



Real Estate Analysis

Joshua Edelstein

Agenda



I. Address Stakeholder



2. Data Background



3. Predictive Model



4. Conclusion/ Recommendations



5. Next Steps

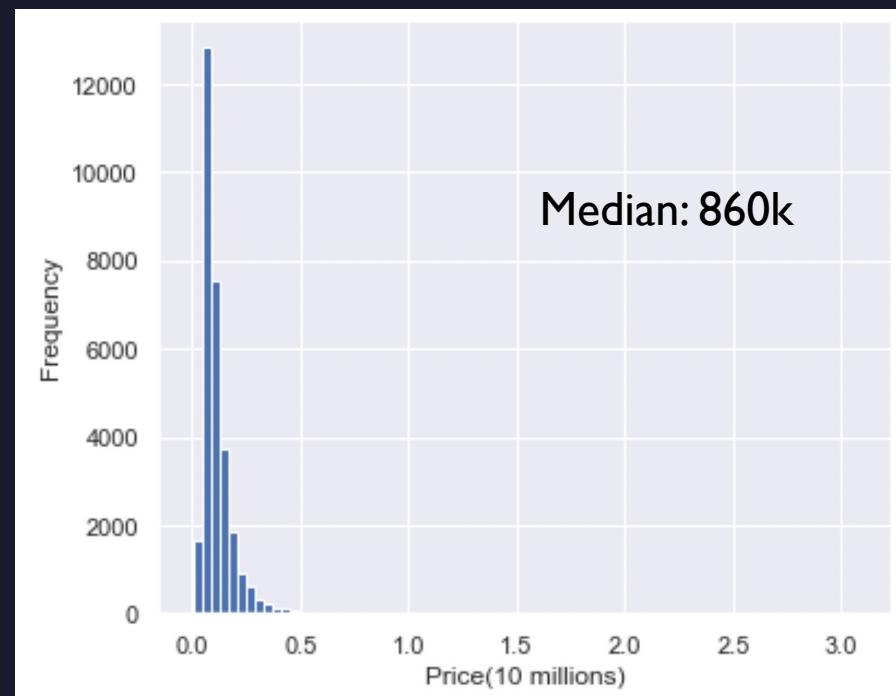
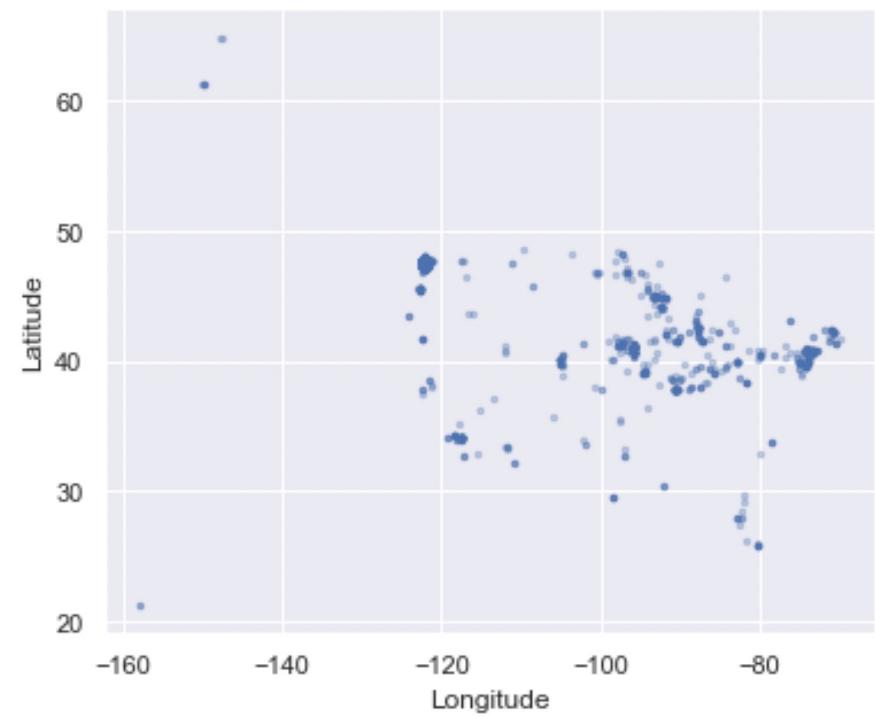
Business Question

- King of the Deck Co.
- Should they expand into home renovations?
- What is the ideal deck size?



Data Understanding

- Over 30,000 within USA
- Sold in 2021-2022
- Built 1900-2022



Data Understanding

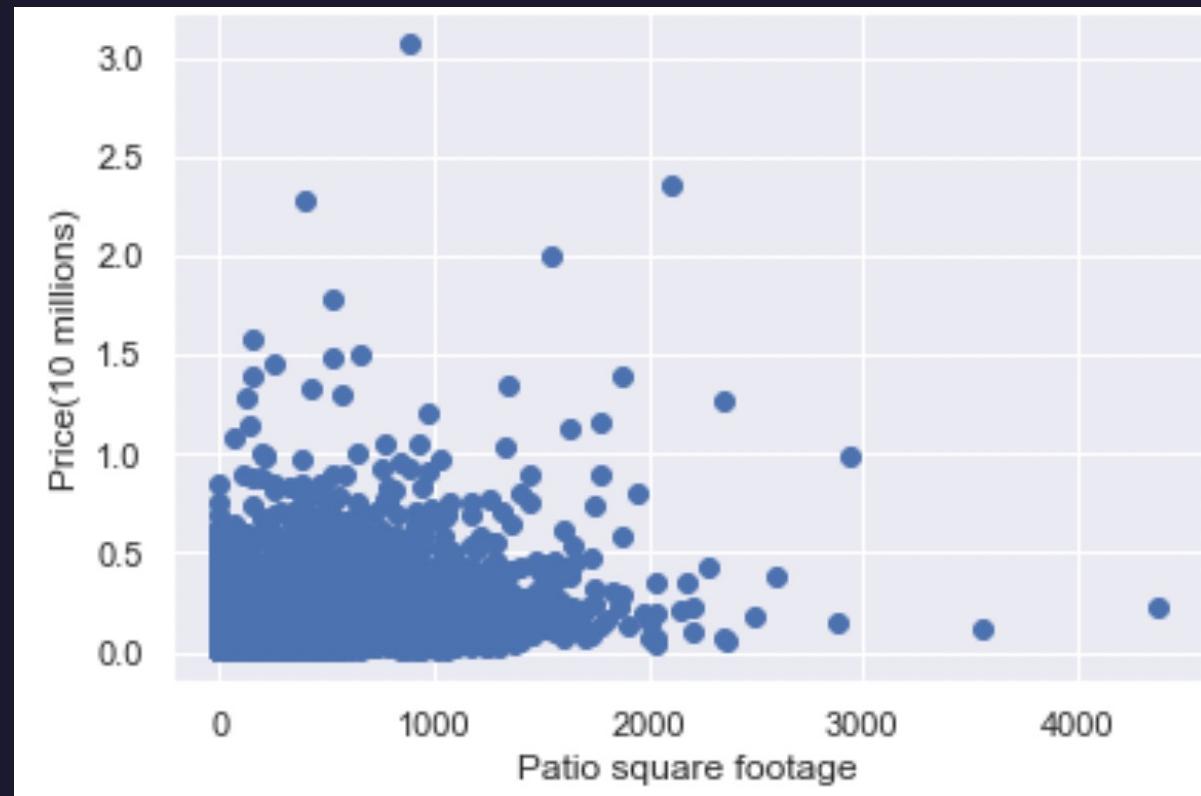
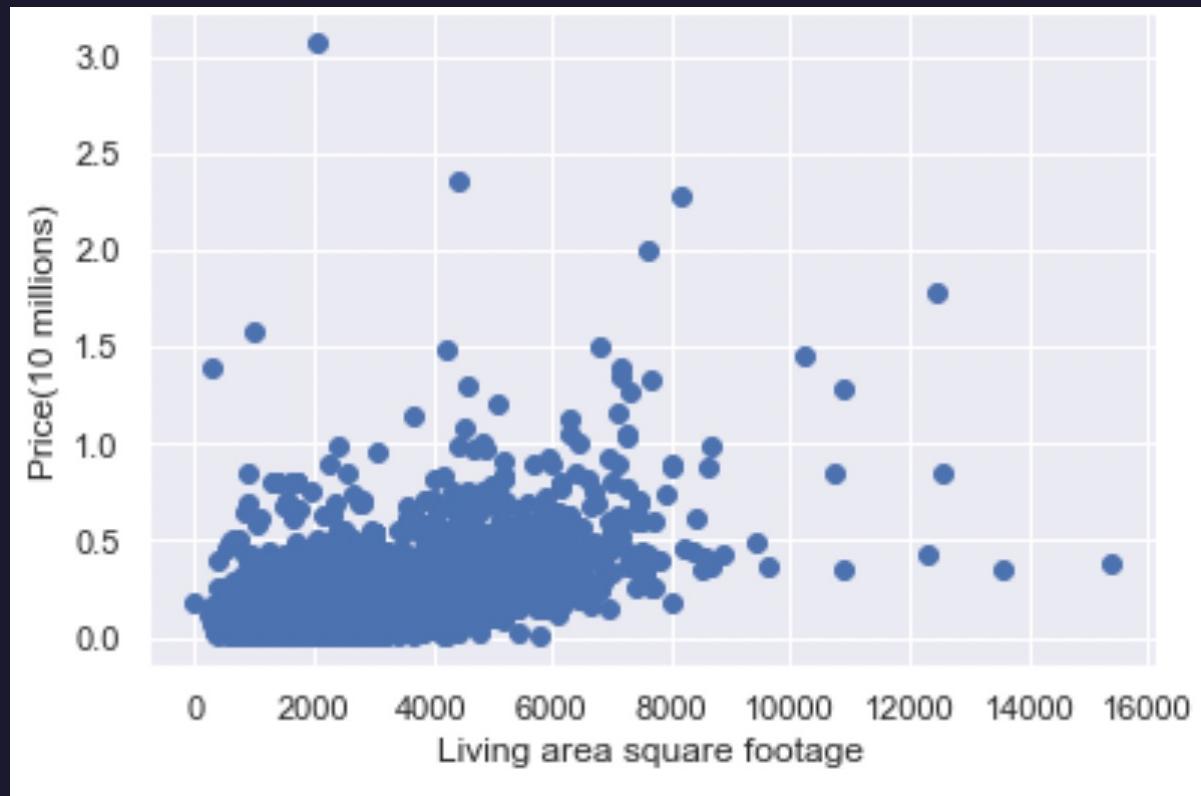
- Data Information
 - Numeric (Square Footage, bedrooms, bathrooms, etc.)
 - Categorical (View, Condition, Noise, etc.)



Modeling

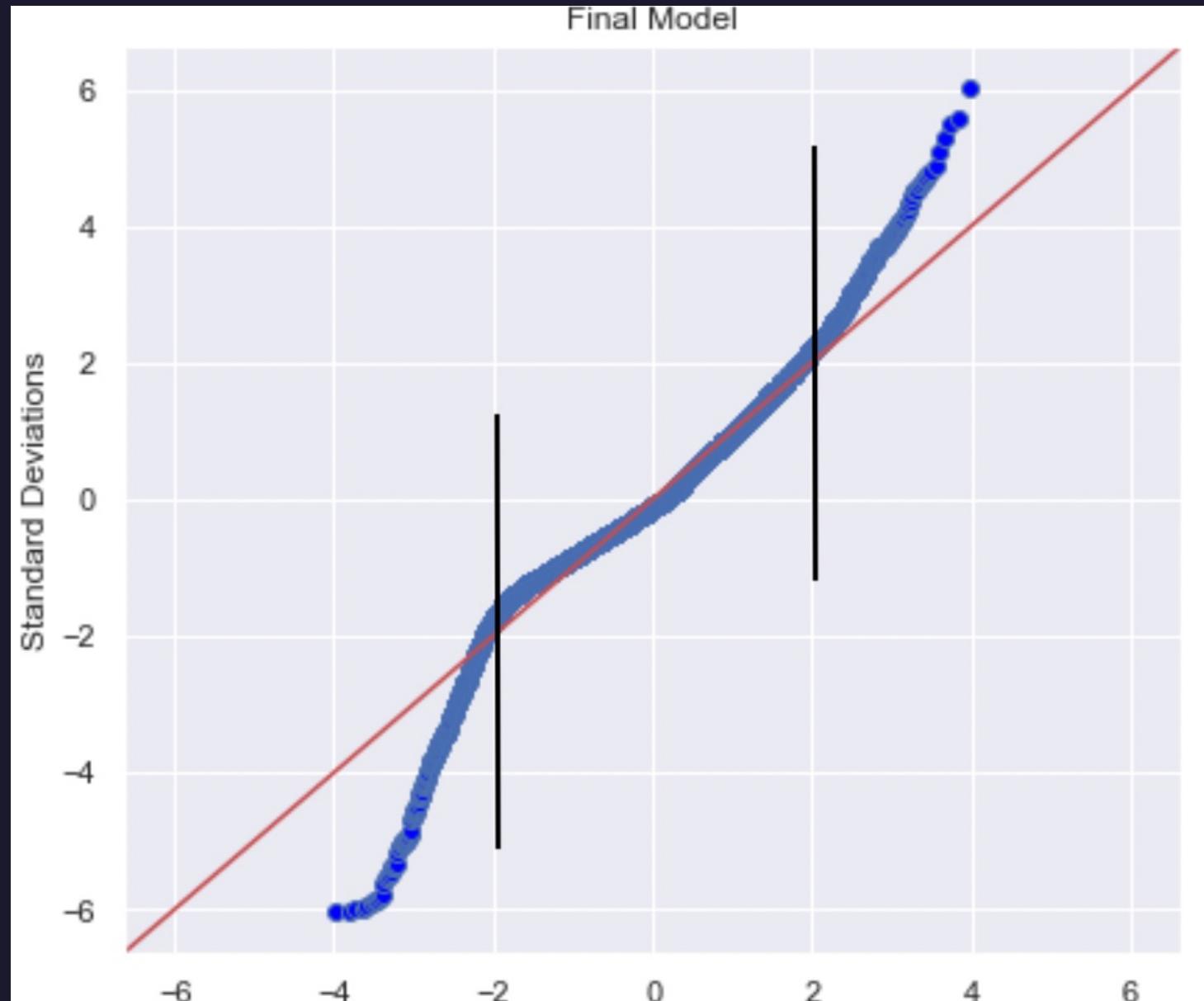


Main Factors:



Modeling

- The model explains **68%** of the variance
- Average predictions off by **22%**
- Accurate within **2 standard deviations**
 - Middle **95%** of the data
- High and Low Priced Houses



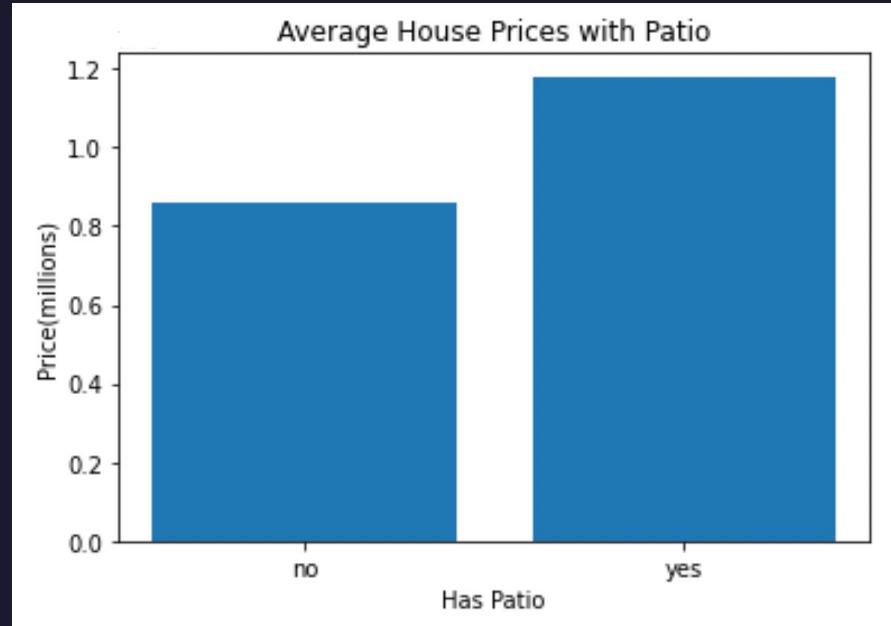
Regression Results

- Adding 1 square foot of patio → **.006% gain in house price**
- Adding 1 square foot of living area → **.03% gain in house price**



Deck Statistics

- Patio adds value to House
- Patio vs Living Area
 - ~10%
- Patio vs Lot Size
 - ~3%



Recommendations

Consider Expanding

- Include Indoor Renovations

Benefits of Deck to clients:

- Lower Cost
- Less Headache than full renovation

Ideal Deck Size

- 10% of Living Area
- 3% of Lot Size

Next Steps

- Option I
 - Look into deck materials
 - Profitability
 - Add value
 - Aesthetically pleasing



Next Steps(II)

- Option II
 - Create more accurate model with more Data:
 - House of worship
 - Proximity to parks
 - Landscaping (pool, courts, green area)
 - Social and Economic Factors



A photograph of a modern outdoor terrace. The terrace features light-colored wooden furniture, including a sofa, armchairs, and a coffee table, all with light blue and white cushions. Large potted plants, such as a palm tree and a large green plant, are scattered throughout the space. In the background, there's a dark wooden fence with a string of small white lights. Beyond the fence, a building with many windows and trees are visible under a clear sky.

Thank You

Joshua Edelstein

Email: joshuaedelstein15@gmail.com