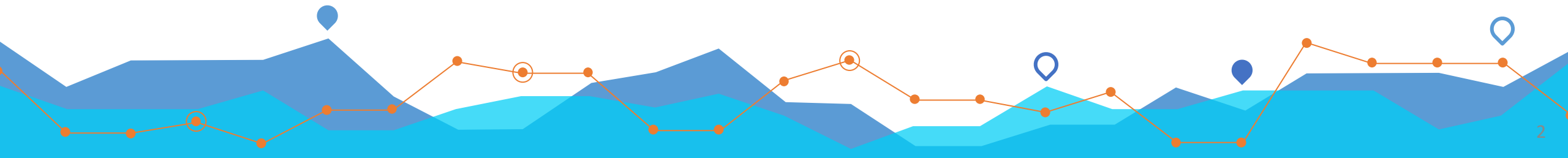# appraiseMe: A User-Friendly Appraisal Tool

Matthew Noonan
mcn9284@gmail.com
5/3/2022

OUTLINE

1. Problem
2. Understand
3. Analysis
4. Results
5. Future

The Business Problem

The Problem:

Home owners don't have access to quick and easy property value estimation. What information they DO have is often outdated or not reflective of the current market.

The Solution:

A mobile app with access to real estate databases, past records, and user-supplied information fed into a predictive model that can estimate current values and reasonably predict short-to-mid term price changes.

The Value:

Our product/service supports and informs users seeking greater confidence and control over the market forces that often seem too capricious.
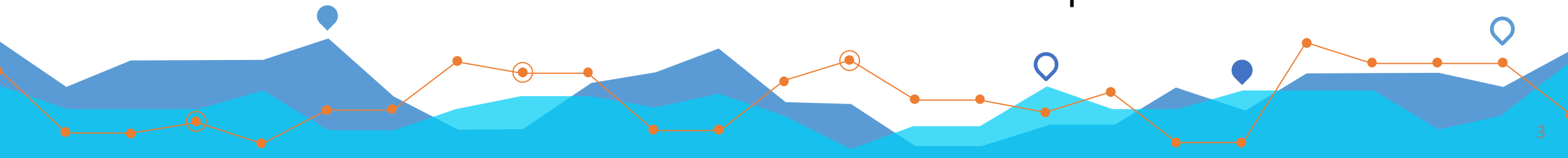
Results

	R-Squared	RMSE	CV KFold
Baseline Model	0.494	$257580	0.492
Model 2	0.679	$204791	0.699
Model_4	0.759	$193634	0.763

Discussion/Analysis

Our most successful model was model_4. It was developed from data that had been log(x+1) transformed in order to make It conform to a normal distribution

The 'sqft_living' coefficient 133.04 indicates that for every unit change in square footage of living space, there is a $133.04 change in sale price. The number of bathrooms was also a surprising predictor, with every additional bathroom adding ($43,257.61) to sale price.

The geographical data is included in the final model, but will likely be dropped until it can be more meaningfully incorporated. For instance, the coefficient for zipcode is -585.60. But how does that scale? Housing prices sometimes gain and sometimes lose value due to zipcode. We need to find a way to make this feature make sense

123 A Street

Value: $650,000

Square Feet: 2,500

Bedrooms: 5

Future Directions

◉ Find way to meaningfully incorporate geo data

◉ Explore other linear models (Lasso, Ridge, etc.)

◉ Engineer new features (avg commute times, proximity to recreation, shopping, etc.)
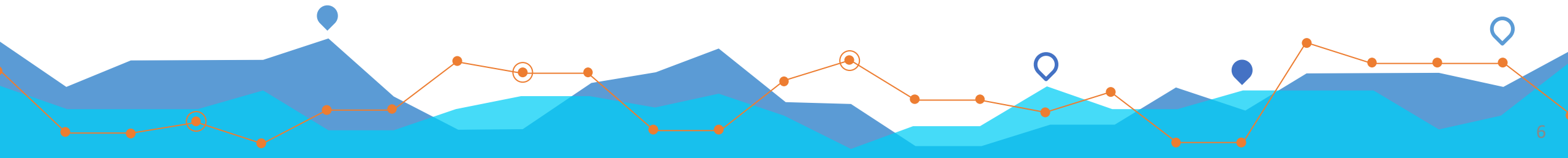
THANKS!

Any questions?

You can find me at
mcn9284@gmail.com