BIG MOUNTAIN RESORT

Problem

Need to optimize pricing strategy

Exploring avenues for further development and profitability

Aligning ticket prices with the value and quality of facilities offered

Develop a data-driven strategy to enhance market position

Evaluate the potential for price adjustments based on facility value

Analyze the implications of various development scenarios

Adult weekend ticket price ($) distribution for resorts in market share
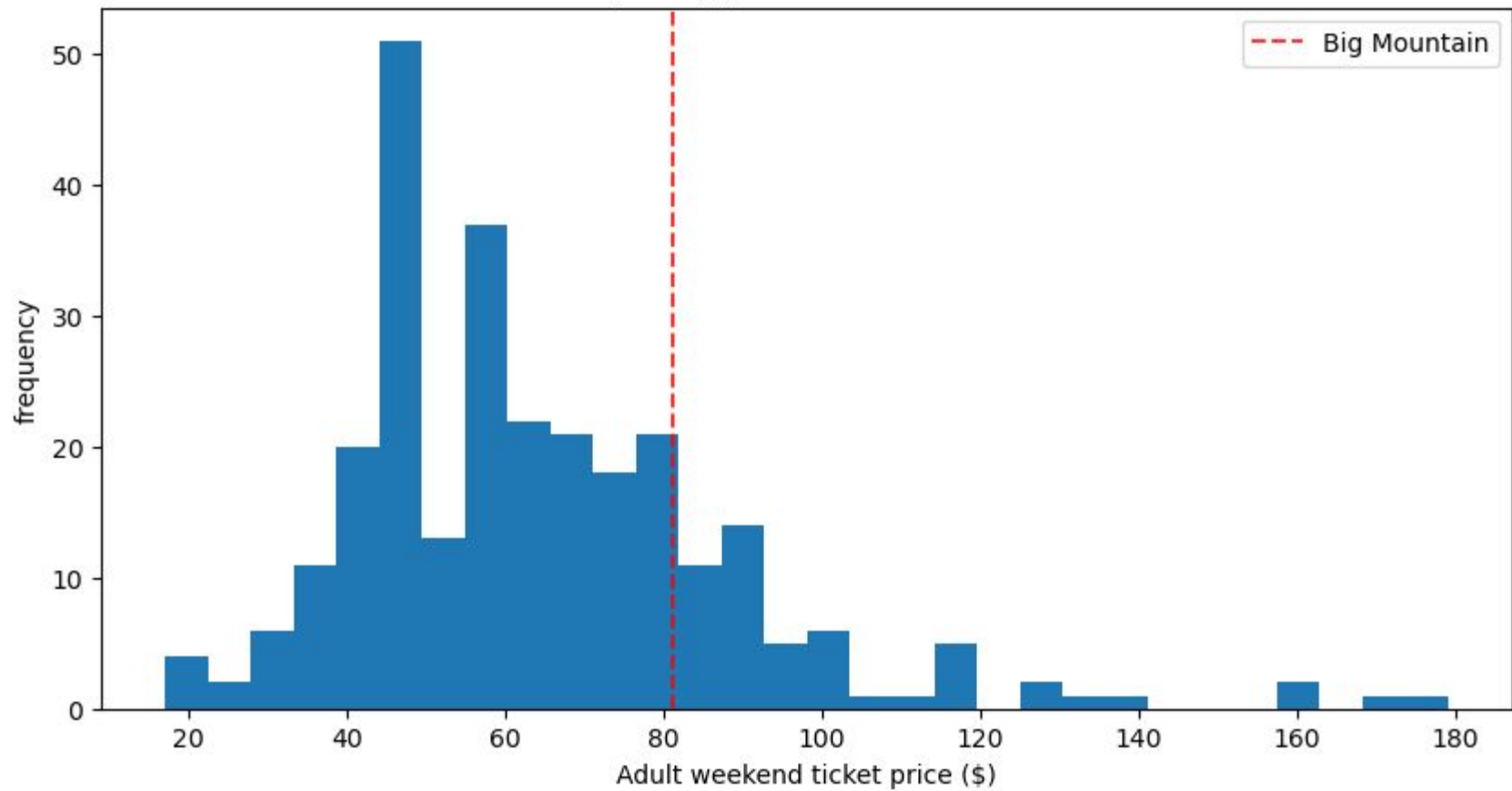
Recommendations

Proposed ticket price increase to $95.87

Need for a user-friendly tool for business analysts to explore various scenarios
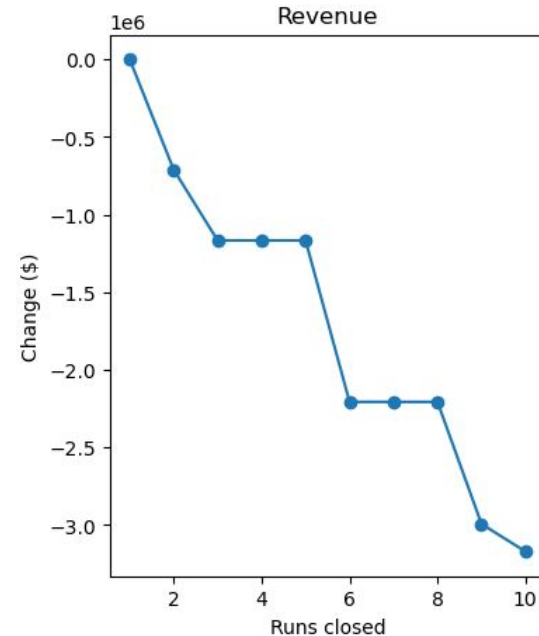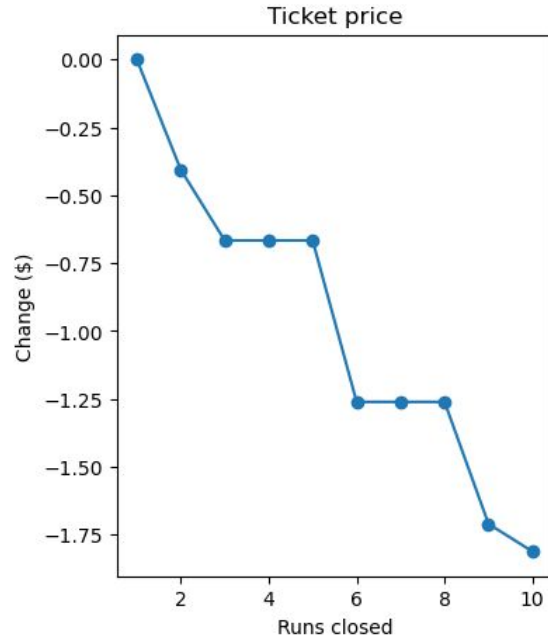
Modeling

Data Cleaning: Ensured the accuracy and reliability of the dataset by handling missing values and removing duplicates.
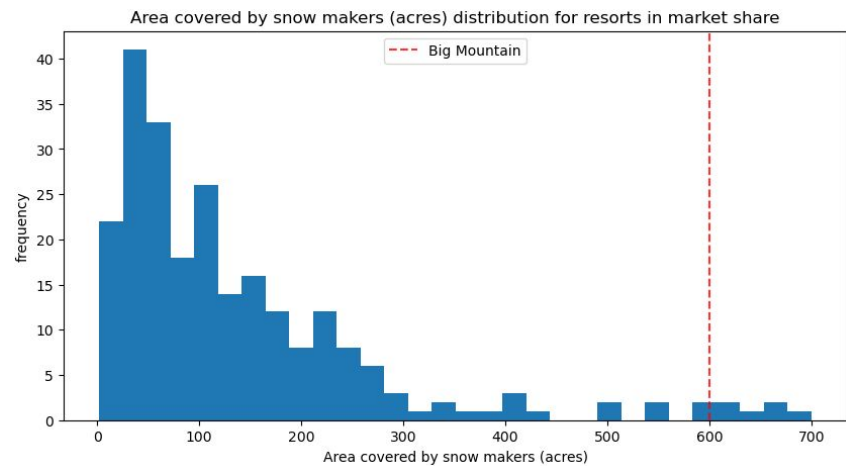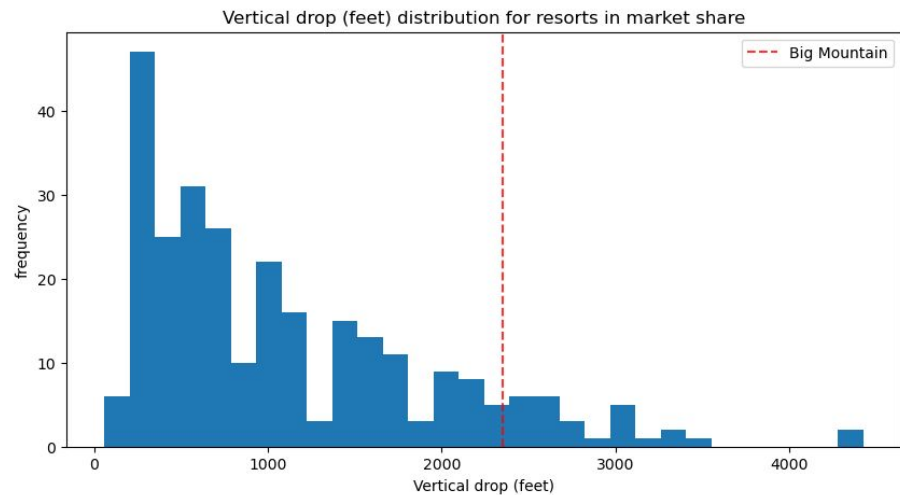
Market Position Analysis: Identified Big Mountain's strong market position, highlighting its superior facilities such as snow-making area, vertical drop, and chair availability.

Pricing Analysis: Analyzed the current ticket pricing strategy, identifying a potential gap between the current price ($81.00) and the modeled price ($95.87).

Modeling

Feature Selection: Identified critical features influencing pricing, including vertical drop, snow-making area, and chair availability.

Vertical drop (feet) distribution for resorts in market share

Area covered by snow makers (acres) distribution for resorts in market share

Modeling

Winning Model: Adopted the random forest model due to its better performance in predicting the outcomes of different scenarios.

Scenario 1 Analysis: Detailed analysis of scenario 1, which involves adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift, projecting an increase in ticket price support by $1.99 and potential seasonal revenue increase of about $3,474,638.

Modeling

Scenario 2 & 3 Analysis: Evaluation of scenario 2 and 3, highlighting the limited impact of a small increase in snow-making area and the low feature importance of the longest run in the chosen random forest model.

Summary

Current Price: $81.00 Modeled Price: $95.87

Potential Seasonal Revenue Increase: ~$3,474,638 (Scenario 1)

Facility enhancements for better customer experience.

Balancing enhancements with operational efficiency.