



BIG MOUNTAIN RESORT

PROBLEM STATEMENT

01

BIG MOUNTAIN RESORT'S TICKET PRICING MAY NOT BE OPTIMIZED TO REFLECT THE MARKET'S VALUATION OF ITS FACILITIES.

02

WE AIM TO FIND AN IDEAL TICKET PRICE BY ANALYZING RESORT FEATURES IN COMPARISON TO COMPETITORS.



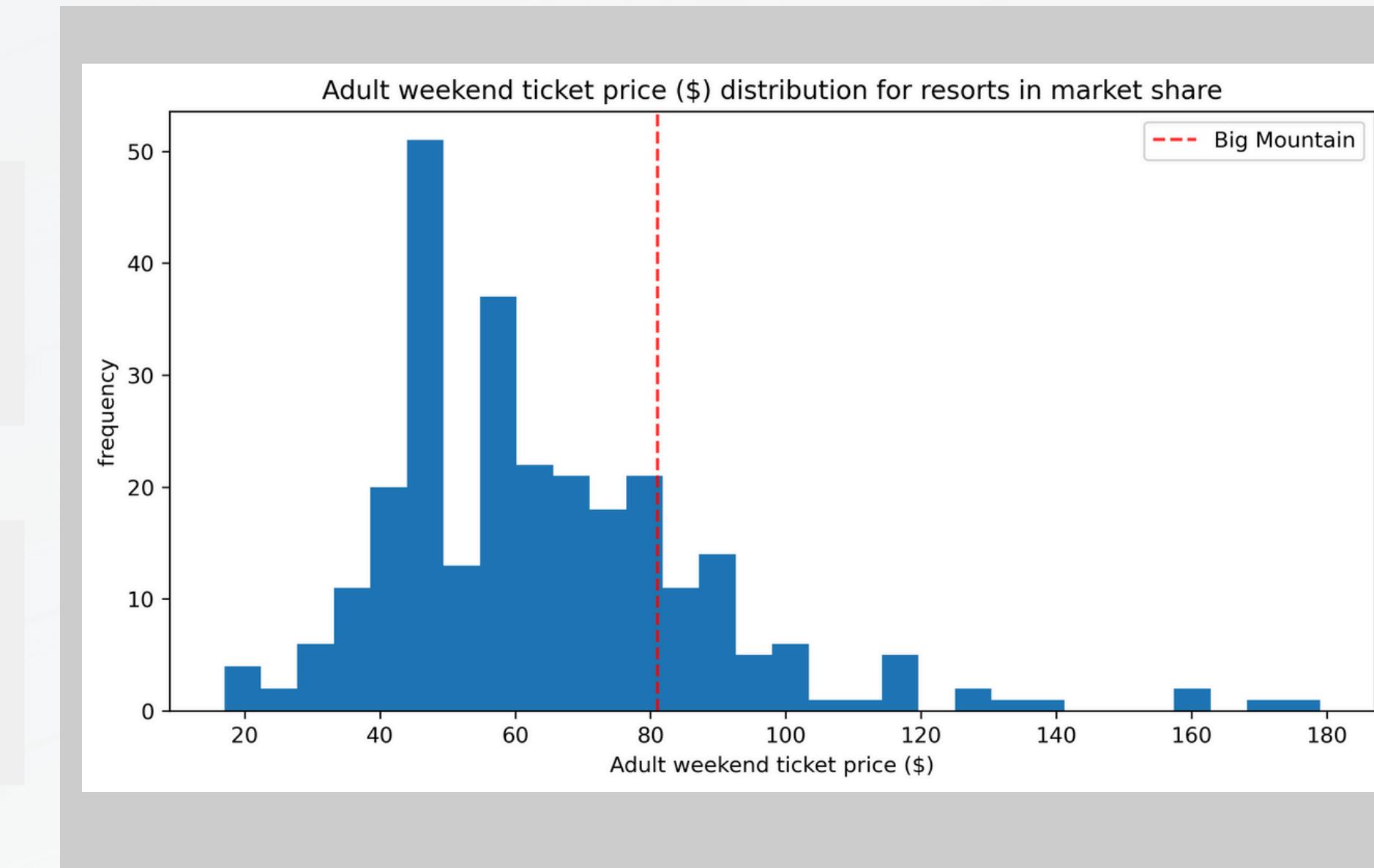
RECOMMENDATION



Proposed Ticket Price: Increase the ticket price to \$95.87 from the current \$81.



This recommendation is based on the competitive analysis of resort facilities and market trends.



MODELING METHODOLOGY & RESULTS

Utilized Random Forest Regression to determine optimal pricing.

STEP 1

Features such as vertical drop, skiable terrain, and lift types were highlighted as most impactful.

STEP 2

Data wrangling and cleaning were completed to ensure reliable modeling.

STEP 3

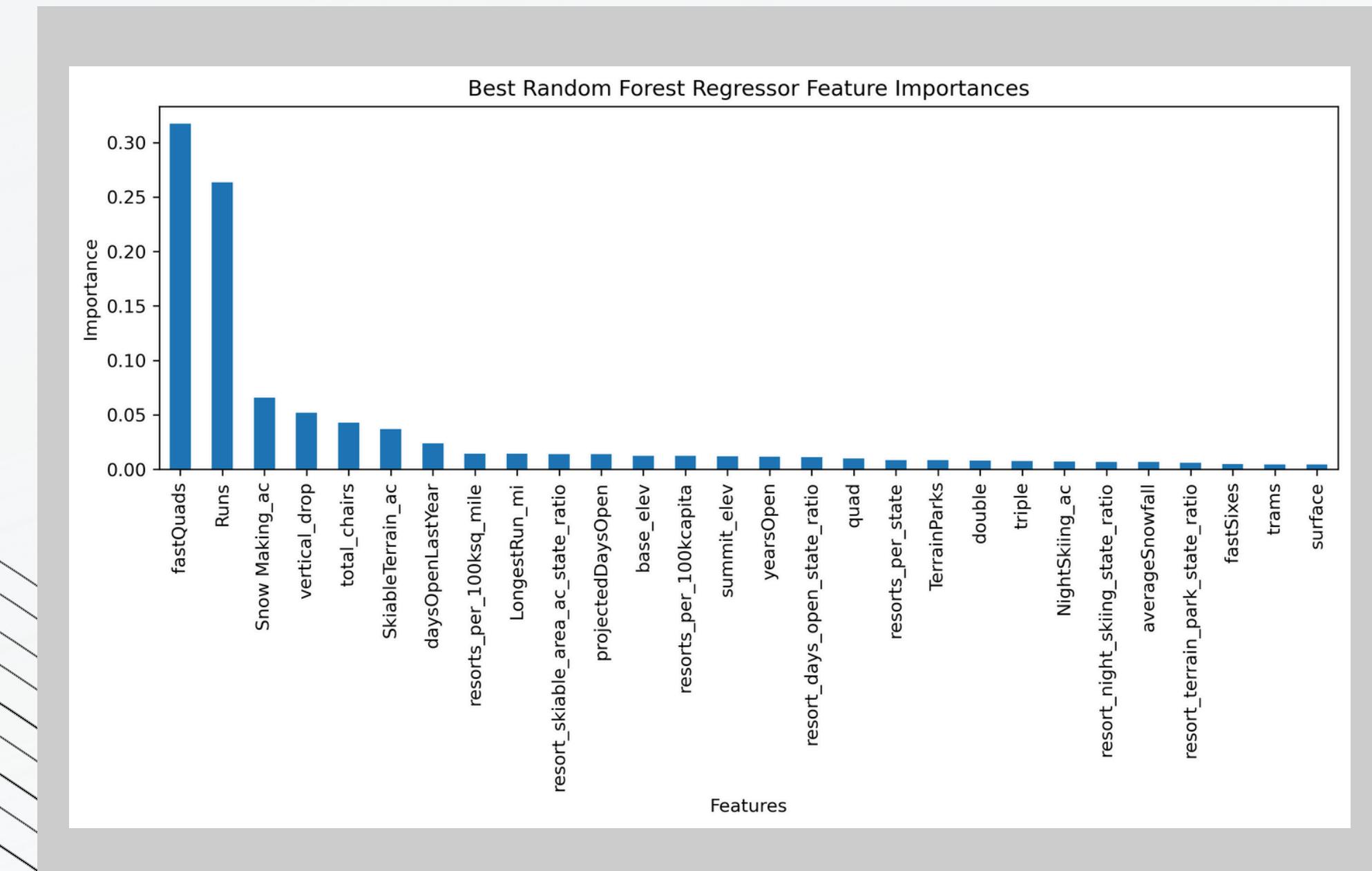
FEATURE IMPORTANCE FROM RANDOM FOREST MODEL



Vertical drop, snow-making area, and total number of chairs are the most influential factors for determining ticket price.



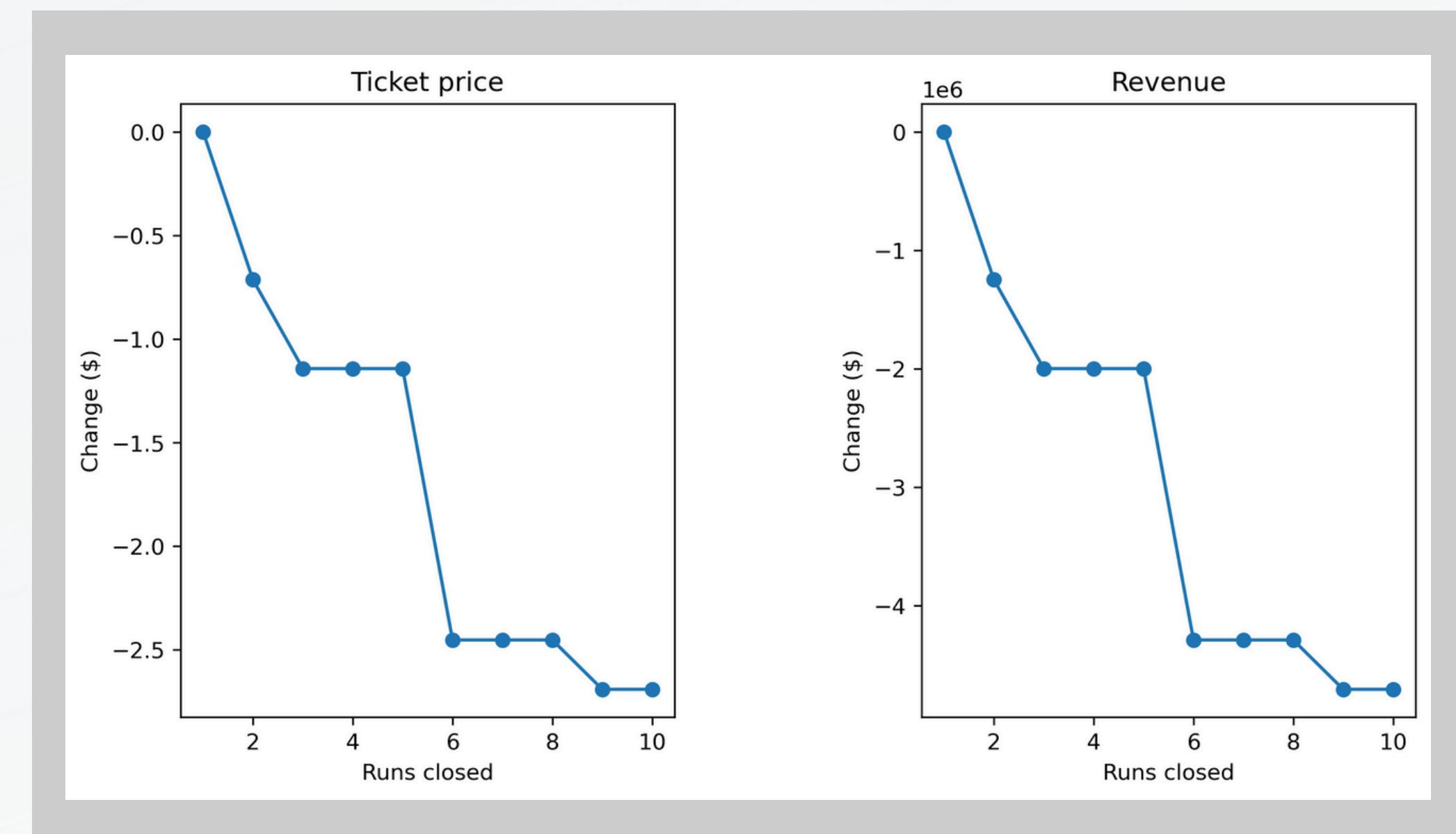
The importance of each feature helps to understand what drives ticket pricing.



SCENARIO ANALYSIS

CLOSING RUNS

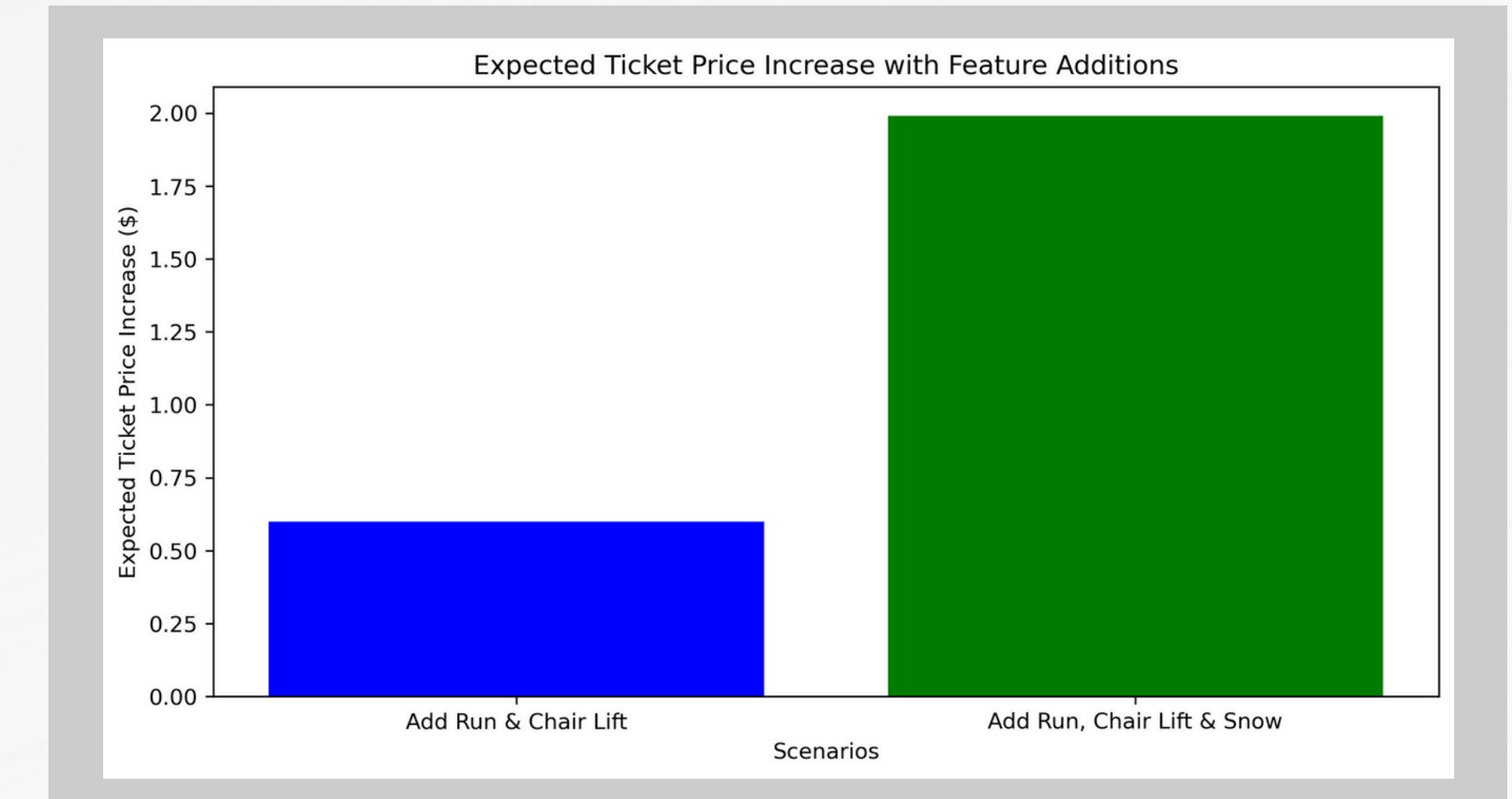
- Analyzing the *impact of closing 1 to 10 runs.*
- **Findings:**
 - Closing 1-3 runs resulted in minor price impact.
 - Closing more than 5 runs led to a significant decline in ticket price support.



SCENARIO ANALYSIS

ADDING A NEW CHAIR LIFT & SNOW COVERAGE

- Adding a run, increasing vertical drop, adding a new chair lift, and increasing snow coverage.
- **Findings**
 - Adding a chair lift and snow coverage can increase ticket price support by \$1.99, with an estimated additional revenue of \$3.47 million.



SUMMARY & CONCLUSION

- Recommended Price: \$95.87 based on modeling results.
- Feature Importance: Focus on enhancing snow making, increasing chair lifts, and maintaining vertical drop.
- **Scenario Analysis:**
 - Run closures should be approached cautiously; minimal closures have minimal impact, but larger closures negatively impact ticket price support.
 - Adding features increases price support and revenue.

FUTURE SCOPE OF WORK

- Consider testing the impact of selective run closures before making permanent changes.
- Collect additional data related to visitor numbers and operational costs for more refined modeling.
- Further investigate other factors such as visitor satisfaction and regional competition.

