King County Housing's Reigning Features

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What Sells Homes?

Attractive homes with high sale price

- Amenities/traits increase market value
 - Large impact on price
 - Low/negative impact

Remodel/renovate/develop amenities

- Sell more homes
- Sell at higher prices

Data

- King County housing sales data
- 2014-2015
- 21,597 records/21 columns
- Target variable Sale Price
- Example Variables
 - Sq ft/Bd/Ba
 - Yr Built/Renovated
 - Location/Zip/View



Methods





Exploratory data analysis

Python

Pandas

Numpy

Seaborn/Matplotlib

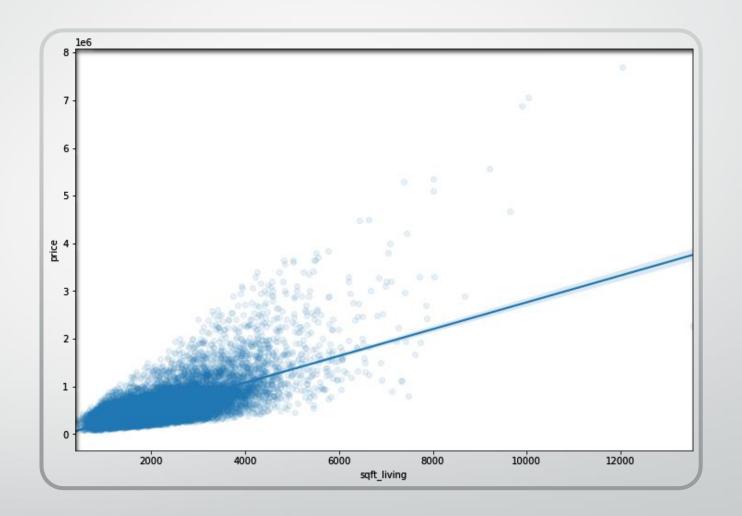
Linear regression analysis

Stats models

SciKitLearn

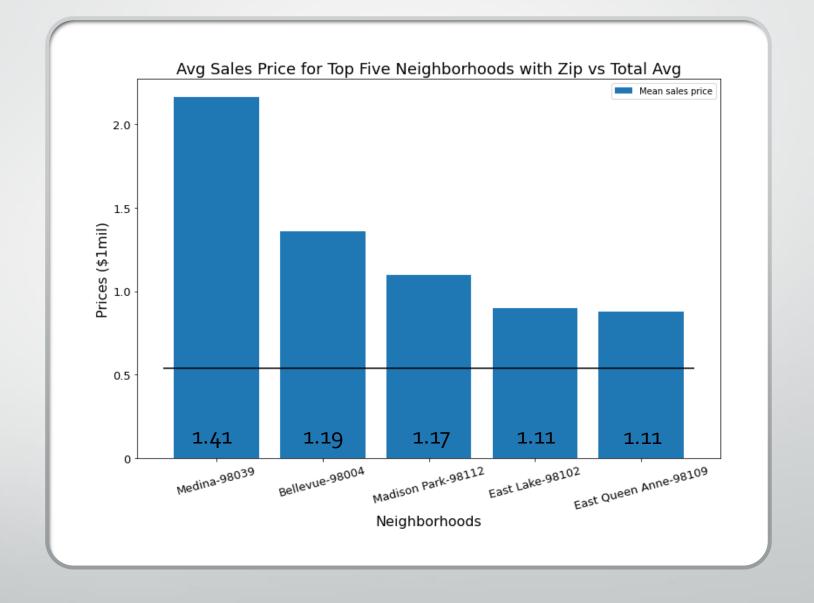
First Simple Model

- Target: Price
- Variable: Sq Ft Living
- Coef: \$280.87/sqft
- $R^2 = 0.49$



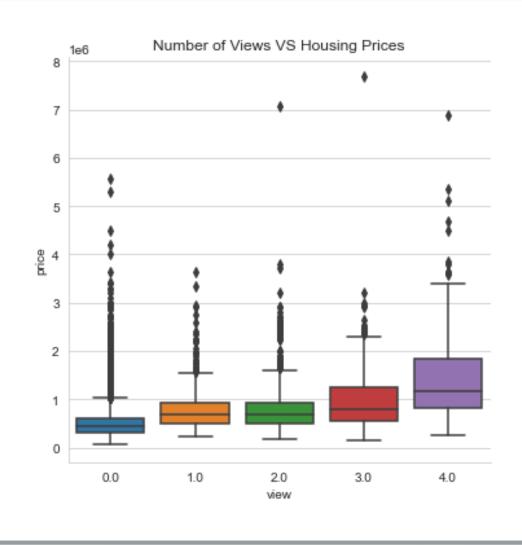
Top 5 Zip Codes

- Areas with these zip codes correlate with price
- Invest/upgrade in these areas to maximize sale price



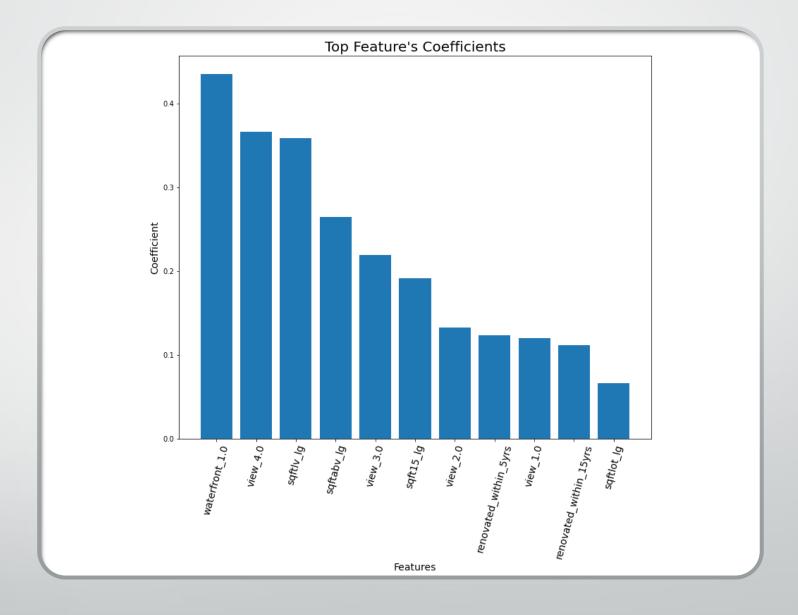
Property Views

- Increased views/popularity raises price avg
- Marketing/Open Houses
 - Increased interest
 - Upwards price pressure



Other Value Increasing Features

- Waterfront houses add most value
- Views and SqFt also important
- Renovations add value
- $R^2 = 0.87$



Conclusion

Key Recommendations

- Marketing strategies towards greater visibility/demand
- Build/invest in areas with:
 - More sqft
 - Waterfront/gorgeous views

Issues/Future Ideas

- Further investigate interactions with seasonality that impact value
- Better regional understanding

