# Ames Housing Prices

E.R. Schultz





The Question:

What impacts home sale prices?

What home features deliver higher sale prices?



### The Approach:

- 1. Explore and clean
- 2. Identify and examine interesting relationships
- 3. Build models to understand Sale Price
- 4. Interpret Results



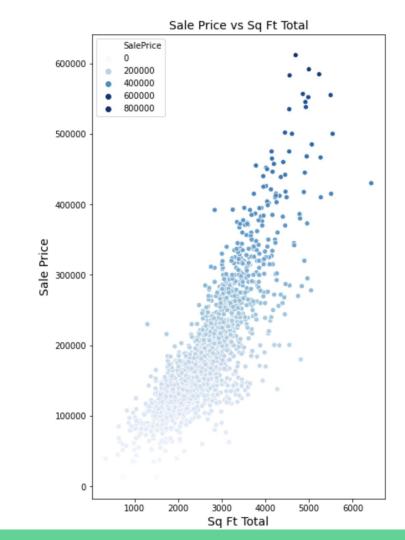
# **Total Square Footage**

Positive Relationship

Model:

1-Sqft Increase:

Associated with a \$46.97 increase in sale price, all else equal.



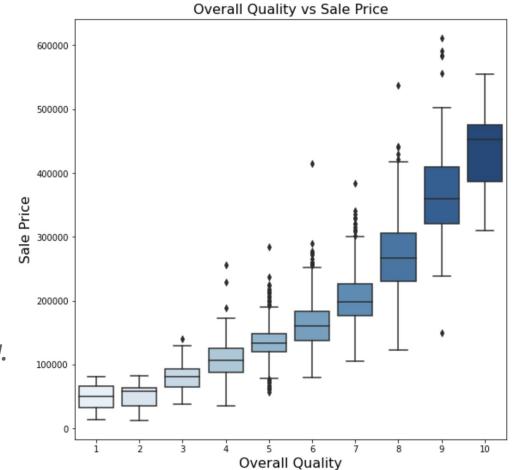
# Material and Finish Quality:

Positive Relationship

Model:

1-Group-Level Increase:

Associated with a \$9179.7677 increase in sale price, all else equal.



# Lot Frontage:

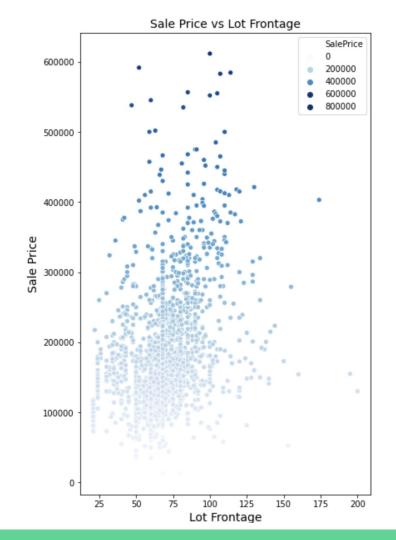
Linear feet of street connected to property

Positive Relationship

Model:

1-Foot Increase:

Associated with a \$181.93 increase in sale price, *all else equal*.



### Age of Home

Negative Relationship

Model:

1-Year Increase:

Associated with a \$492.0899 decrease in sale price, all else equal.



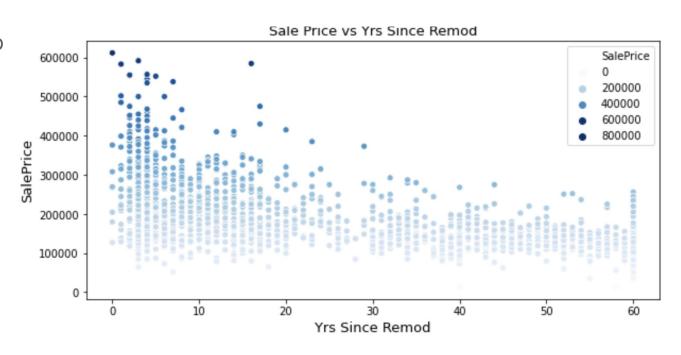
#### Years Since Remodel/Addition

Negative Relationship

#### Model:

1-Year Increase:

Associated with a \$390.79 decrease in sale price, all else equal.



#### Recommendations:

- 1. Pursue remodeling to help mitigate home age.
- 2. Emphasize Overall Quality of Material and Finish.
- 3. Maximize livable square footage
  - a. Though obvious, this is still one of the strongest predictors of price
- 4. Carefully consider analysis of spatial patterns in data.
  - a. We intentionally avoided neighborhood analysis.

