

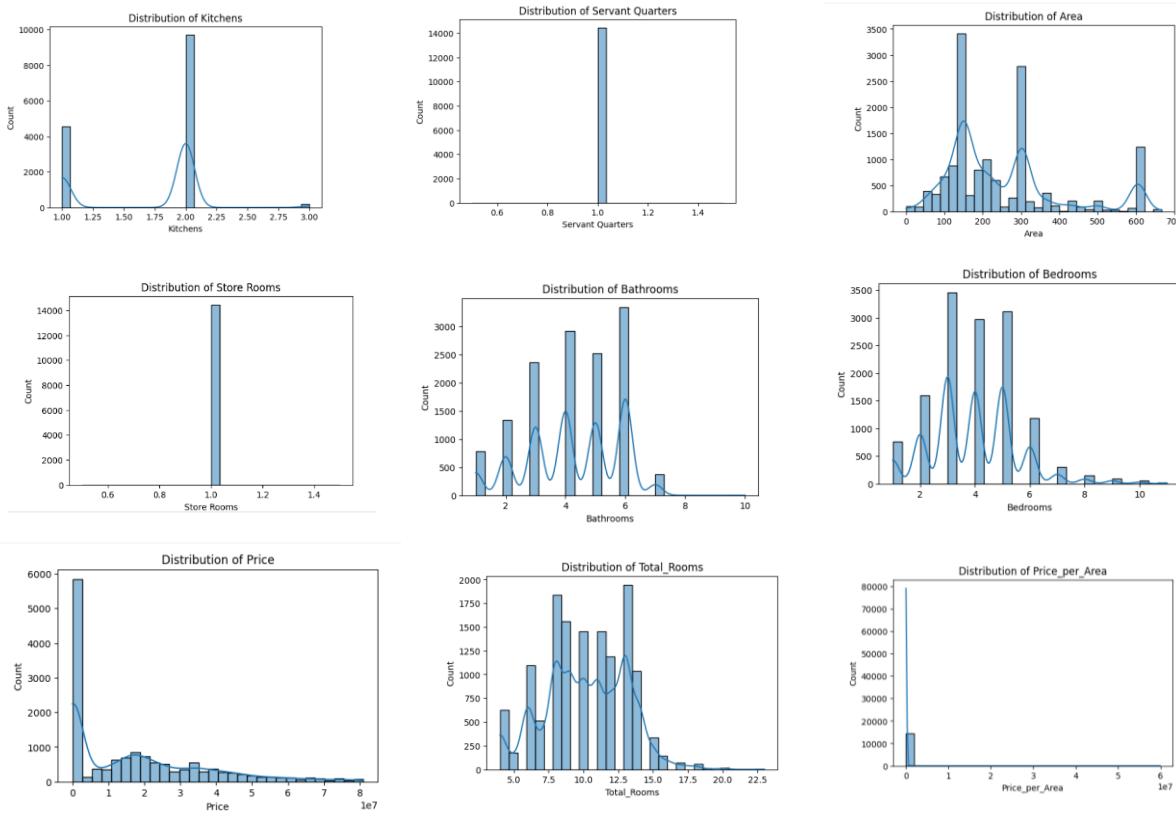
Real Estate Market Insights: An Exploratory Analysis of Zameen.com Listings in Pakistan

Problem statement:

"Identify the key features that significantly influence property prices in Pakistani cities"

Insights and Recommendations:

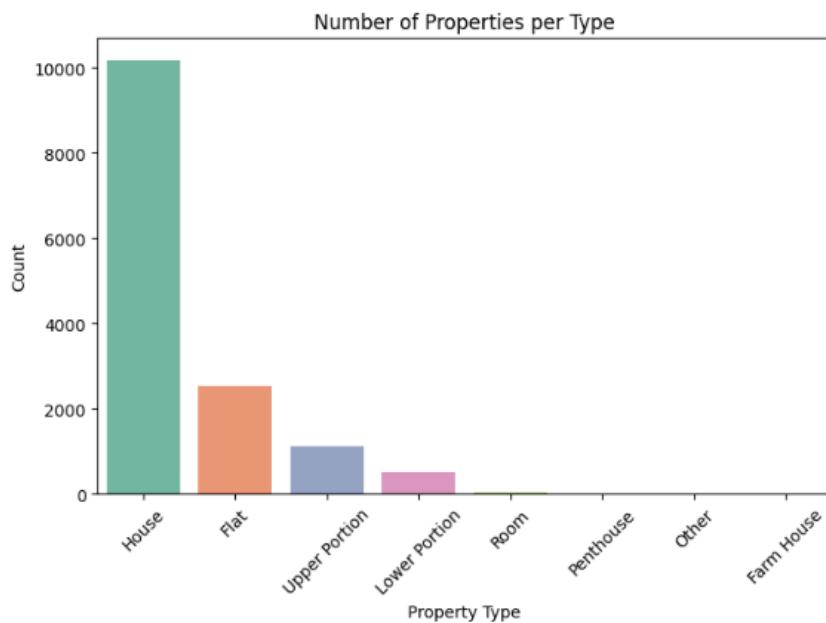
The histogram graphs show the distributions among distinct categories. Most of the property types have exactly one servant quarter and one store room, although two kitchens are recorded.



The bar graph shows the average price against the property type. House has the highest average price with respect to other property types.



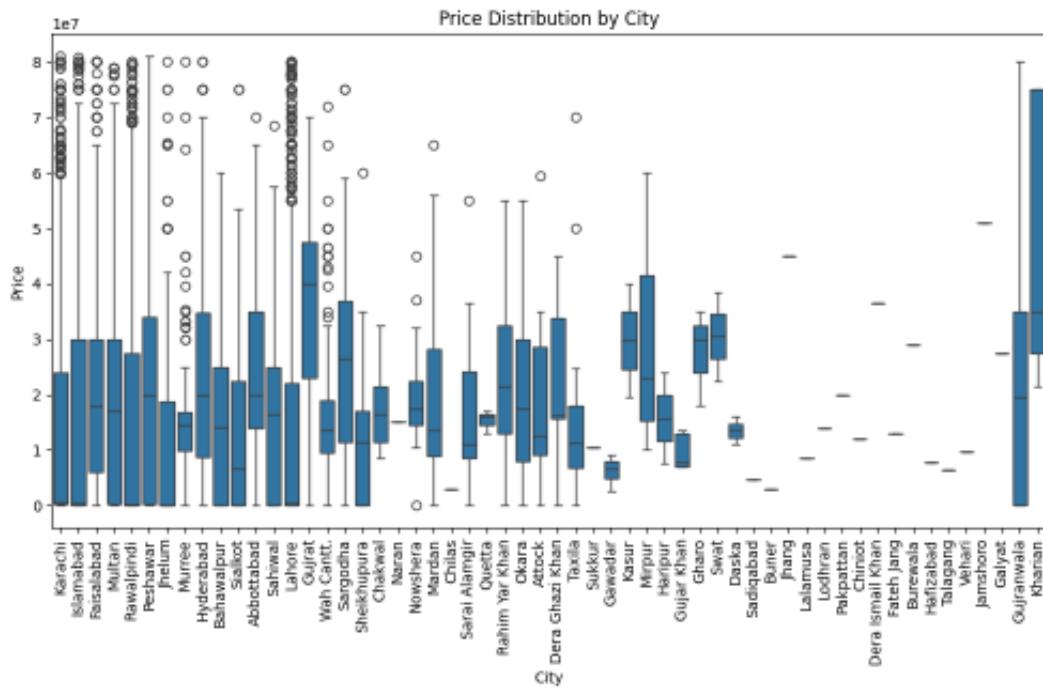
While the count of properties per type also shows that the most bought property type is of house. Its number is so high compared to flats, upper portion and lower portion.



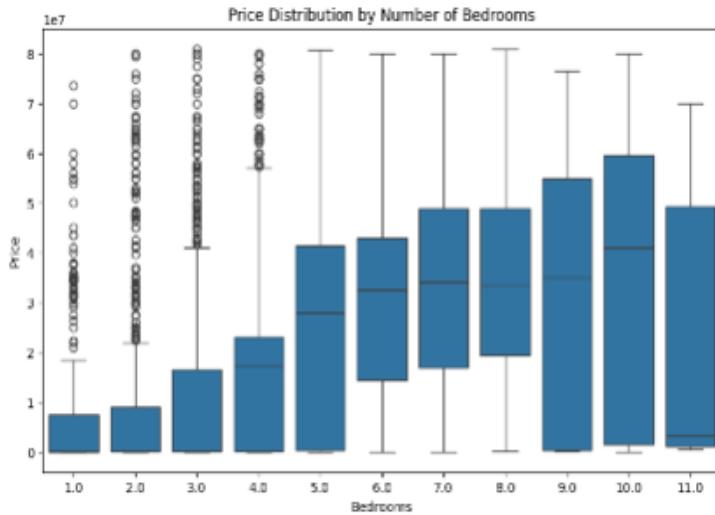
The top location for property sales is citizen coop housing society in karachi.



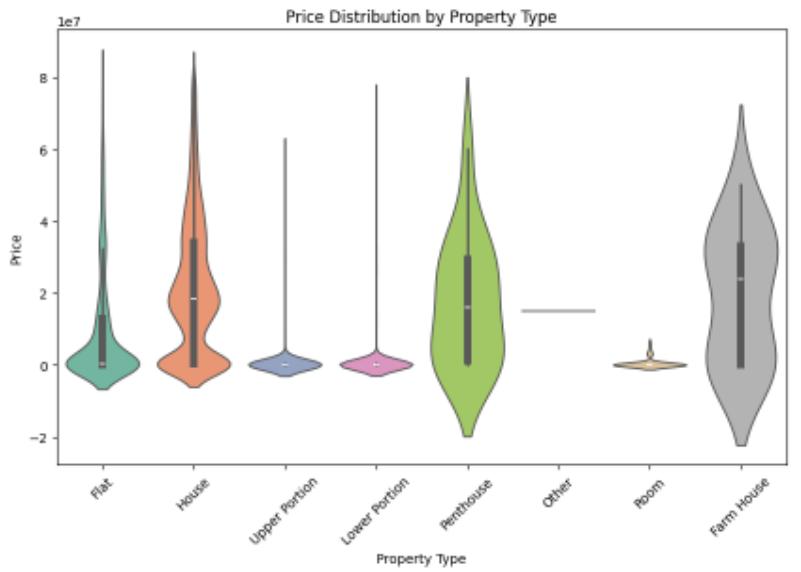
The box chart of price distribution by city. It shows the cities like Karachi and Islamabad have the largest overall price ranges and the highest concentrations of outliers, indicating some properties in these major areas sell for significantly higher prices,



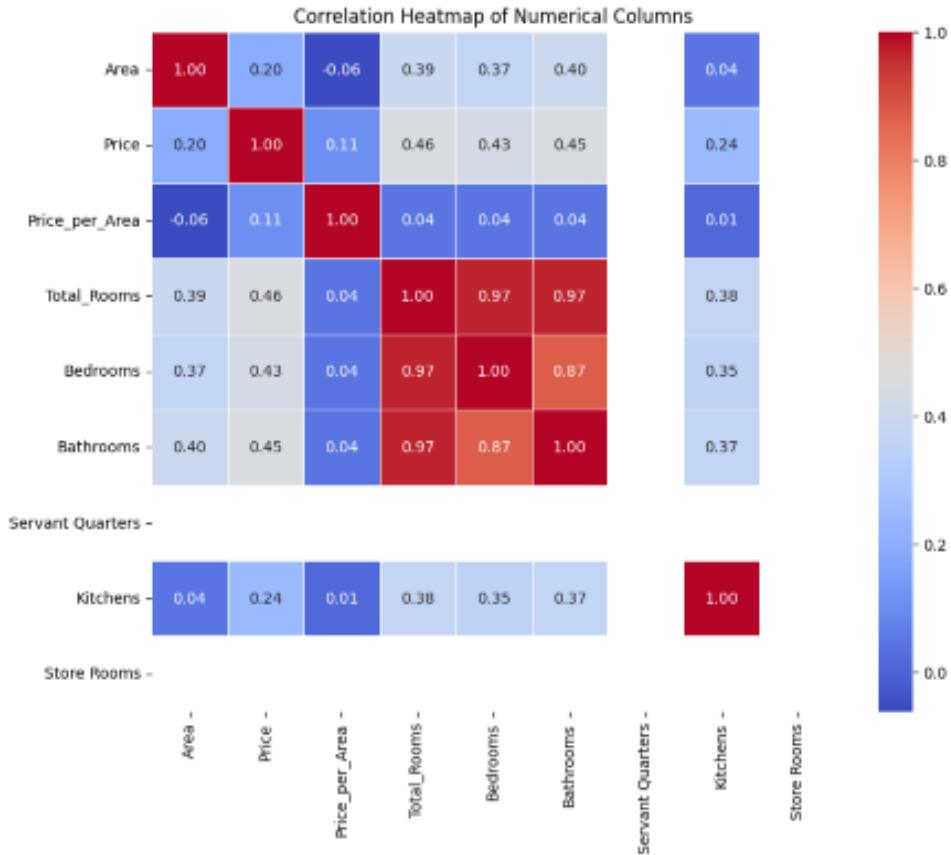
The price distribution by number of bedrooms shows that the more bedrooms a property has, the higher its price will be, showing that size is the biggest factor driving up the cost.



The violin plot of price distribution by property type describes how the cost of a property jumps dramatically based on what you are buying. If you want to buy a larger area property like a farmhouse or a penthouse, then higher prices are demanded compared to smaller area properties.



The correlation heatmap chart shows that the number one thing that drives up the property price is the size or area of the house, but things like the total number of rooms, bedrooms, and bathrooms are also very important since they are all linked together.



Conclusion and Next steps:

Based on collective insights from the price, area, room features, and location charts, we can confidently conclude that the value of a property is almost entirely determined by its physical characteristics and where it's located on the map. Large houses and farmhouses in major metropolitan sites like Karachi, Lahore, and Islamabad grasp a significant and consistent premium, indicating that size, luxury, and prime city status are the true drivers of market price.

To gain deeper, actionable insights, the next crucial step is to;

- Move beyond simple feature counts and incorporate external market context.
- We need to look at how prices change over time.
- Compare our current Price-per-Area distribution against local economic growth and interest rates.
- Analyze the specific characteristics that make a property type so much more expensive within its respective high-value cities.