Bengaluru House Price Visualisation Project

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1. Introduction

The Bengaluru real estate market is one of India's fastest-growing sectors, driven by urbanization, the tech industry, and population growth. The Bengaluru House Price dataset offers a granular view of this market by detailing house prices, sizes, and other key factors like location and amenities. Through data visualization, we aim to interpret trends and present a clearer picture of how various factors affect house pricing. Using bar charts, line diagrams, and pie charts, we provide a comprehensive analysis to help stakeholders better understand the dynamics of the real estate market in Bengaluru.

2. Data Description

The data table of Bengaluru House prices consists of the following variables :-

(i) Area_type : Type of area the house is built on

(ii) Availability : Indicates if the house is ready for possession

(iii) Location : Localities the houses are situated in

(iv) Size: Number of bedrooms (e.g., 2 BHK, 3 BHK).

(v) Society : Name of the housing society the house belongs to

(vi) Total_sqft : Total carpet area of the flat

(vii) Bath: Number of bathrooms

(viii) Balcony : Number of balconies

(ix) Price : Price of the house per sqft in INR

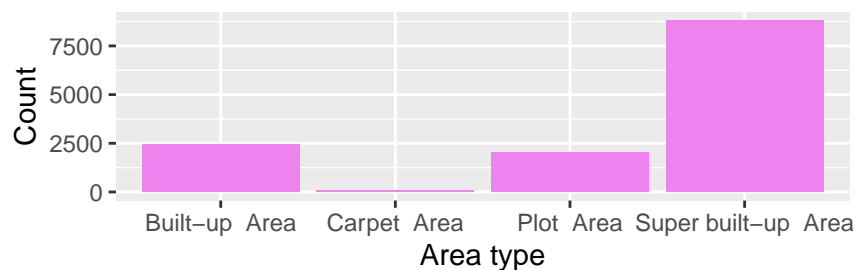**3. Exploratory Data Analysis (EDA)**

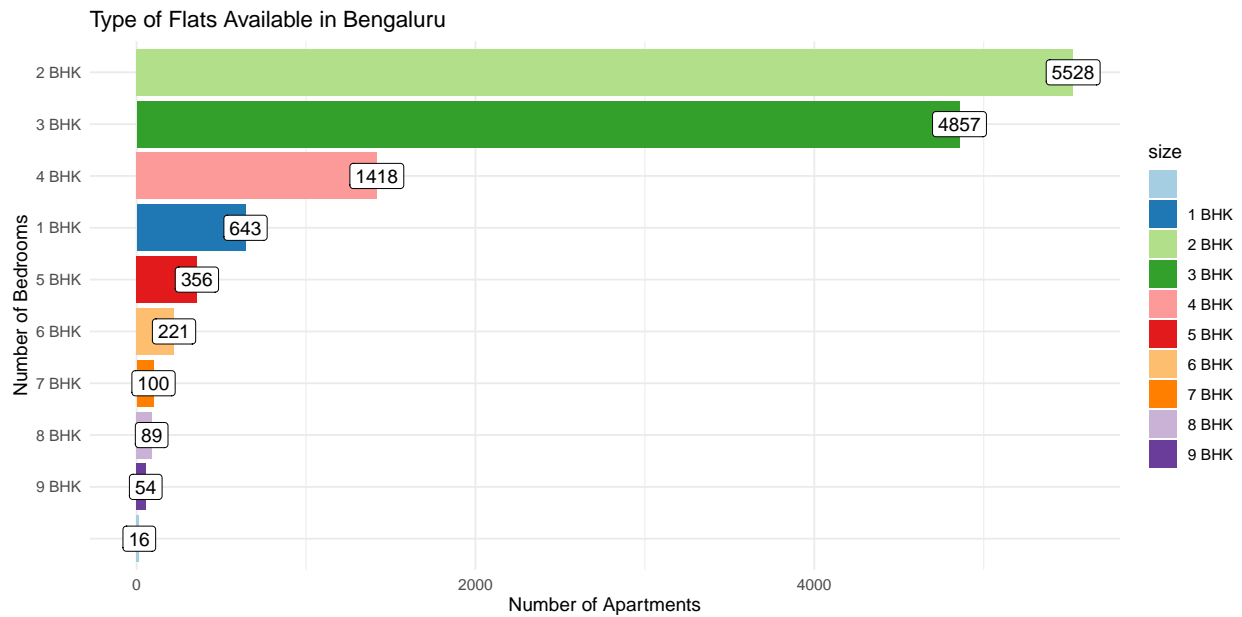Figure 1: Distribution of Apartments on the basis of area type

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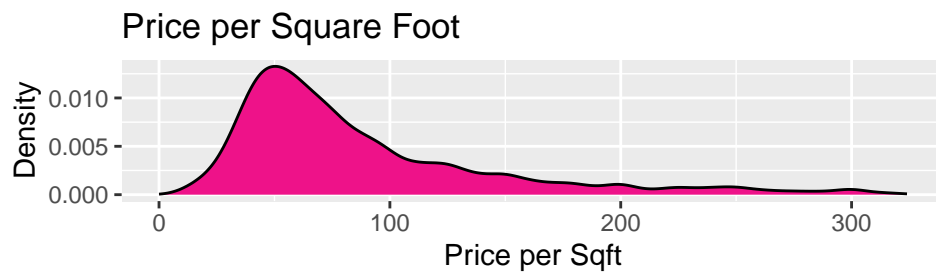Figure 2: Count Of different type of flats available in Bengaluru according to number of bedrooms

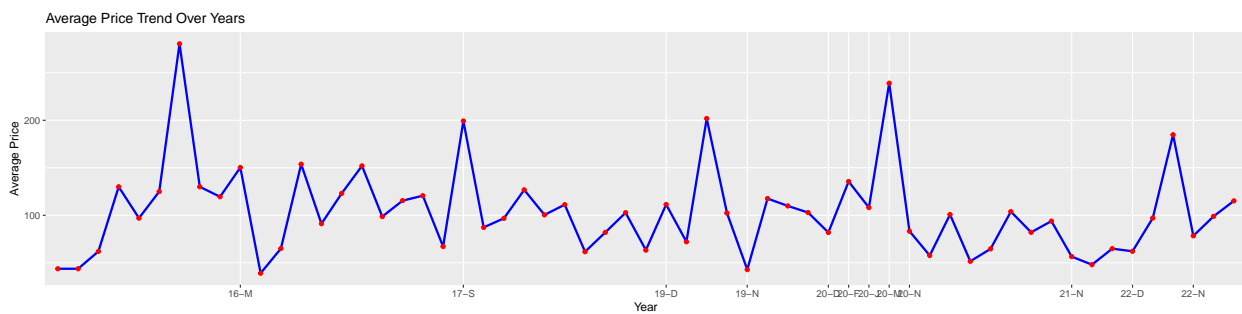Figure 3: Curve showing the price of houses per sqft in Bengaluru

Figure 4: Line graph showing the trend of house price over the years in Bengaluru
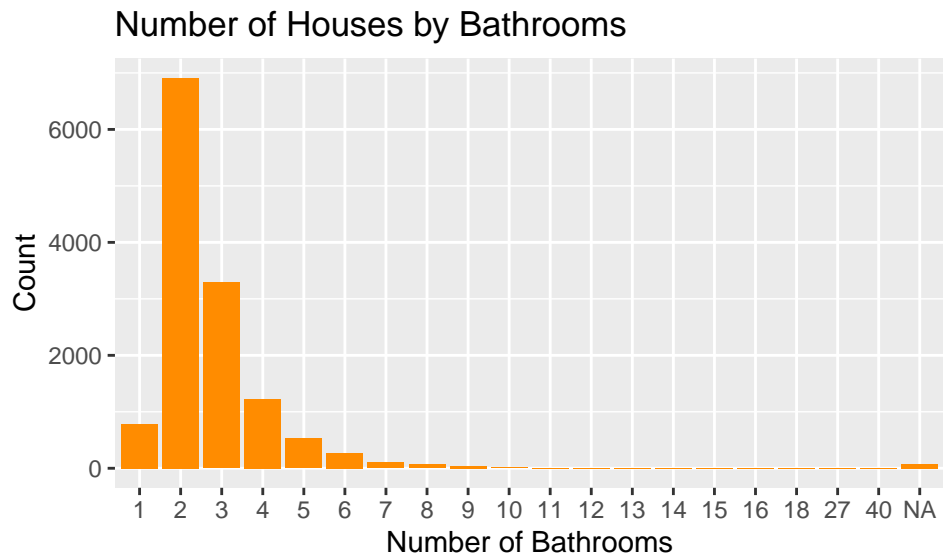
Number of Houses by Bathrooms

Figure 5: Bar graph depicting number of bathrooms in each apartment
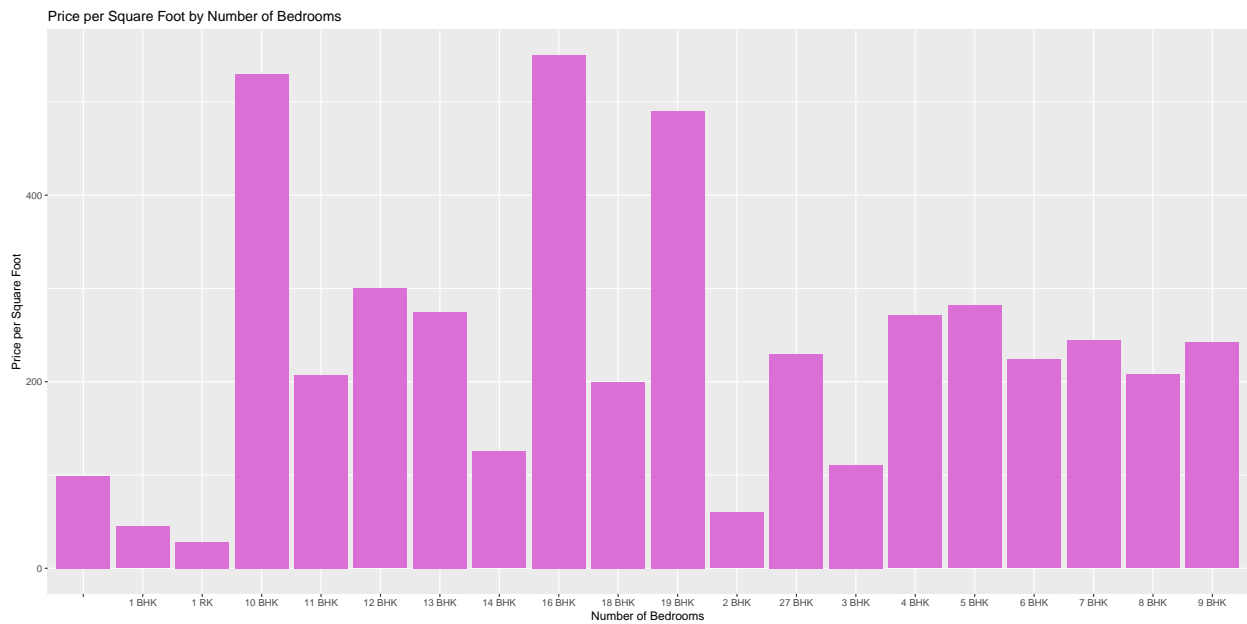
Price per Square Foot by Number of Bedrooms

Figure 6: Bar Diagram depicting the average price per sqft of apartments with different number of bedrooms
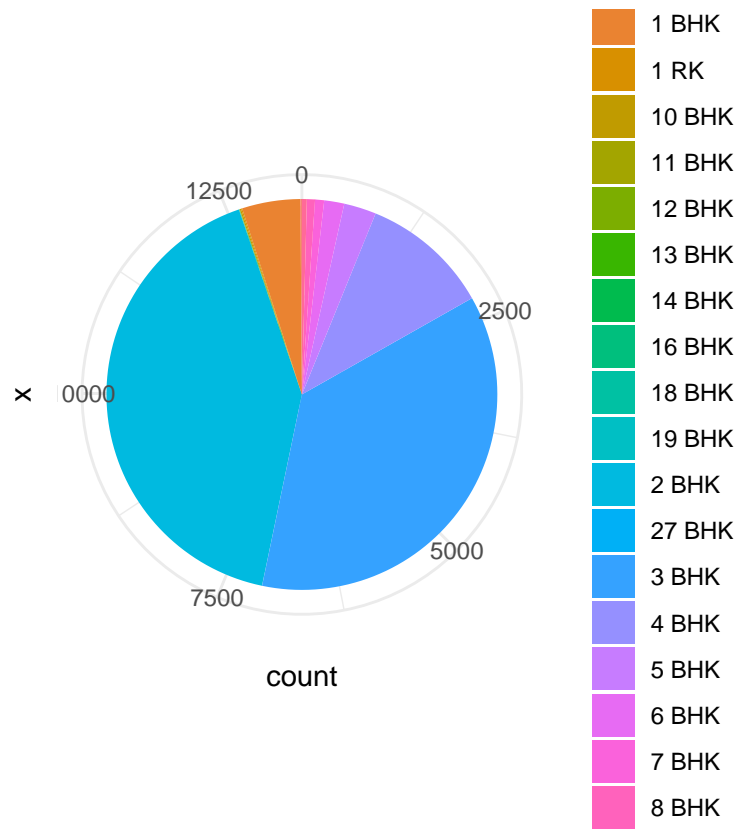
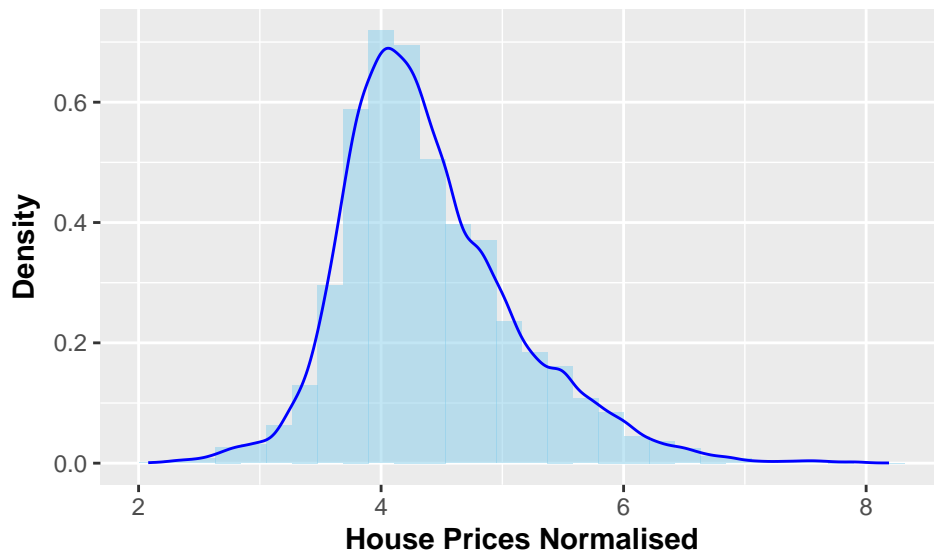Figure 7: Pie chart depicting portion of houses by number of bedrooms

Figure 8: Normal Curve fitted to the bar graph of log of house prices and its corresponding density

4. Results

- Firstly from Figure1, we can see that most of the apartments are built on Super built-up area.

- Figure 2 states that most of the apartments are 2 bhk followed by 3 bhk. Also it is worth noticing that 4 bhk though being 3rd most common apartment are far less than 3bhk.

- Figure 3 shows that most apartments are priced at approximately Rs.50 per sq. ft.

- Figure 4 shows that there is no existence of any trend for house price over the years but there is presence of seasonal variations. This could be due to demand of buying houses change during the year owing to salary increments received on special months or buyers preferring to buy on auspicious time of the year.

- Figure 5 shows that apartments with 2 bathrooms are most common.

- From Figure 6 it is evident that average price of 16 ,19 and 10 bhks are the highest and are close-by.

- Figure 7 depicts that 2bhks and 3 bhks are most common as they occupy quite a big sector. 4bhks also exist in significant amount.

- Figure 8 shows that the log of prices can be estimated using normal distribution.

5. Conclusions

The exploratory data analysis of Bengaluru's housing market reveals several key trends. Most apartments are built on super built-up areas, with 2 bhk and 3 bhk units being the most common. While house prices per square foot are concentrated around Rs.50, no consistent price trend over the years was identified,though seasonal variations may exist due to demand shift. Apartments with 2 bathrooms dominate the market. High-end,larger apartments(16,19 and 10 bhks) have the highest prices. Overall, the dataset's price distribution aligns with a log-normal.