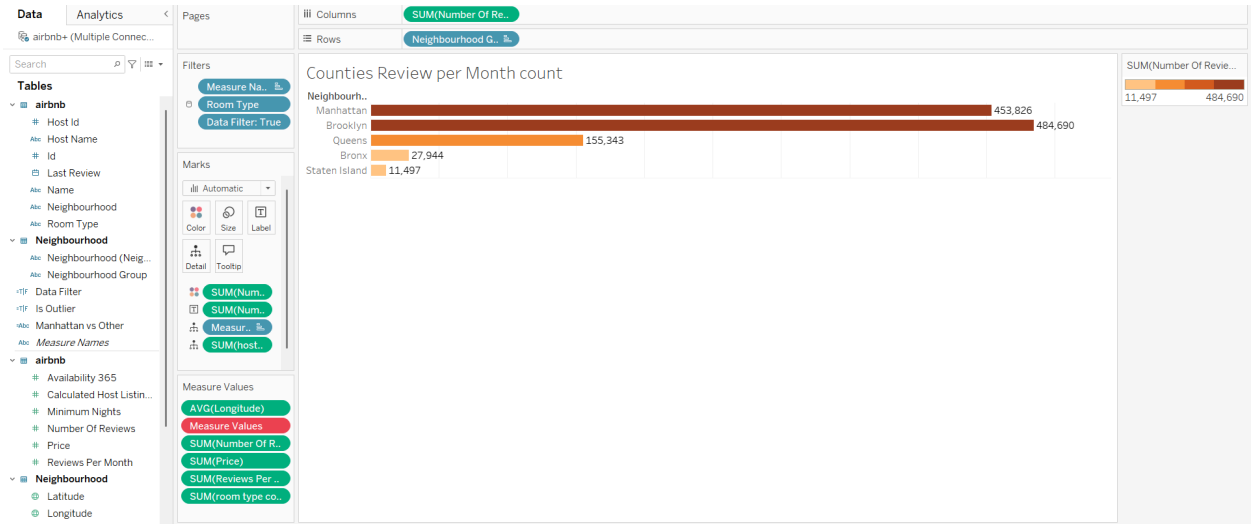
Conclusion

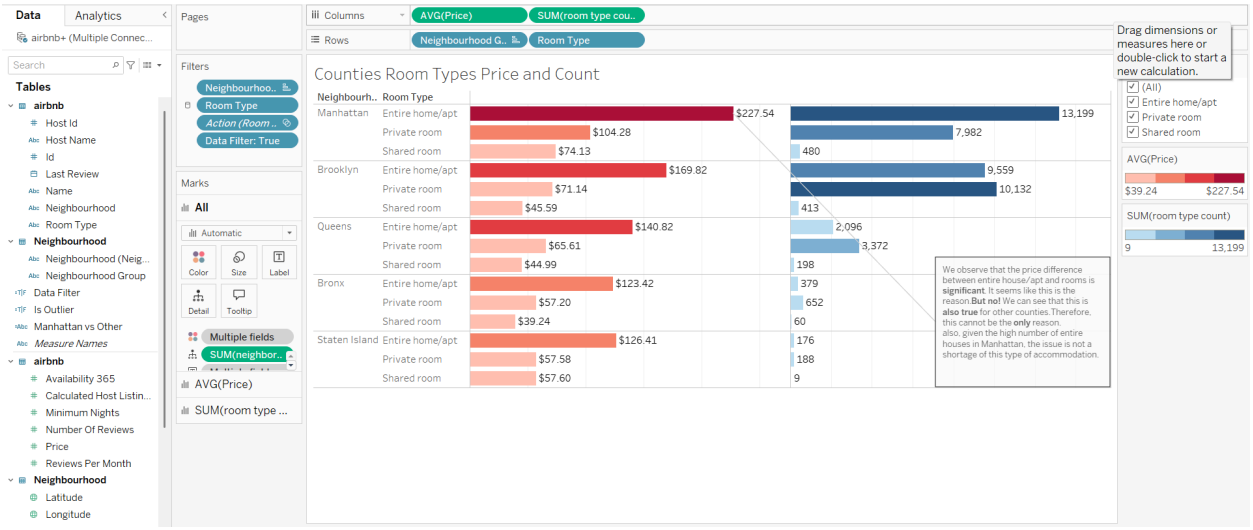
Based on the analysis of the variables in the dataset, the lower demand for entire house/apartment in Manhattan can be attributed to factors such as price and minimum nights.
However, price cannot be the reason behind Manhattan's different pattern, and it is observed that the minimum number of nights has a significant impact on this issue.

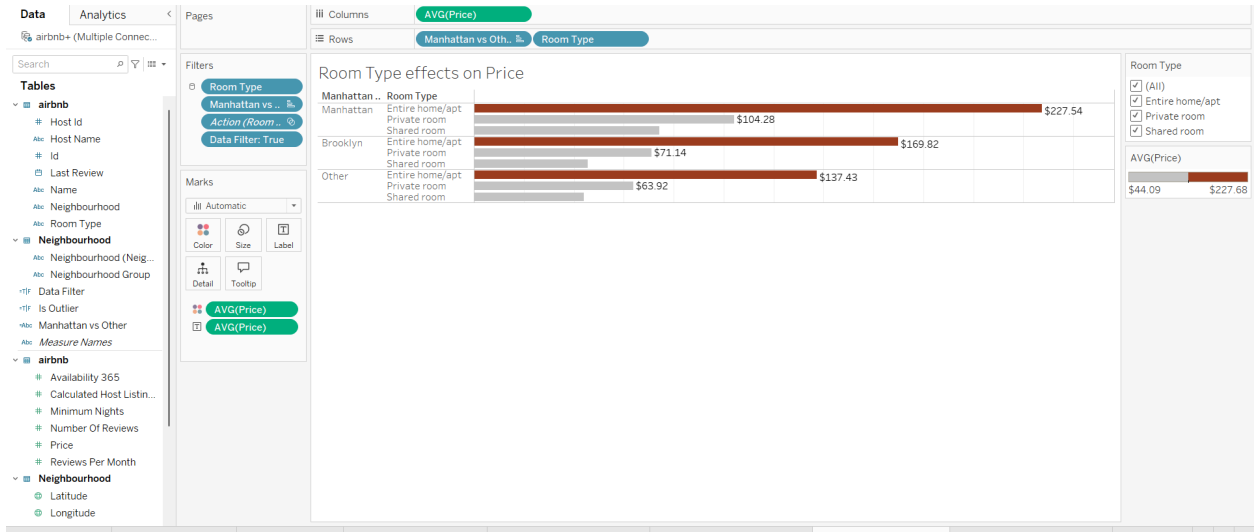
worksheets


Location of Counties
Given the high number of accommodation demands and hosts in Brooklyn and Manhattan, and considering their close geographical proximity, the analysis will place special focus on Brooklyn in addition to Manhattan as the primary county of interest.
Bronx
Manhattan
Queens
Brooklyn
Staten Island
© 2025 Mapbox © OpenStreetMap


Room Type effects on review
Manhattan's Unique Pattern Lower Demand for Entire Houses Compared to Other Counties !


Counties Review per Month count
Manhattan 453,826
Brooklyn 484,690
Queens 155,343
Bronx 27,944
Staten Island 11,497


Data
Analytics
Pages
Columns
AVG(Price)
SUM(room type cou..
Rows
Neighbourhood G..
Room Type
Filters
Neighbourhoo..
Room Type
Action (Room ..
Data Filter: True
Marks
All
Automatic
Color
Size
Label
Detail
Tooltip
Multiple fields
SUM(neighbor..
AVG(Price)
SUM(room type ...
Counties Room Types Price and Count
Neighbourh..
Room Type
Manhattan
Entire home/apt $227.54 13,199
Private room $104.28 7,982
Shared room $74.13 480
Brooklyn
Entire home/apt $169.82 9,559
Private room $71.14 10,132
Shared room $45.59 413
Queens
Entire home/apt $140.82 2,096
Private room $65.61 3,372
Shared room $44.99 198
Bronx
Entire home/apt $123.42 379
Private room $57.20 652
Shared room $39.24 60
Staten Island
Entire home/apt $126.41 176
Private room $57.58 188
Shared room $57.60 9
We observe that the price difference between entire house/apt and rooms is significant. It seems like this is the reason.But no! We can see that this is also true for other counties.Therefore, this cannot be the only reason. also, given the high number of entire houses in Manhattan, the issue is not a shortage of this type of accommodation.
Drag dimensions or measures here or double-click to start a new calculation.
Room Type
(All)
Entire home/apt
Private room
Shared room
AVG(Price)
$39.24
$227.54
SUM(room type count)
9
13,199
Tables
airbnb
Host Id
Host Name
Id
Last Review
Name
Neighbourhood
Room Type
Neighbourhood
Neighbourhood (Neig...
Neighbourhood Group
Data Filter
Is Outlier
Manhattan vs Other
Measure Names
airbnb
Availability 365
Calculated Host Listin...
Minimum Nights
Number Of Reviews
Price
Reviews Per Month
Neighbourhood
Latitude
Longitude


Data
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Data Filter: True
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AVG(Price)
Room Type effects on Price
Manhattan ..
Room Type
Manhattan
Entire home/apt $227.54
Private room $104.28
Shared room
Brooklyn
Entire home/apt $169.82
Private room $71.14
Shared room
Other
Entire home/apt $137.43
Private room $63.92
Shared room
Room Type
(All)
Entire home/apt
Private room
Shared room
AVG(Price)
$44.09
$227.68
Tables
airbnb
Host Id
Host Name
Id
Last Review
Name
Neighbourhood
Room Type
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Neighbourhood Group
Data Filter
Is Outlier
Manhattan vs Other
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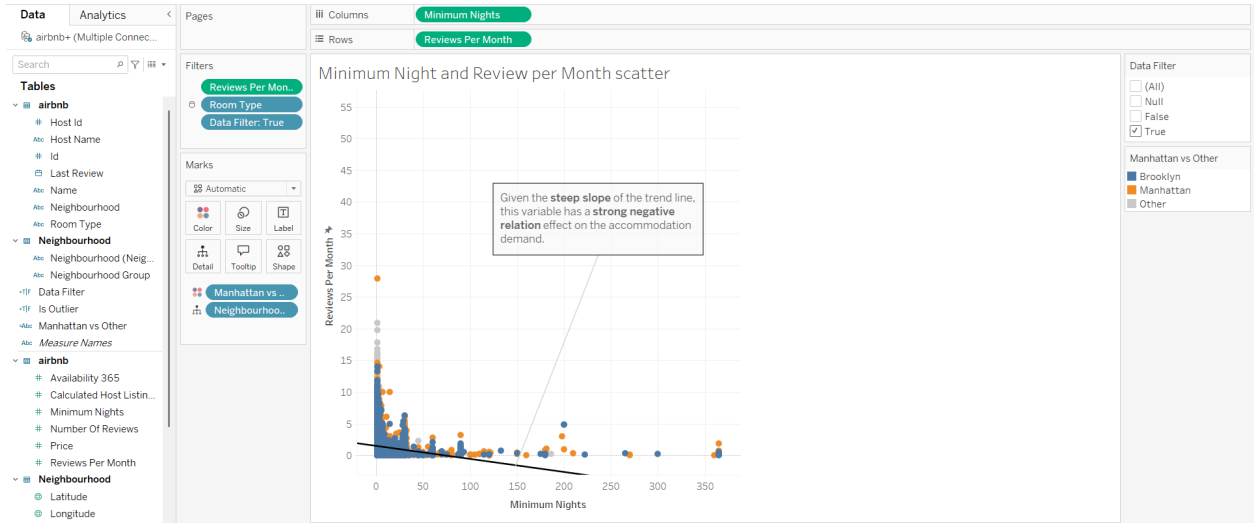
Data
Analytics
Pages
Columns
Minimum Nights
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Reviews Per Mon..
Room Type
Data Filter: True
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Tooltip
Shape
Manhattan vs ..
Neighbourhoo..
Minimum Night and Review per Month scatter
Reviews Per Month
Minimum Nights
Given the steep slope of the trend line, this variable has a strong negative relation effect on the accommodation demand.
Data Filter
(All)
Null
False
True
Manhattan vs Other
Brooklyn
Manhattan
Other
Tables
airbnb
Host Id
Host Name
Id
Last Review
Name
Neighbourhood
Room Type
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Neighbourhood Group
Data Filter
Is Outlier
Manhattan vs Other
Measure Names
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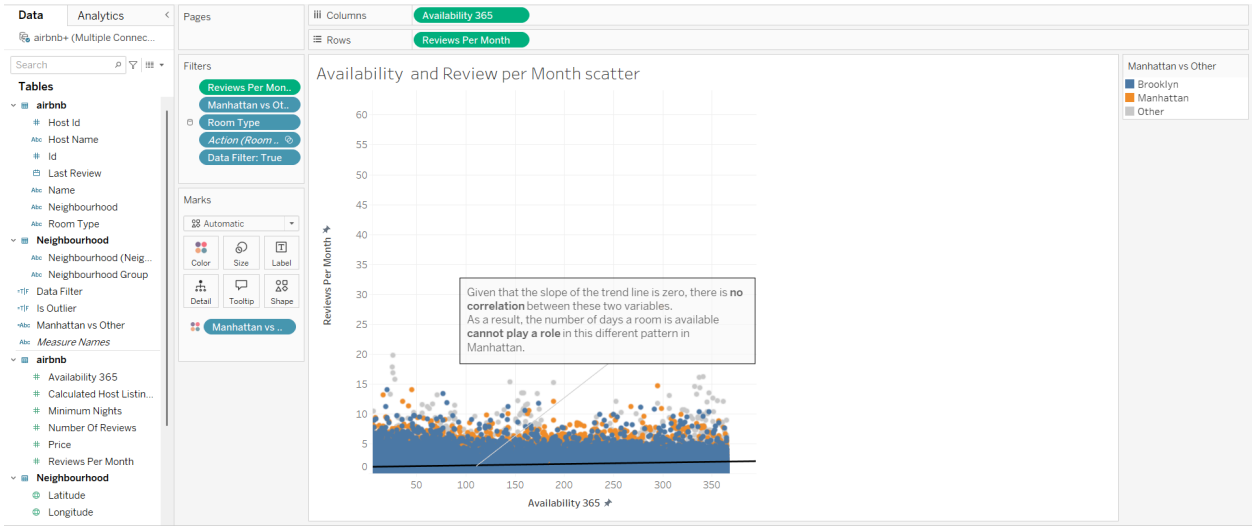
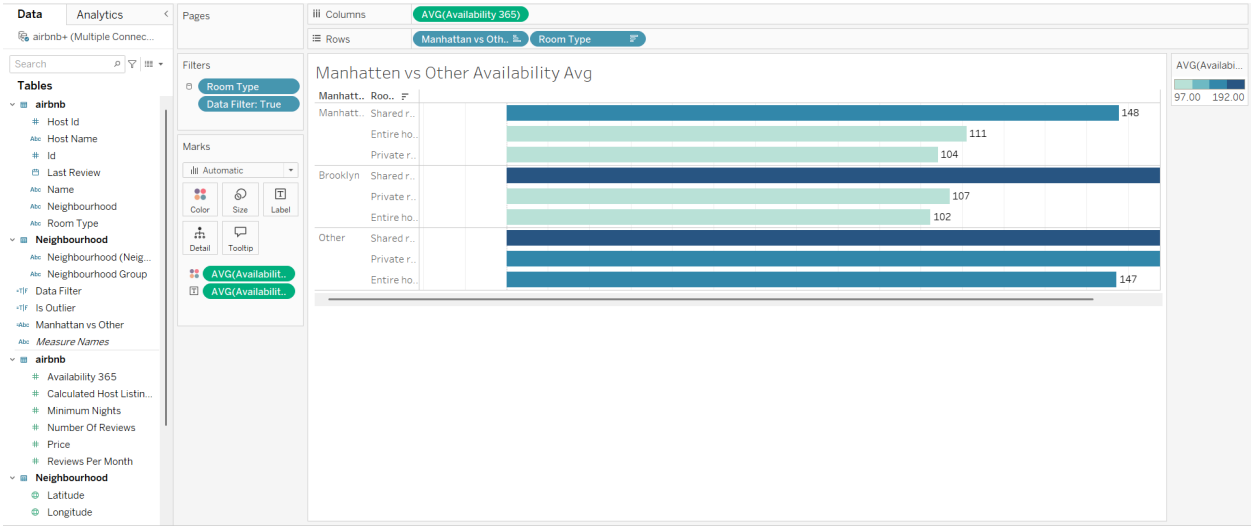
Availability 365
Calculated Host Listin...
Minimum Nights
Number Of Reviews
Price
Reviews Per Month
Neighbourhood
Latitude
Longitude


Availability and Review per Month scatter
Columns
Availability 365
Rows
Reviews Per Month
Reviews Per Mon..
Manhattan vs Ot..
Room Type
Action (Room ..
Data Filter: True
Manhattan vs ..
Manhattan vs Other
Brooklyn
Manhattan
Other
Reviews Per Month
Availability 365
Given that the slope of the trend line is zero, there is no correlation between these two variables.
As a result, the number of days a room is available cannot play a role in this different pattern in Manhattan.


Manhatten vs Other Availability Avg
Columns
AVG(Availability 365)
Rows
Manhattan vs Oth..
Room Type
Room Type
Data Filter: True
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97.00
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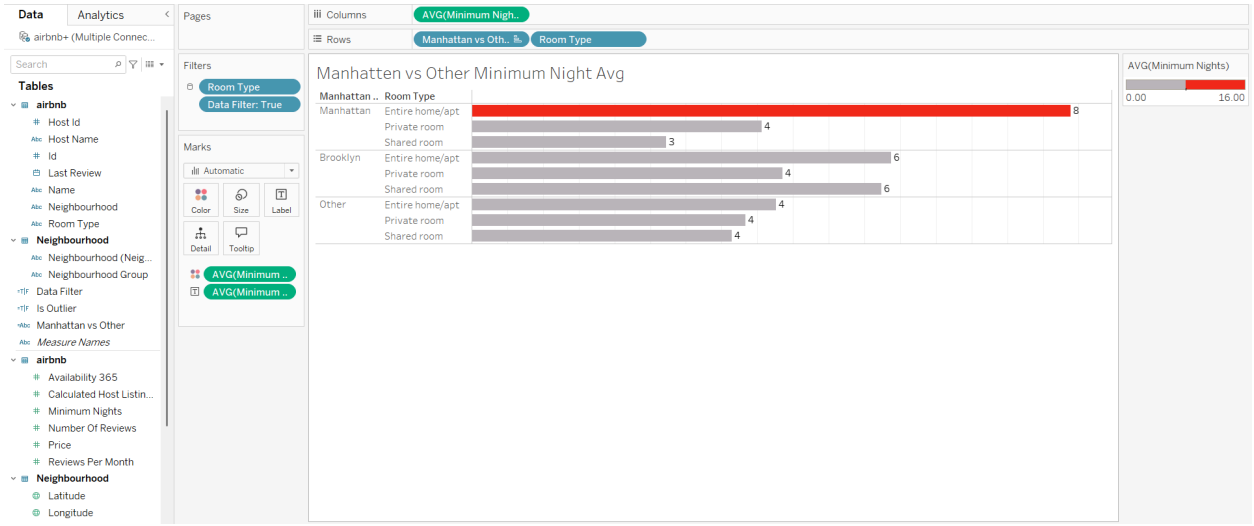
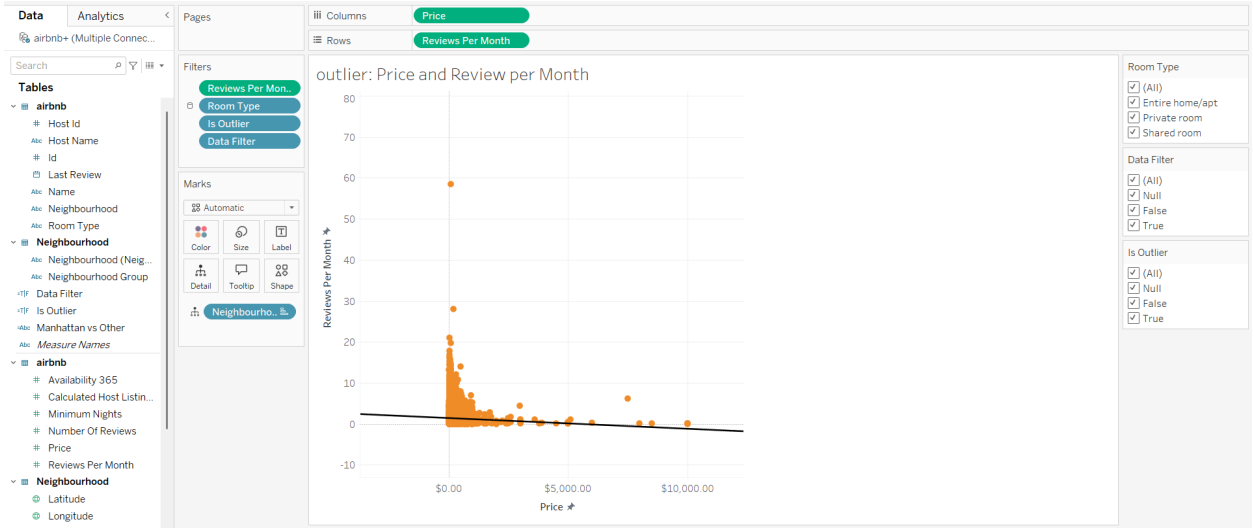
Shared r..
Entire ho..
Private r..
Brooklyn
Shared r..
Private r..
Entire ho..
Other
Shared r..
Private r..
Entire ho..
148
111
104
107
102
147


Price and Review per Month scatter
Columns
Price
Rows
Reviews Per Month
Reviews Per Mon..
Action (Room ..
Room Type
Data Filter: True
Neighbourho..
Neighbourho..
Data Filter
(All)
Null
False
True
Neighbourhood Group
Bronx
Manhattan
Brooklyn
Queens
Staten Island
Reviews Per Month
Price
The negative linear relationship between price and accommodation demand is shown based on the trend line.


Data
Analytics
Pages
Columns
AVG(Minimum Nigh..
Rows
Manhattan vs Oth..
Room Type
Filters
Room Type
Data Filter: True
Marks
Automatic
Color
Size
Label
Detail
Tooltip
AVG(Minimum ..
Manhatten vs Other Minimum Night Avg
Manhattan ..
Room Type
Manhattan
Entire home/apt
Private room
Shared room
Brooklyn
Entire home/apt
Private room
Shared room
Other
Entire home/apt
Private room
Shared room
AVG(Minimum Nights)
0.00
16.00


Data
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Columns
Price
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Reviews Per Month
Filters
Reviews Per Mon..
Room Type
Is Outlier
Data Filter
Marks
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Color
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Detail
Tooltip
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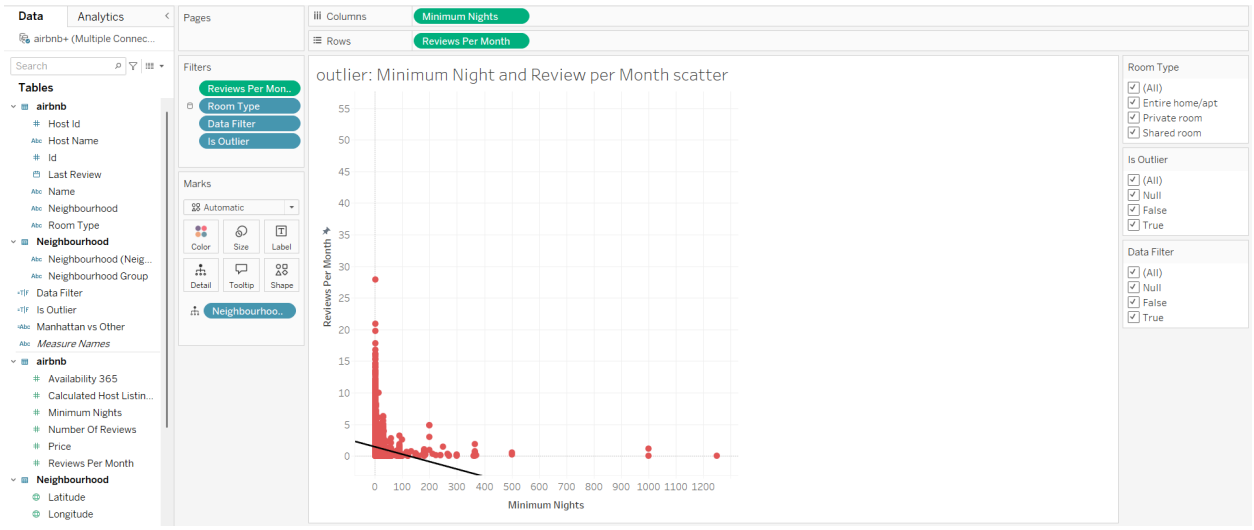
outlier: Price and Review per Month
Reviews Per Month
Price
$0.00
$5,000.00
$10,000.00
Room Type
Data Filter
Is Outlier


Data
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Is Outlier
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Size
Label
Detail
Tooltip
Shape
Neighbourhoo..
outlier: Minimum Night and Review per Month scatter
Reviews Per Month
Minimum Nights
Room Type
Is Outlier
Data Filter