

Renovation & King County House Sales

Yi Lin
23/09/2023



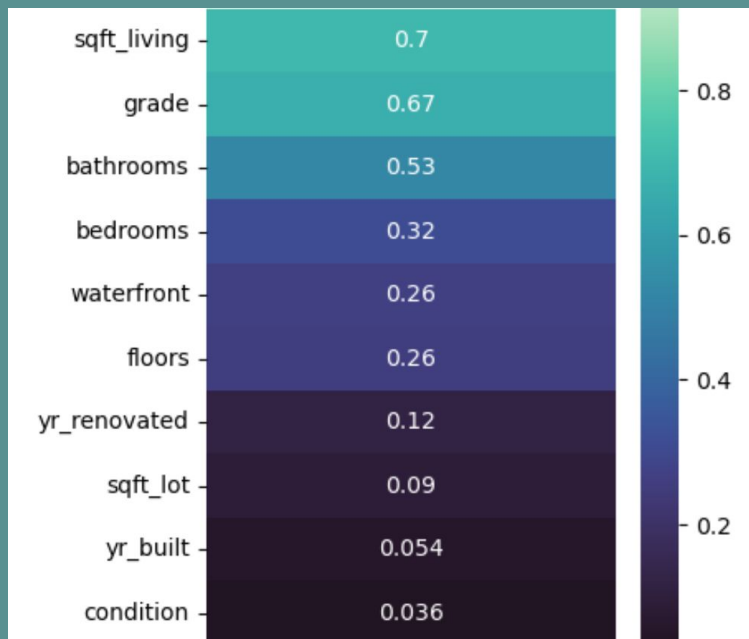
Q: how home renovations might increase the estimated value of their homes, and by what amount?

We analyse data of 21,597 houses sold in 2014-2015

Factors considered in analysis:

- bedrooms - quantity of bedrooms
- bathrooms - quantity of bathrooms
- sqft_living - footage of the home
- sqft_lot - footage of the lot
- floors - floors (levels) in house
- waterfront - if the house has a view to a waterfront
- condition - how good the condition is (Overall)
- grade - overall grade (King County grading system)
- yr_built - built Year
- yr_renovated - year when house was renovated

Variables Correlating with Price



We have built a model to find out the relationship between price and the variables

Conclusion:

1. The renovation between 1933 and 1991 is likely to decrease house price.
 - *The reason could be the renovation is aged and its style is outdated, which leave the buyers a negative impression and they would not make offers with a high price.*
2. The renovation between 1992 and 2015 is likely to increase house price by 15% to 16.8%
 - *In this case, the renovation budget should not exceed 10% of the house to keep minimum 5% extra profit, otherwise it is not worth to renovate the house.*