King's County Sale Price Prediction

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Problem Statement

Sale Price

Accurate linear regression models

House modifications

Business Value

Accurate Sale Price

Higher ROI

Clear Direction

Methodology

- 2014-2015 house sales in King's County, WA
  - 21k rows of data
- Multivariate Linear Regression
  - Categorical Variables - One-hot encoding
  - Continuous Variables - Log-transformations,
  - K-means clustering

Predictions- Square footage of house

ACCURACY

True vs Predicted Sale Price of Houses

Predictions- Square footage above ground

ACCURACY

True vs Predicted Sale Price of Houses

Findings

Square footage - above

Condition

Bathrooms

	Predictors	Coefficient
0	lat_long	4.555778
1	lat	2.699121
2	c2	1.636482
3	sqft_living	1.048355
4	sqft_above	0.931554
5	waterfront_1	0.707795
6	bthrms_7_75	0.697017
7	sqft_living15	0.671017
8	bthrms_6_5	0.666972

	Predictors	Coefficient
9	bthrms_6_25	0.610188
10	bthrms_8_0	0.602830
11	sqft_lot	0.556051
12	zipcode_98039	0.489609
13	cond_5	0.472888
14	cond_4	0.405781
15	zipcode_98004	0.386532
16	bthrms_5_5	0.381319
17	zipcode_98119	0.370201

Recommendations

- Square footage above ground
- Bathrooms
- Condition

Future Work

- Variance in sale price by location
- Bigger dataset

THANK YOU