



# **BIG MOUNTAIN RESORT**

## PRICING ANALYSIS

COCO MARTINEZ



## INTRO

- Big Mountain Resort serves ~350,000 visitors annually
- A new chair lift added \$1.54M in annual operating costs
- Management wants to know if pricing reflects the value of current facilities.
- Adult weekend ticket price is currently \$81

## PROBLEM IDENTIFICATION

GIVEN A RESORT'S FEATURES, WHAT TICKET PRICE  
WOULD THE MARKET SUPPORT?

# RECOMMENDATION + KEY FINDINGS

## MODEL'S ESTIMATED TICKET PRICE

**\$96**

Estimated Incremental Revenue:  
~\$26.25M

Our model determined that Big Mountain's facilities support a ticket price up to this amount. Demand response to a \$15 price increase has not been tested.

## RECOMMENDATION

**\$83 - 86**

Estimated Incremental Revenue:  
~\$3.47M - \$8.75M per season

Recommended Action:  
Test a moderate price increase to cover new lift costs while limiting demand risk.

*\*Revenue estimates based on 350,000 visitors, visiting 5 days.*

# HOW PRICING WAS EVALUATED

## 01. COMPETITOR RESORTS

✓		✓
✗		✓
✓		✓
✗		✗
✓		✗

Analyzed 277 national resorts with available pricing data for adult weekend tickets.

## 02. FEATURES + PRICING



Compared ticket prices against resort features (runs, lifts, vertical drop, snowmaking, etc).

## 03. MODEL



Trained multiple models and selected the most accurate and stable model based on cross validation results.

# TESTED MODELS

## RECOMMENDATION

**\$9**  
**MAE**

### RANDOM FOREST

Lowest average MAE ~\$9 across cross validation  
Results were stable across different folds.

*MAE: Mean average error represents average prediction error per ticket.*

### DUMMY REGRESSION

MAE: ~\$17 - \$19  
Baseline model using average ticket price across resorts.

### LINEAR REGRESSION

MAE: ~\$10 - \$12  
Assumes linear relationships between resort features and price.

# WHAT DRIVES TICKET PRICE

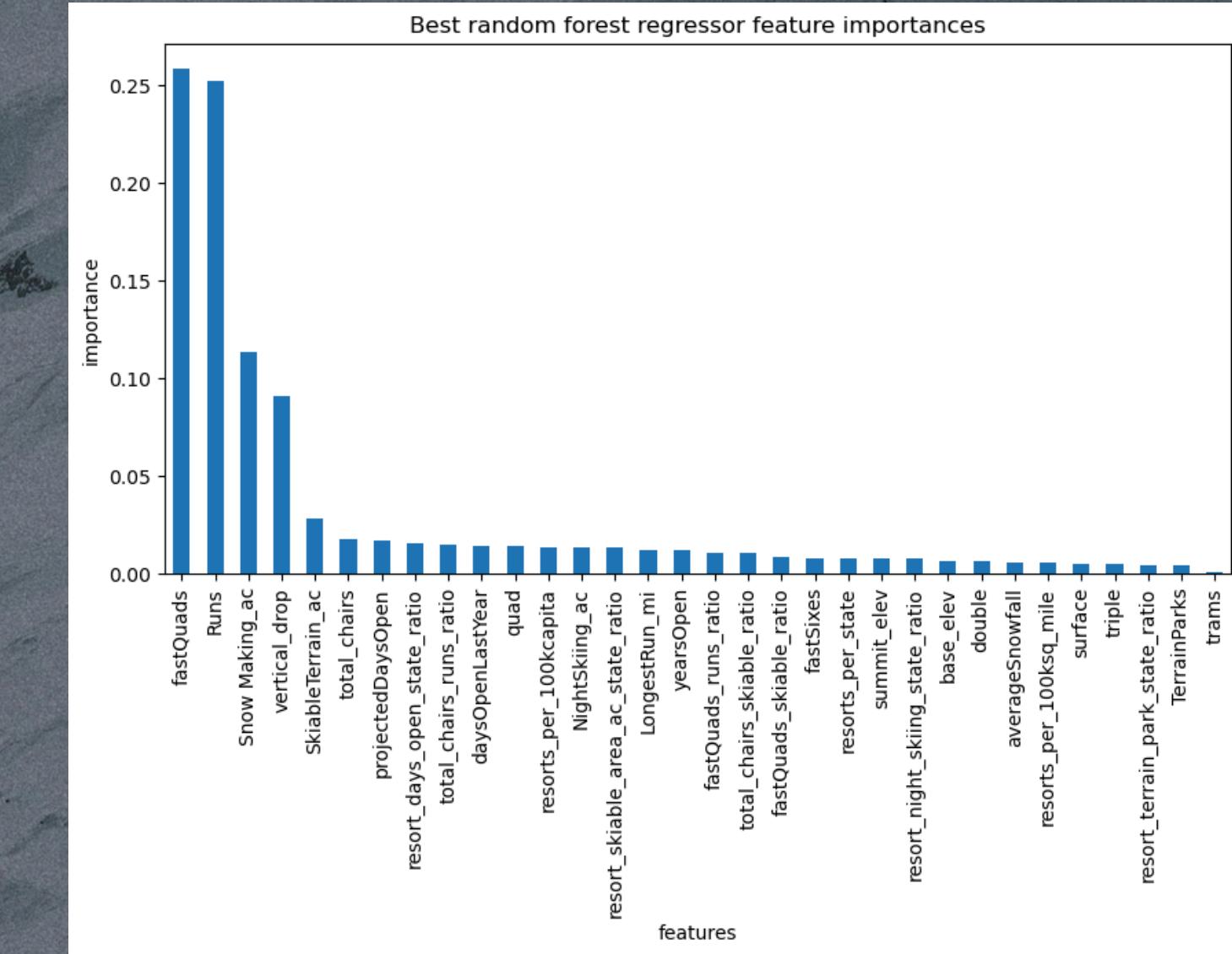
## TOP FEATURES

Same top features as linear model

- 1. Fast Quads
- 2. Runs
- 3. Snow Making
- 4. Vertical Drop
- 5. Skiable Terrain

## KEY TAKEAWAY

Lifts, terrain, and number of runs drive pricing power.



\*x-axis shows all features from original dataset and engineered stat summary ratios.

# SCENARIO OVERVIEW

01.



Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.

02.



Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage

03.



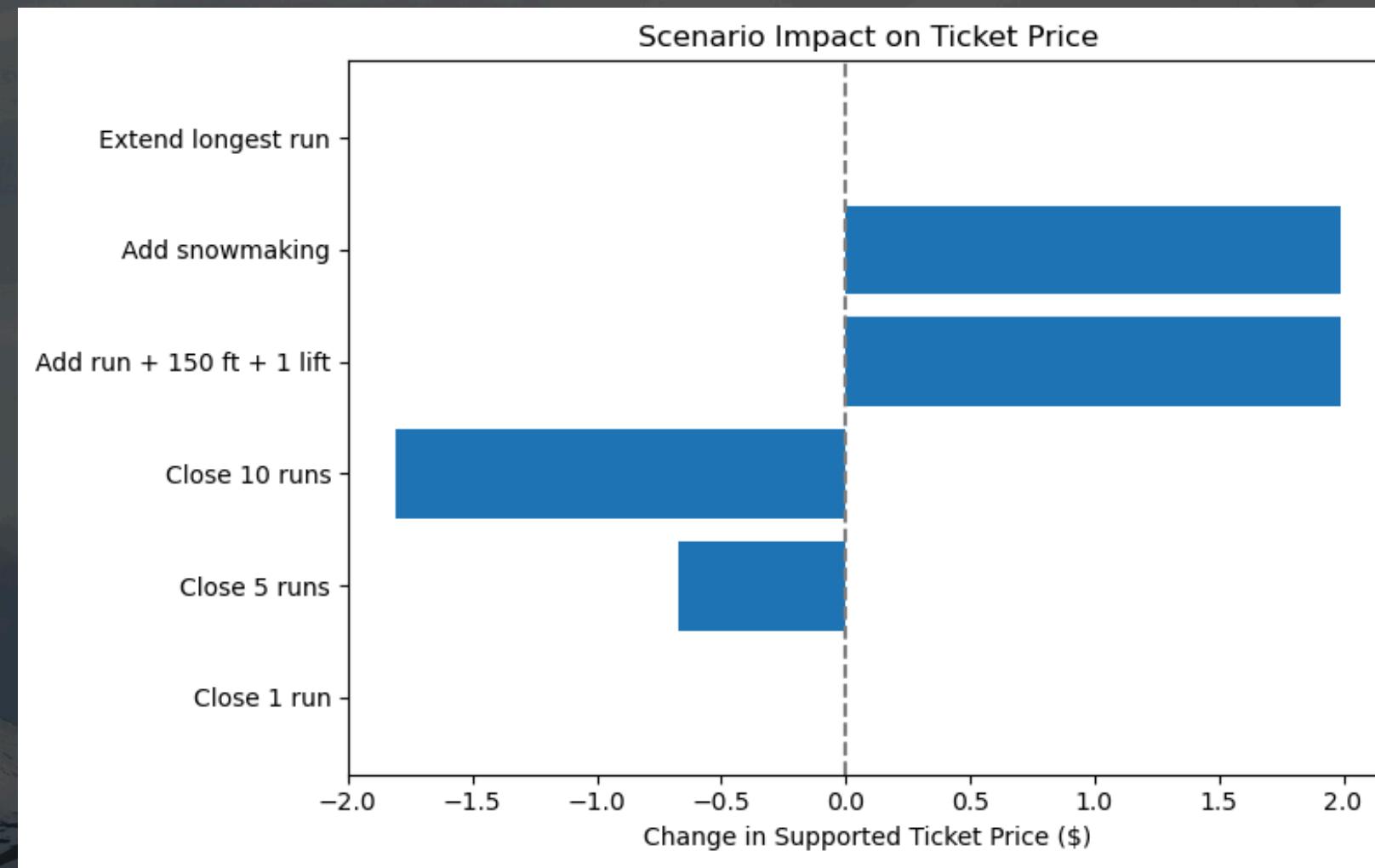
Same as number 2, but adding 2 acres of snow making cover

04.



Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres

# SCENARIO MODELING



## KEY TAKEAWAYS

**Scenario 1:**  
**Closing runs reduces pricing support**

**Scenario 2:**  
Adding a run, vertical drop, and lift supports a ~\$2 price increase

**Scenario 3:**  
Add-on snow making to scenario 2 does not increase price

**Scenario 4:**  
Extending longest run does not materially increase supported price

# WHAT THIS MEANS FOR BIG MOUNTAIN

## INCREASE TICKET PRICE



Big Mountain's facilities support higher pricing than current amount

## RESORT IMPROVEMENTS



High-impact improvements can support the cost of an additional ski lift.

## EXTENDED ANALYSIS



This model can be reused to explore how different features affect pricing .

*\*Further analysis of visitor data and operational cost is recommended for a full-scope pricing strategy*



**THANK YOU**