

A dark blue sofa with two patterned pillows is positioned in a living room. In the background, there is a wooden desk with two lamps and a framed picture on the wall.

# Renovate with Confidence

A Guide for Homeowners on Home Renovation  
Projects that Increase Home Value

# Meet the Team



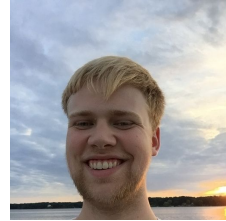
Paul  
Schulken

Technical Lead



Sean  
Conlon

Presentation Lead



Russell  
Blanchard

GitHub Lead

# Agenda



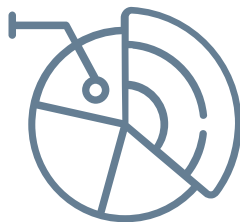
1 Business Plan

2 Data Models

3 Model Results

4 Recommendations

5 Next Steps

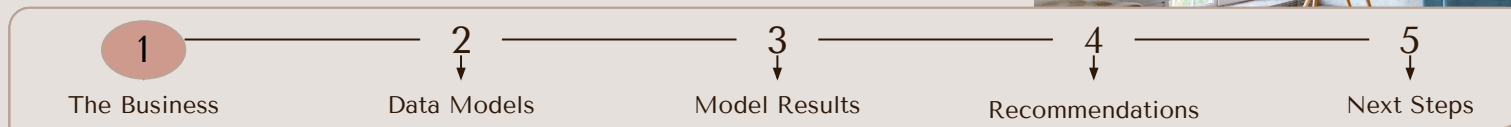


01.

# The Business

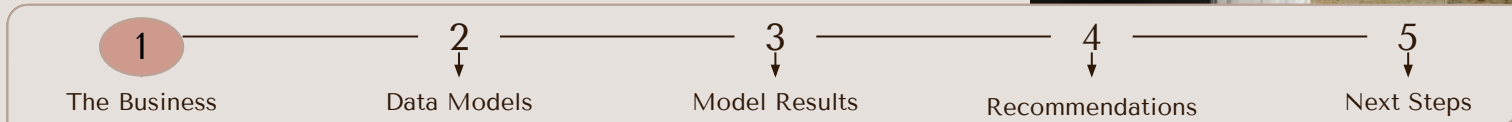
# Business Plan

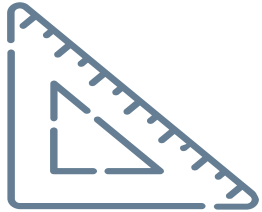
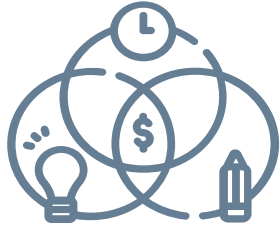
- Most impactful feature on sales price
- Prioritizing renovations
- Ensuring any renovation is worth it



# Bottom Line

- Grade of home best indicator  
**\$188,600** increase for every 1 Grade
- Bathrooms best indicator of grade  
**\$105,000** increase for every 1 Bathroom





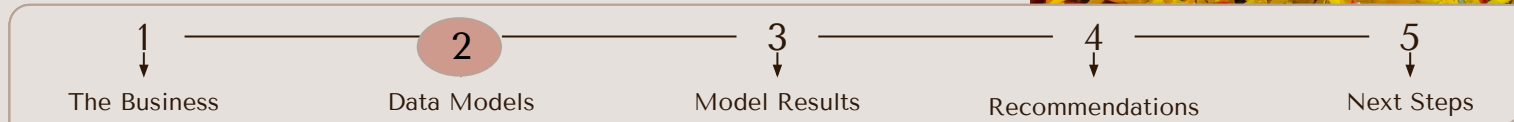
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# Data Models



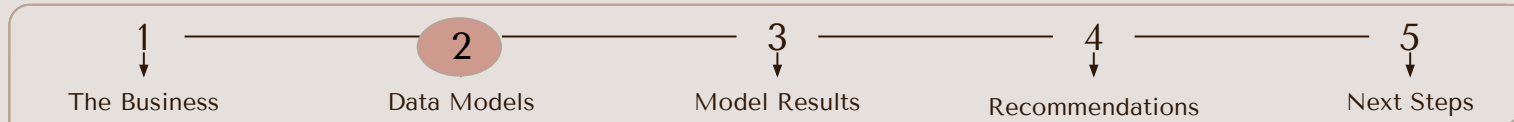
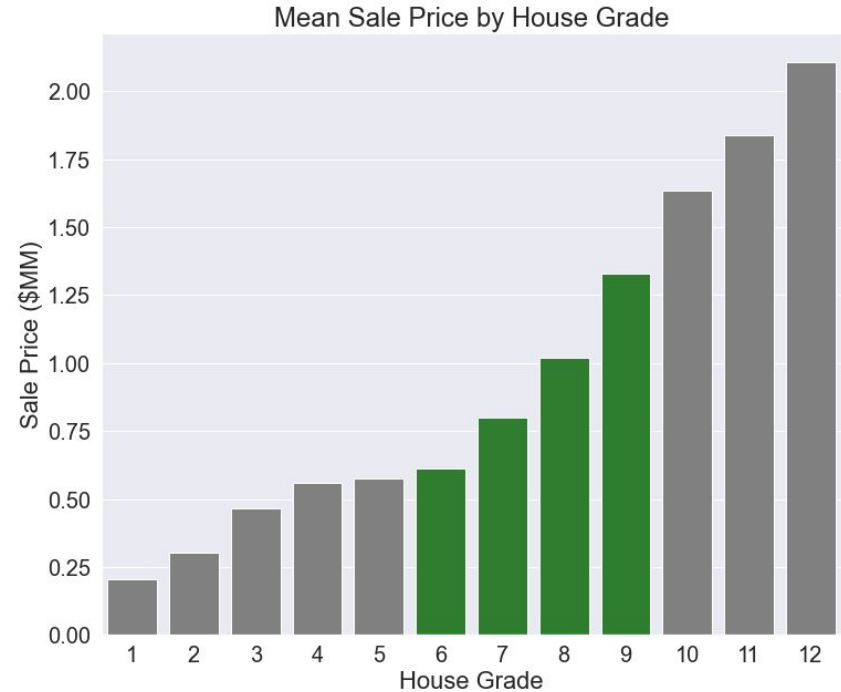
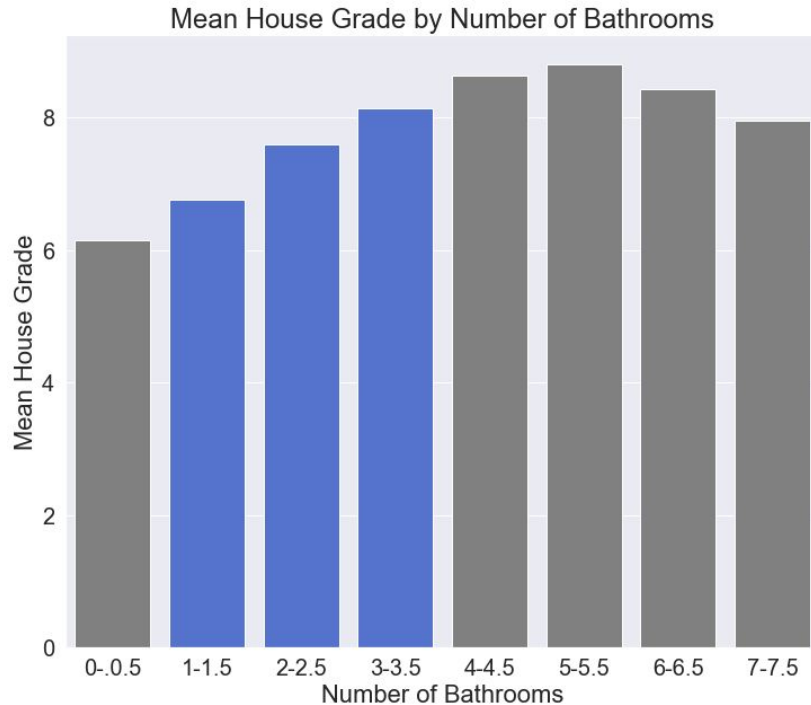
# Data Overview

- Source: King County, WA Government
- Features within homeowner's control  
Bed, Bath, Grade, Garage, Patio
- Limitations: contributing factors





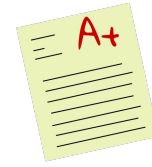
# More Bathrooms = Higher Grade, Price



# Grade Most Impactful

- Target: Sale Price
- Grade accounts for 28% of Sale Price
- Model provided impact rankings of features
  - 1 Grade increase = \$188,600 Sale Price increase

1)



2)



3)



4)



5)



1

The Business

2

Data Models

3

Model Results

4

Recommendations

5

Next Steps



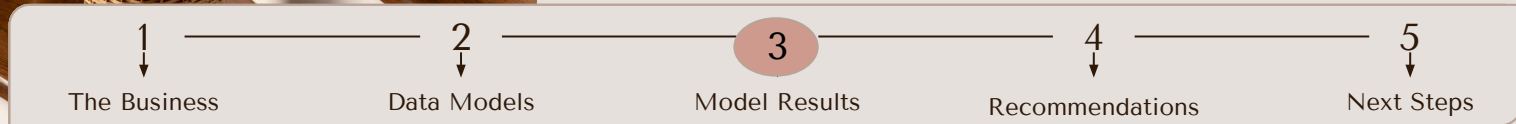
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## Model Results



# Our Findings

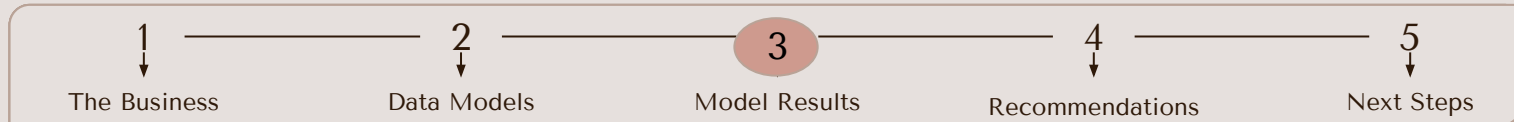
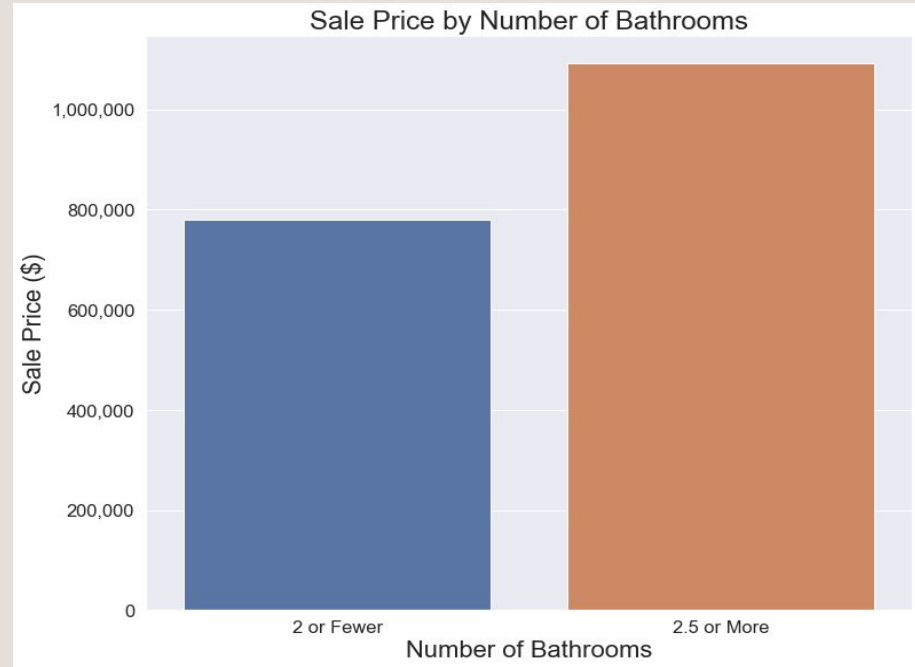
“There’s always room for improvement”  
– *Shannon Fritcher*



# Bathrooms Most Impactful on Grade

Majority of homes include 2 or 2 and a half bathrooms.

It's shown the number of bathrooms truly affects a homes sales price.



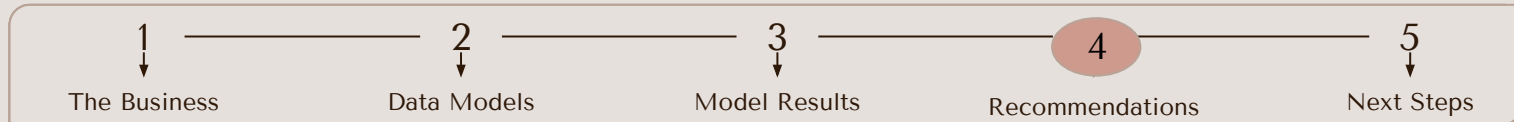
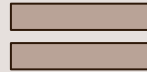


# 04.

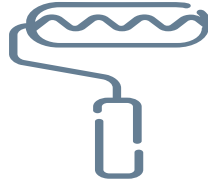
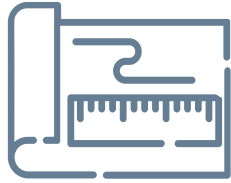
## Recommendations

# Renovation Recommendations

- Consider upgrading half bath or adding full bathroom
- Alternatively, determine if a patio or garage is feasible







05.

Next Steps

# What's Next

## Research

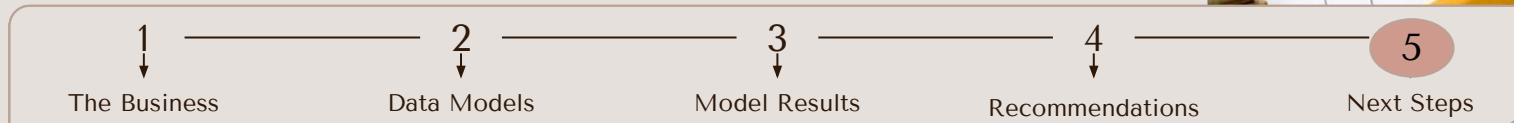
Which features add the highest value?

## Seek Advice

Talk to a professional appraiser

## Plan

Your enjoyment or for resale



# Thank you!

Do you have any questions?

Paul Schulken

- Technical Lead

Sean Conlon

- Presentation Lead

Russell Blanchard

- Github Lead

# Appendix: Statistical Model Details

- Target: Sale Price

Grade most impactful feature

- Baseline RMSE = \$427,580
- Single RMSE = \$362,070 ↓  $R^2 = 0.28$
- Multiple RMSE = \$352,720 ↓  $R^2 = 0.32$  ↑

- Target: Grade

Bathrooms most impactful feature

- Baseline RMSE = 0.99
- Single RMSE = 0.80 ↓  $R^2 = 0.34$
- Multiple RMSE = 0.76 ↓  $R^2 = 0.41$  ↑