Big Mountain's Big Potential

A Data-Driven Approach to Pricing Strategy and Revenue Growth

By: Tristan Peters
Date: 1/1/2025

Unlocking Big Mountain's Financial Potential

The Challenge:

- Current weekend ticket price: $81 (below market value).
- Annual operational cost of the new chair lift: $1.54M.
- Pricing does not reflect superior facilities, leaving revenue untapped.

The Opportunity:

- Big Mountain outperforms competitors in key metrics like vertical drop, skiable terrain, and total chairs.
- A data-driven pricing strategy can optimize revenue while maintaining customer satisfaction.
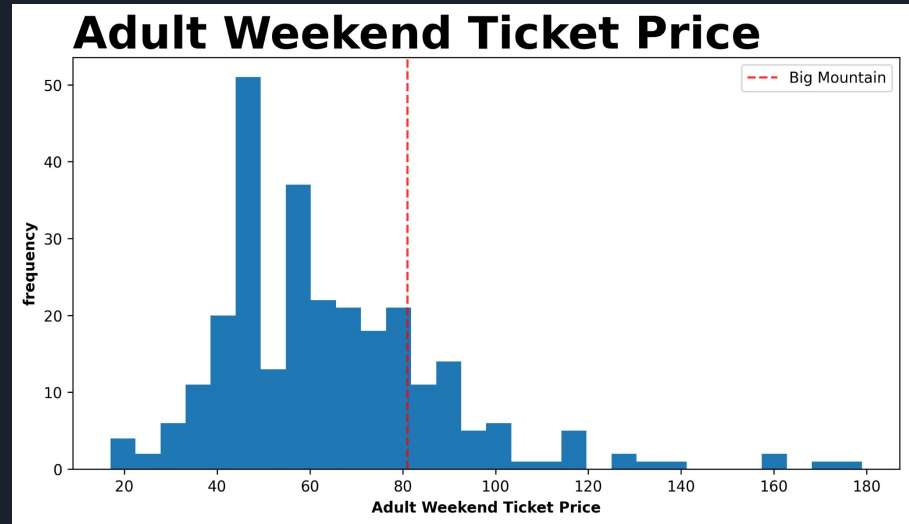
What the Data Tells Us

Key Insights:

- Analysis of over 300 competitors narrowed to 227 relevant resorts.

Top Features Driving Ticket Prices:

- Vertical Drop, Skiable Terrain, Total Chairs, Fast Quads, and others.
- Big Mountain exceeds competitor averages across these critical features.

Implication:

- State-level factors have minimal impact.
- Resort-level features drive value and pricing potential.

Best Random Forest Regressor Feature Importances
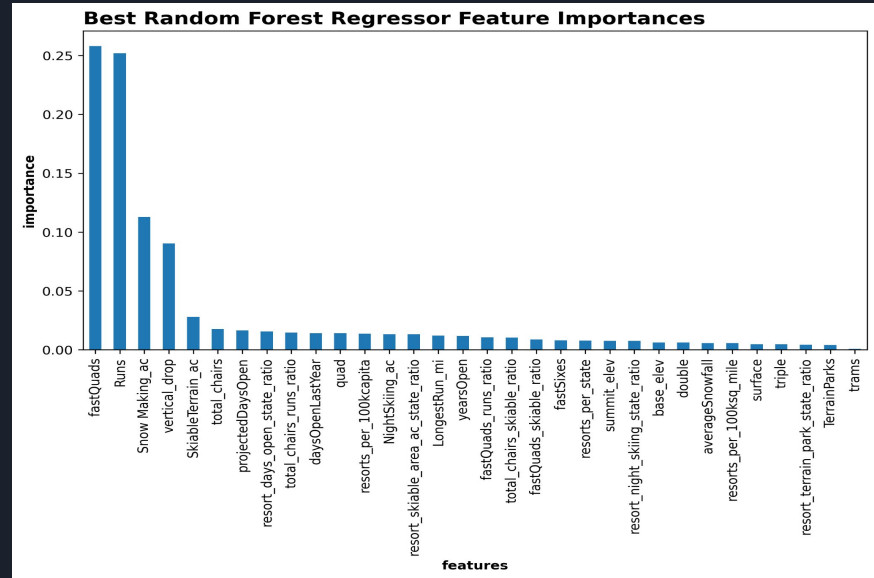
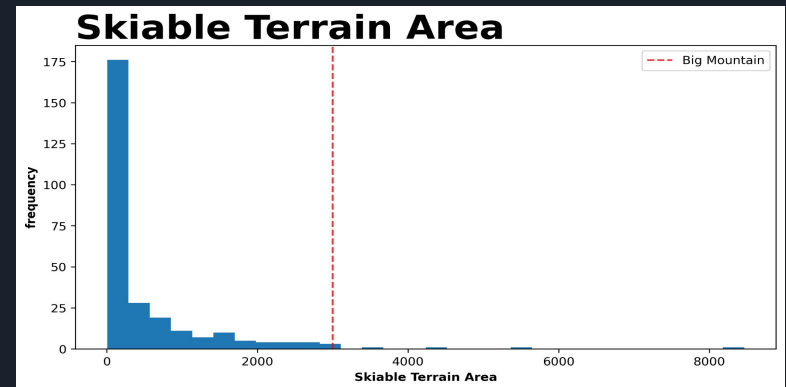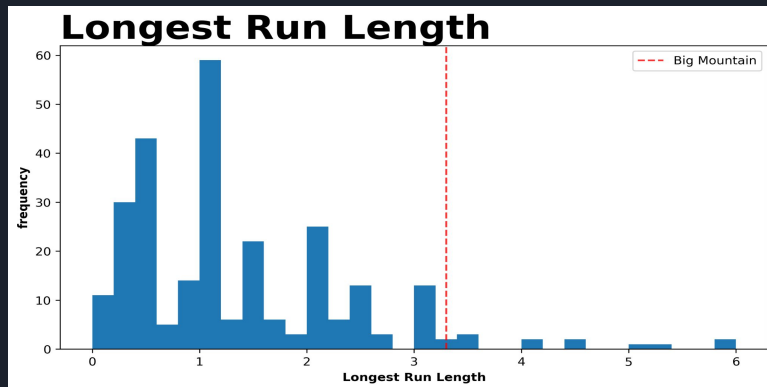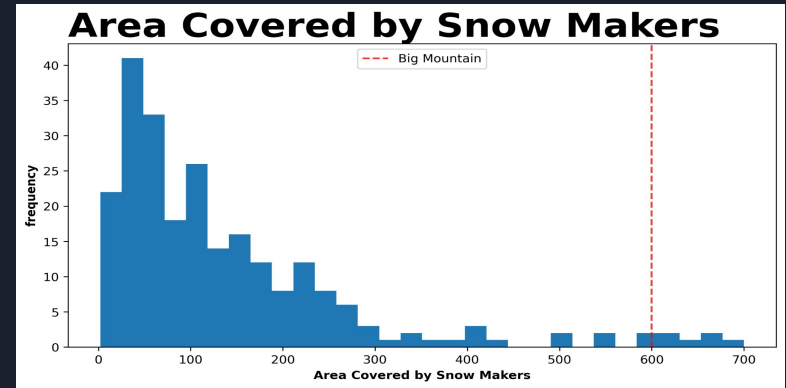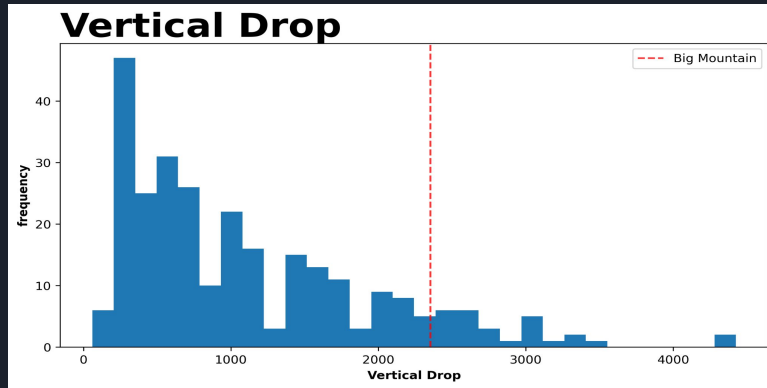# Big Mountain's Market Performance

Key Metrics:

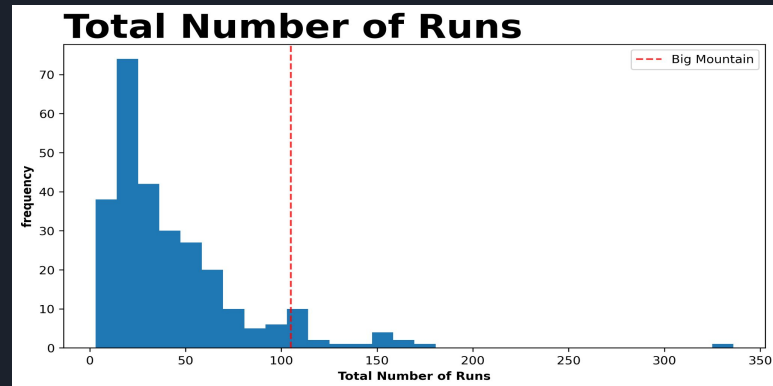- Big Mountain leads in Vertical Drop, Total Chairs, Skiable Terrain, and Snowmaking Coverage.
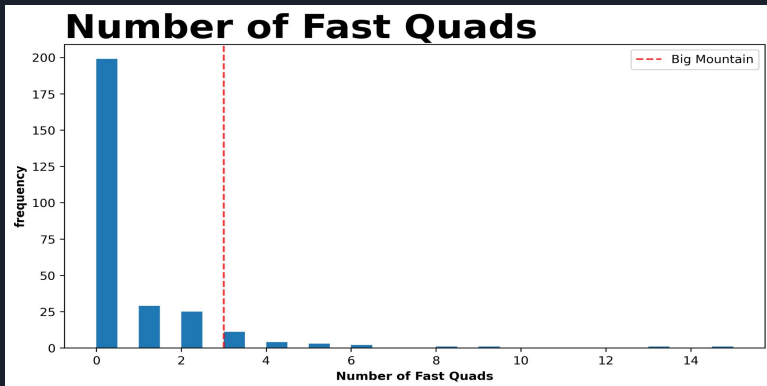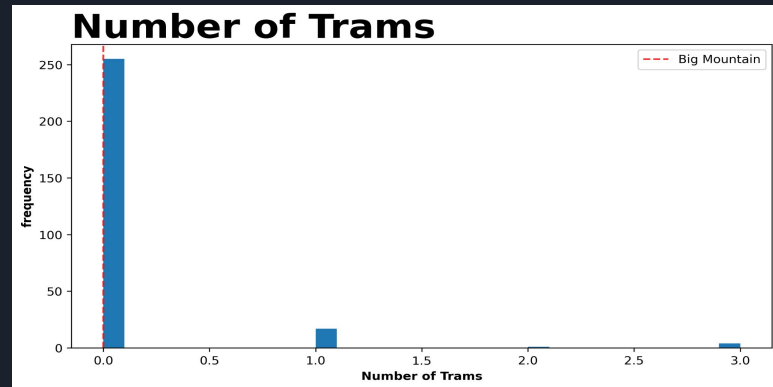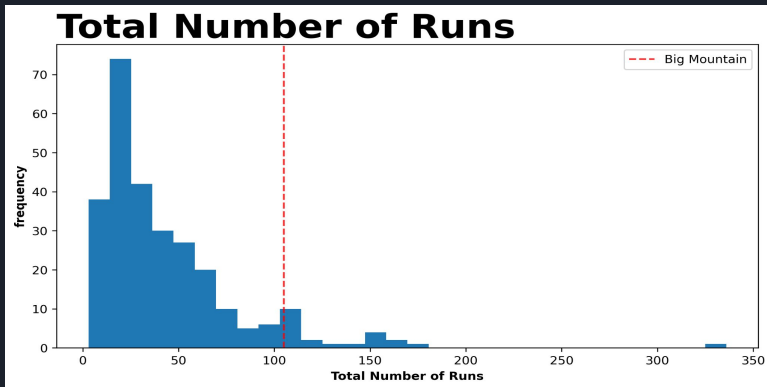
Implication:

- Pricing should reflect these advantages to optimize profitability.

Big Mountain Market Performance Comparison

Big Mountain Market Performance Comparison

Smarter Predictions for Better Decisions
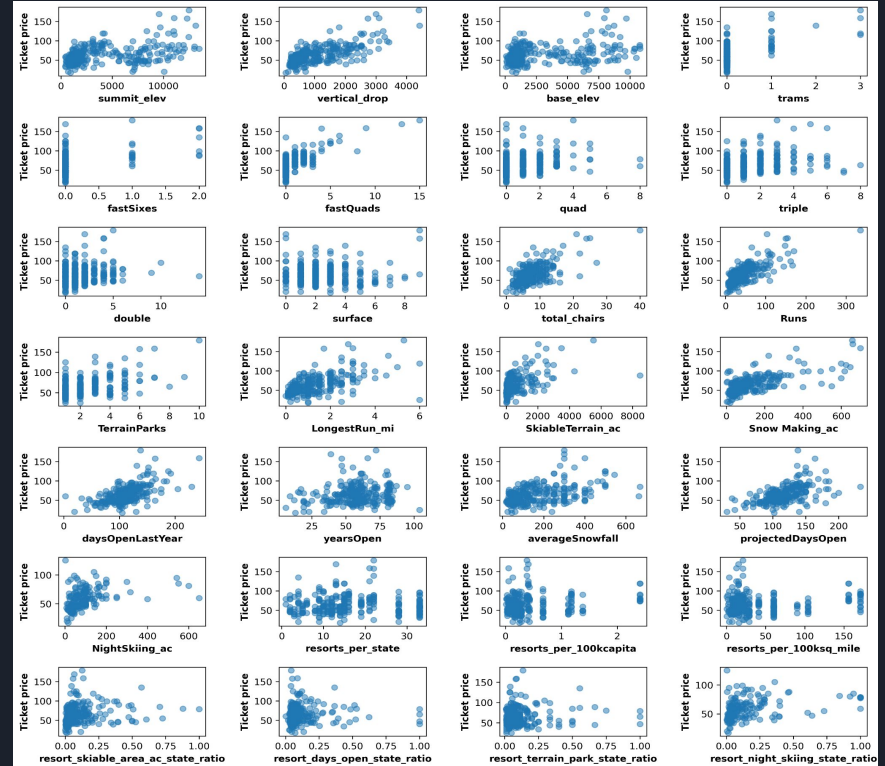
Baseline:

- Mean ticket price lacked predictive power.

Linear Regression:

- Initial results showed overfitting and inconsistency.

Random Forest Regressor:

- R-squared: 0.835.
- Mean Absolute Error: $9.645.
- Reliable, consistent predictions aligning ticket prices with facility value.

Scenario Analysis

Scenario Testing Results:

1. Close unpopular runs: No significant revenue impact until >3 runs closed.
2. Increase vertical drop by 150 feet with a new chair lift: Adds $8.61 to ticket price; $15M revenue annually.
3. Add snowmaking (2 acres): Adds $9.90 to ticket price; $17M revenue annually.
4. Extend longest run: No measurable impact on ticket price.

Recommendation:

- Prioritize Scenarios 2 and 3 for profitable investments.
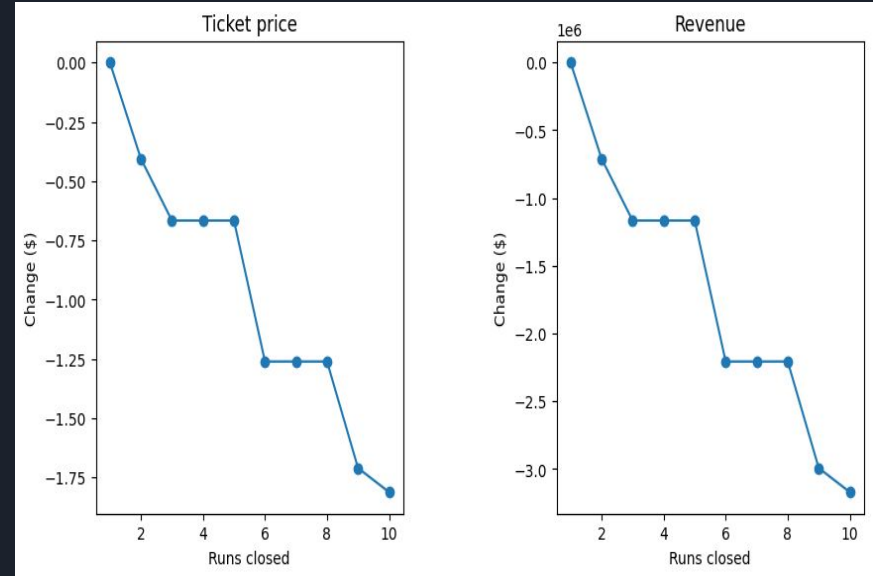
Optimizing Pricing to Maximize Revenue Potential

Recommended Price: $95.87.

Rationale:

- Aligns with Big Mountain's superior facilities.
- Supports operational cost recovery for the chair lift.

Financial Impact:

- Revenue increase projected at $5.1M annually (based on 350,000 visitors).

Turning Data Into Dollars

Immediate Steps:

- Gradually increase ticket prices (e.g., $88 → $90 → $95).
- Invest in snowmaking and vertical drop improvements.

Long-Term Plans:

- Close underperforming runs strategically to reduce costs.
- Develop a dynamic dashboard for scenario testing.

A Clear Vision for Big Mountain's Revenue Growth

The Outcome:

- Data-driven pricing strategy positions Big Mountain as a market leader.
- Revenue aligned with facility value ensures sustainability.

Call to Action:

"Let's implement these recommendations to maximize profitability and secure Big Mountain's future."