



# Project Week 4: Data Visualization

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# Agenda

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1. Project Flow Structure
2. Showing the results
3. Biggest Challenges





# **Project Flow Structure**

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## Step 1: Overview the data set

- The dataset consisted of a table of Airbnb listings in New York from 2008 to 2014
- There are 4 key factors in the table :
  - Room Type
  - Beds
  - Price
  - Neighbourhood
  - Host since

## Step 2: Identify categories and numerical variables

- Using variables that help for the analysis

## Step 3: Generate questions:

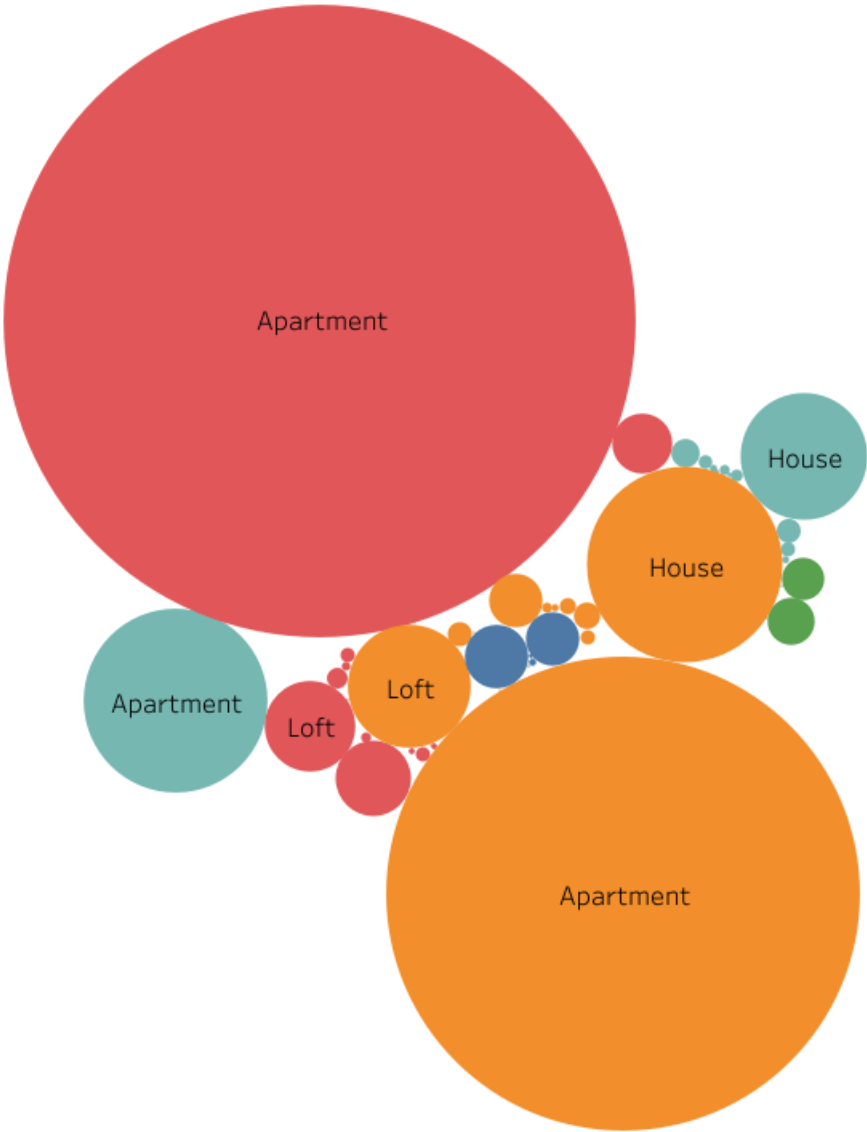
- What is the most popular Airbnb property type in New York city?
- What factors influence Airbnb's profitability?
- How many cluster do we have based on the factors and which cluster has the highest profit?
- What is the profit trend over the year and forecasting?

## Step 4: Create data visualization:

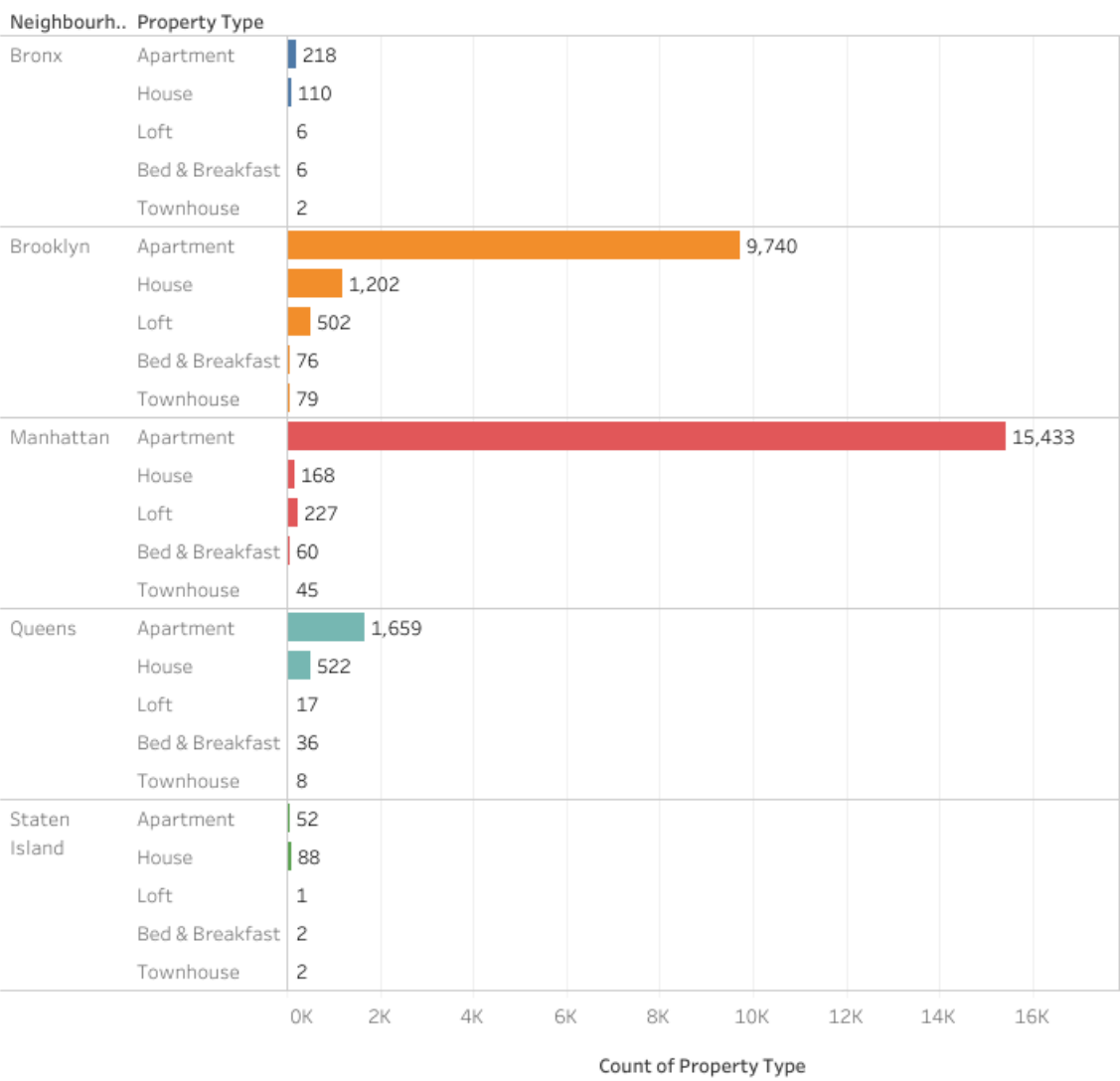
- Have an in-depth data analyze by visualization
- Discover significant patterns and tendencie



Borough Room Type Popularity



Top Amount of Property-Neighbourhood



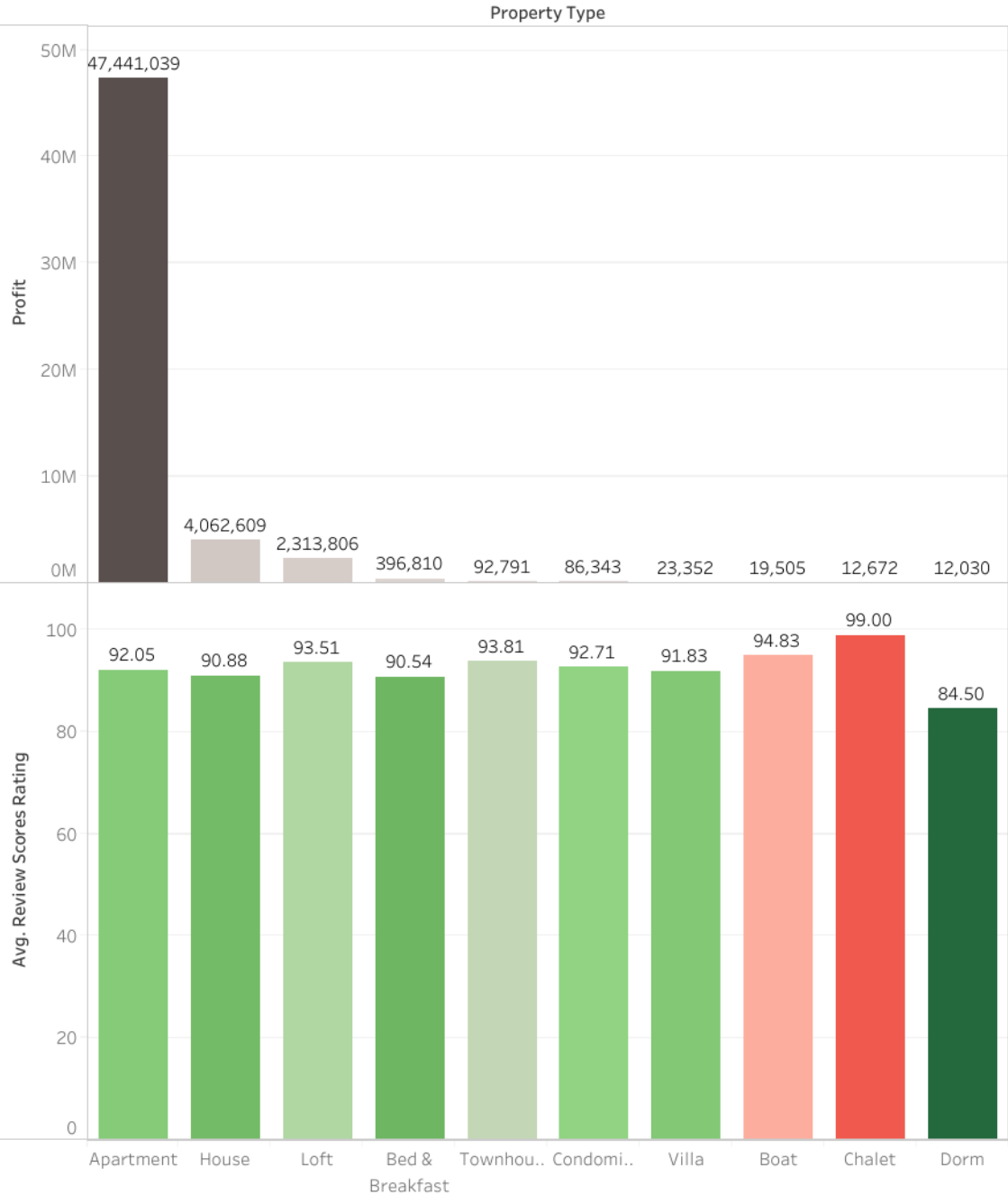
Number Of Reviews  
0 to 257

Property Type  
Multiple values

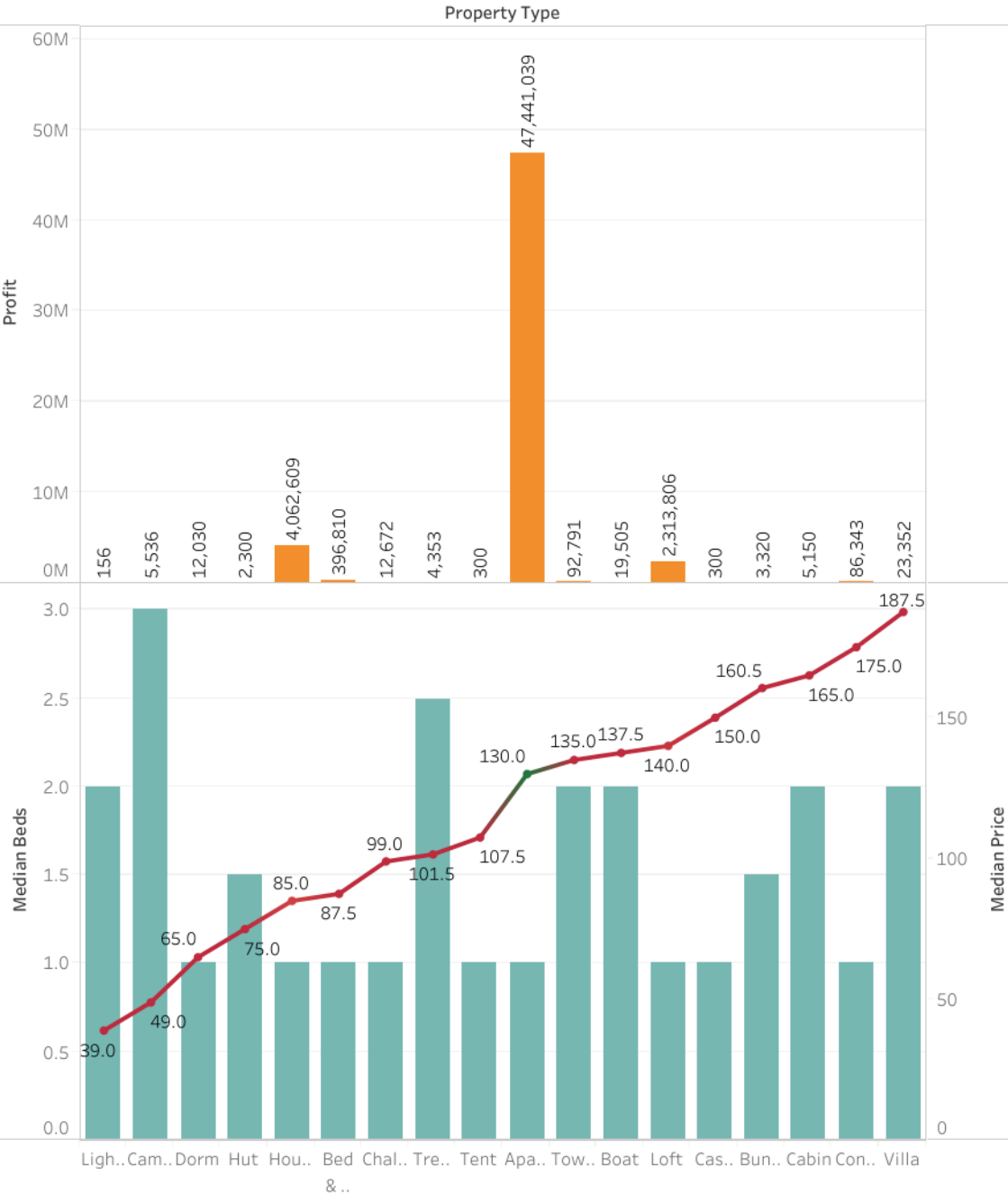
Property Type  
All

Neighbourhood  
■ Bronx  
■ Brooklyn  
■ Manhattan  
■ Queens  
■ Staten Island

Review Score-Profit by Property



MED Beds,Price-Profit



Property Type  
Multiple values

Profit  
12,030 47,441,039

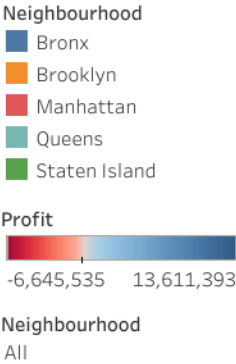
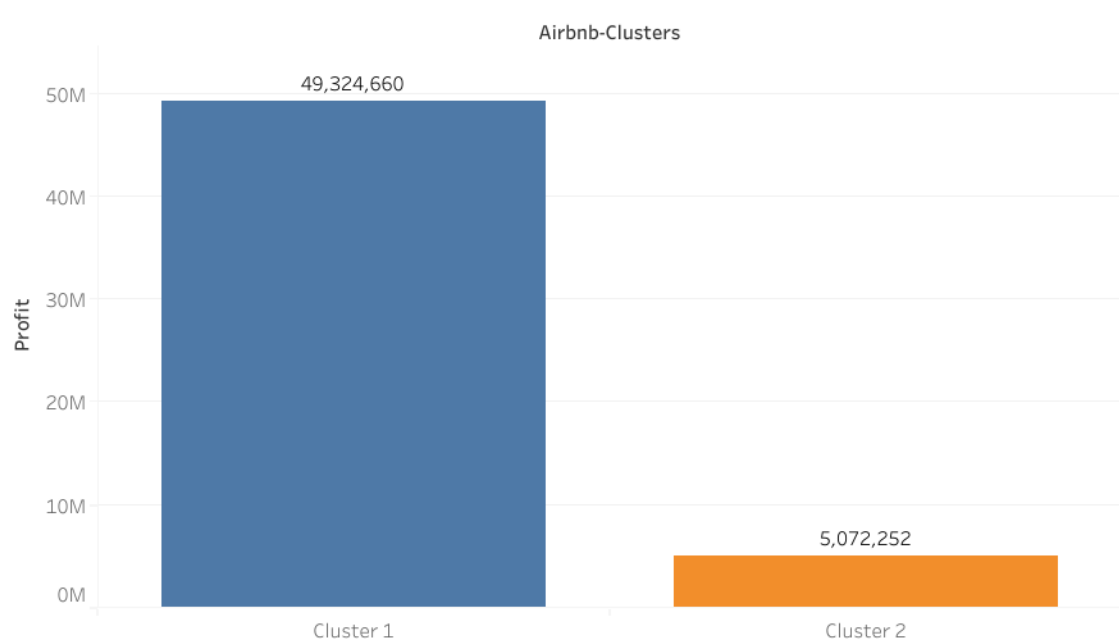
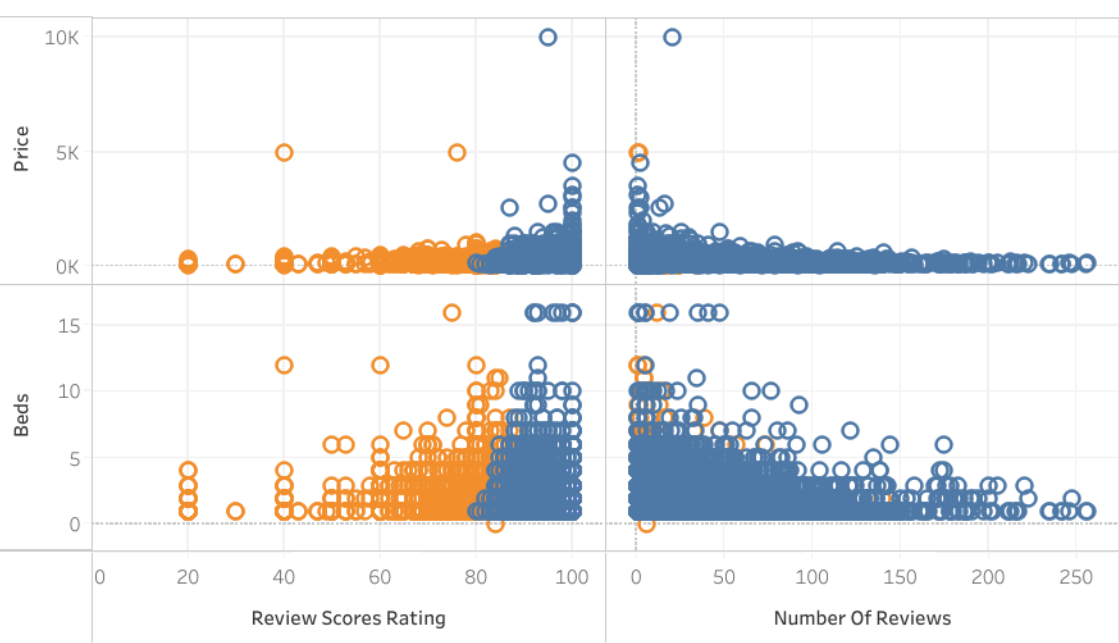
Avg. Review Scores Rating  
84.50 99.00

Measure Names  
Median Beds

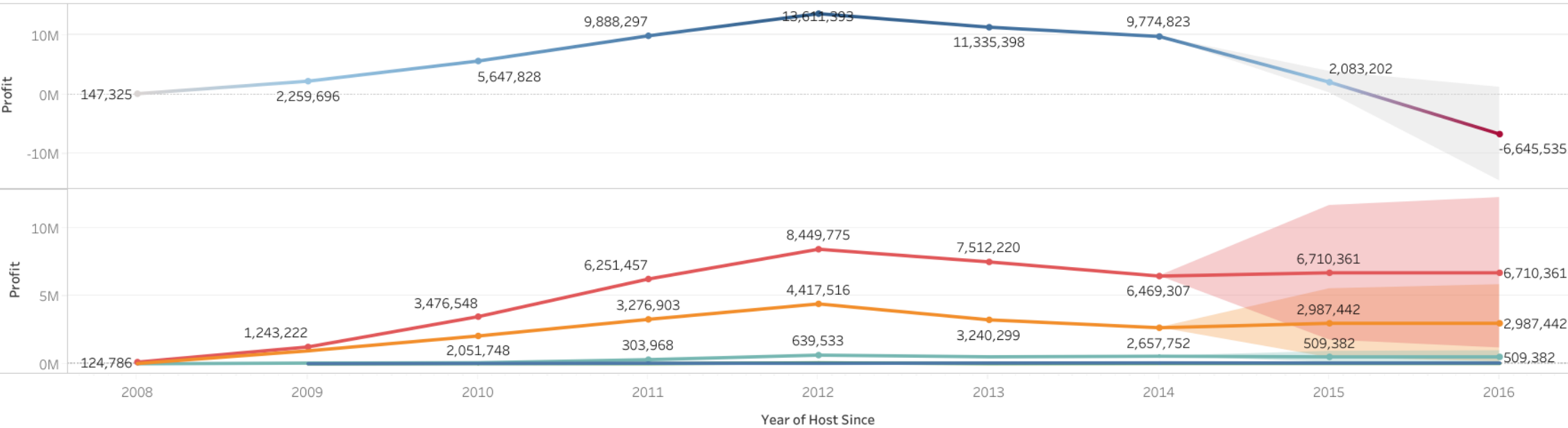
Price  
39 4,391,761

Cluster

Cluster-Profit



Year - Profit



# Summarize

**Apartment is the most popular property type in New York which also has the highest number of review**

**There are 5 factors that influence Airbnb's profitability: number of review and review score, property price, number of bed and location**

**Manhattan and Brooklyn have the largest concentration of Airbnb properties and generate the highest revenue for Airbnb among the five boroughs of New York City.**

**Starting in 2013, profit started to decline dramatically and is expected to decrease further due to regulatory issues and hosts listing illegally**





# Thank you

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Thank you for your attention