

Kings County House Sales

Data Analysis and price
prediction



What are the three most important features impacting the price of a house in the King's County area?



METHODOLOGY:

Multiple Regression Model



The Data

01

Number of bedrooms, bathrooms and floors

02

Size fo the houses

Square footage of living and non-living areas.

03

Location by Zip code as well as longitude and latitude

04

Condition and grade given to housing unit based on King county grading system

05

Date of the Transactions

Qualitative vs Quantitative



Cleaning the data

**Deciding on numerical vs
Categorical variables**

Formatting accordingly

Qualitative vs Quantitative

Numerical

- Size of living area
- Size of Basement
- Year Built

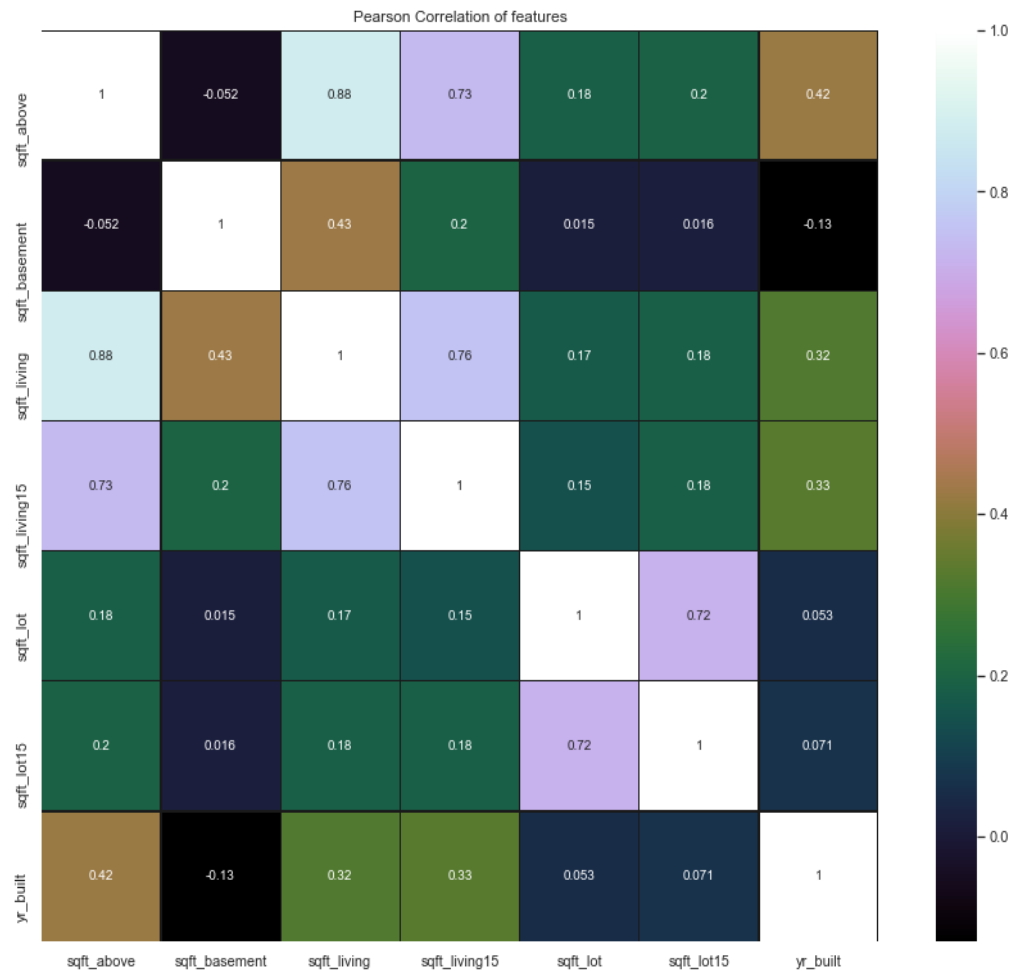
Categorical

- Location
- Grade
- Number of bedrooms and bathrooms

Features correlation

High correlation between quantitative variables

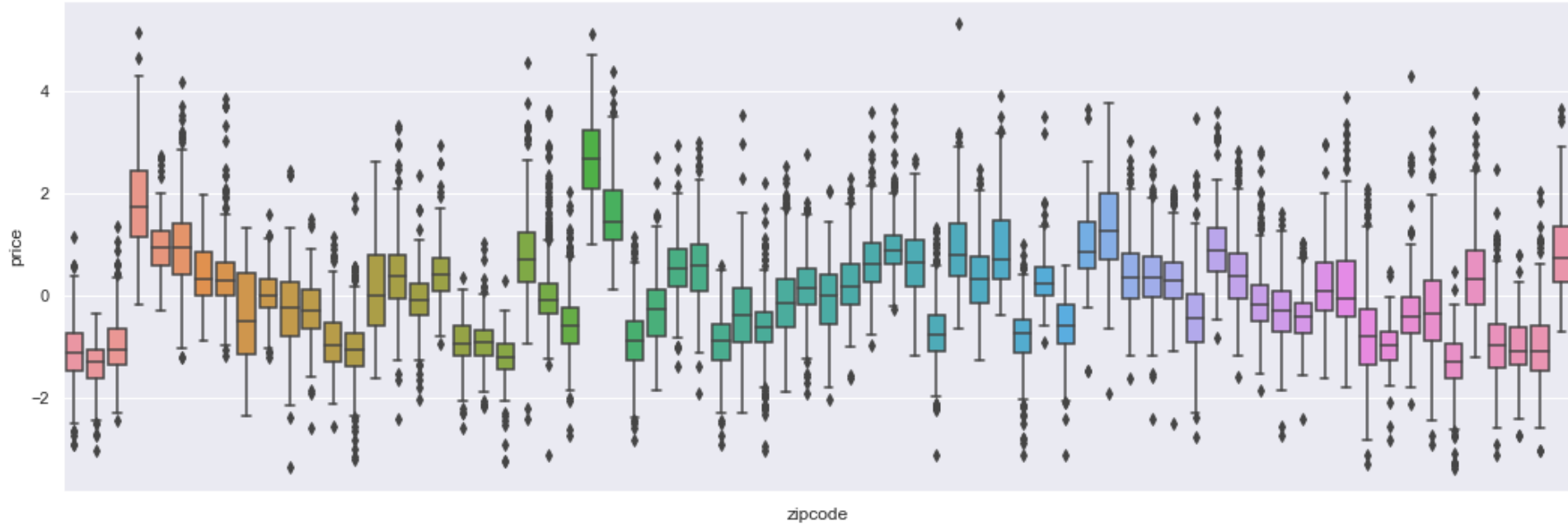
Dropping features to decrease multicollinearity



An aerial photograph of a city skyline, likely New York City, viewed from a high angle. The image is overlaid with a large, dark brown circle in the center. The word "FINDINGS" is written in white, bold, sans-serif capital letters inside this circle. The background image is tinted with a warm, orange-brown color. In the top right corner, there are two parallel, dark brown diagonal lines. In the bottom left corner, there is a dark brown geometric shape resembling a stylized arrow or a corner bracket.

FINDINGS

Location

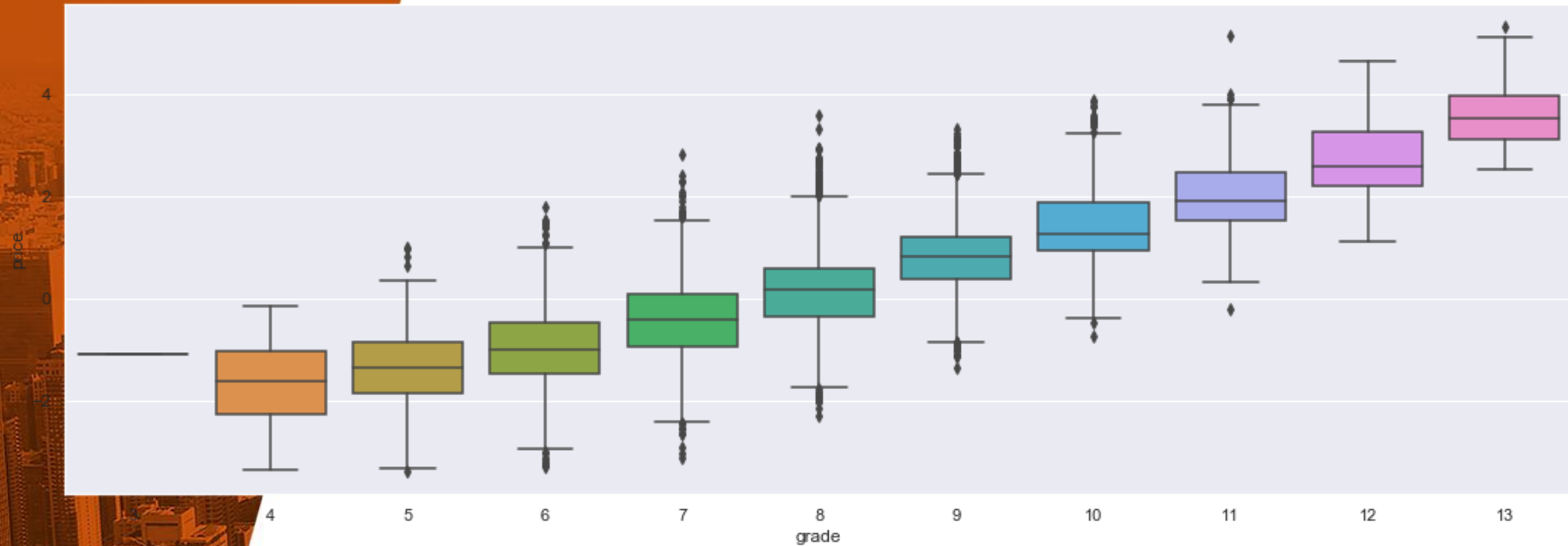


Has Largest impact on price.

To possibility of improvement of location for existing houses except for time.



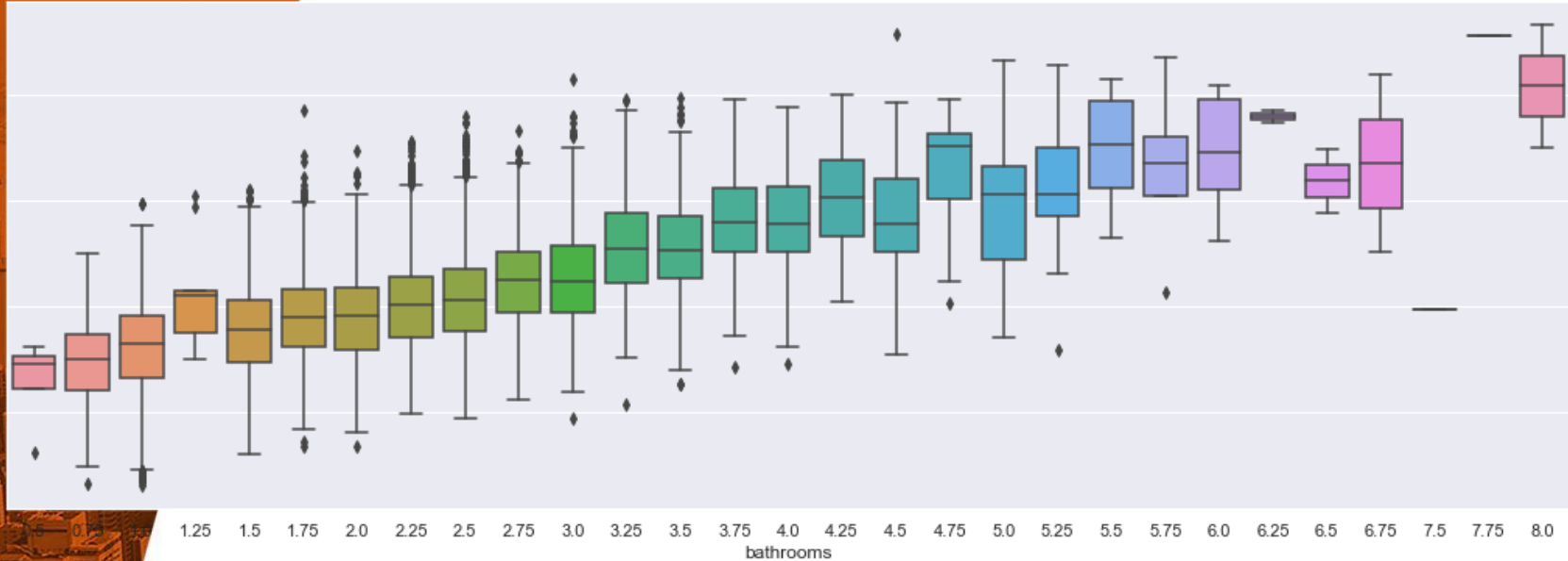
Grade



Strong positive correlation to price.

Identifying how to improve graduate can improve price significantly.

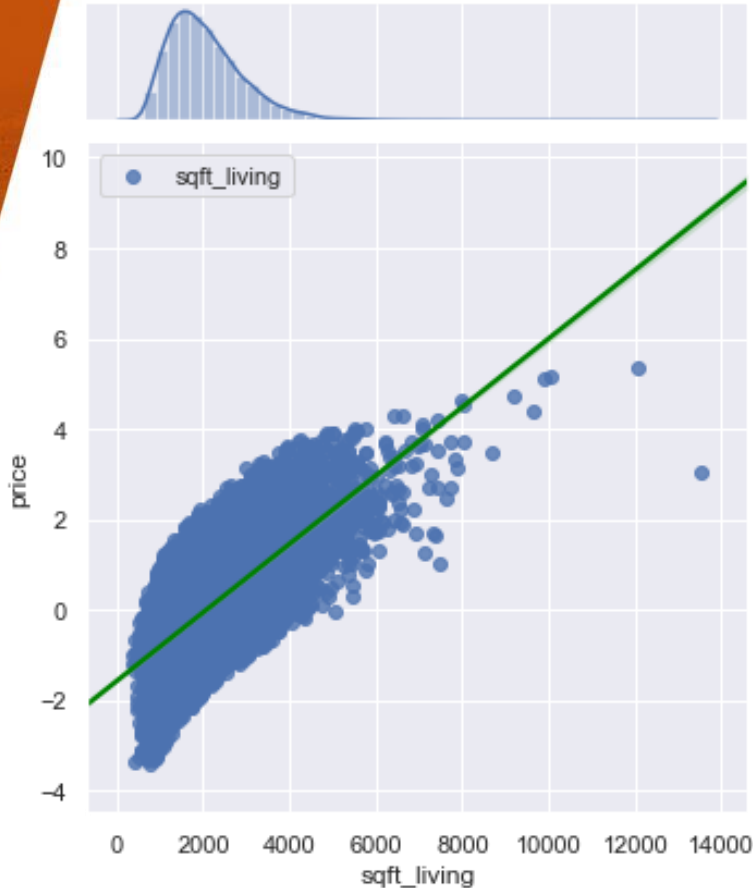
Number of Bathrooms



Strong positive relationship between number of bathrooms and price.

Cost efficient way to increase price of property

Number of Bathrooms



Strong positive relationship between size of the living area and price.

Converting as much space as possible into living area can significantly impact price.

Comclusion

- R-Squared = 85%
- More living area= Higher Value
- More Bathrooms = higher value, most cost efficient way to improve value
- Location is major driver of price but homeowners have no control on it



An aerial photograph of a city skyline, likely New York City, with a large orange circle overlay in the center. The circle has a dashed border and contains the text "Thank you" and "Insert the title of your subtitle Here". The background is a solid orange color.

Thank you

Insert the title
of your subtitle Here