

Big Mountain Resort

Defining a Data-Driven Business Strategy

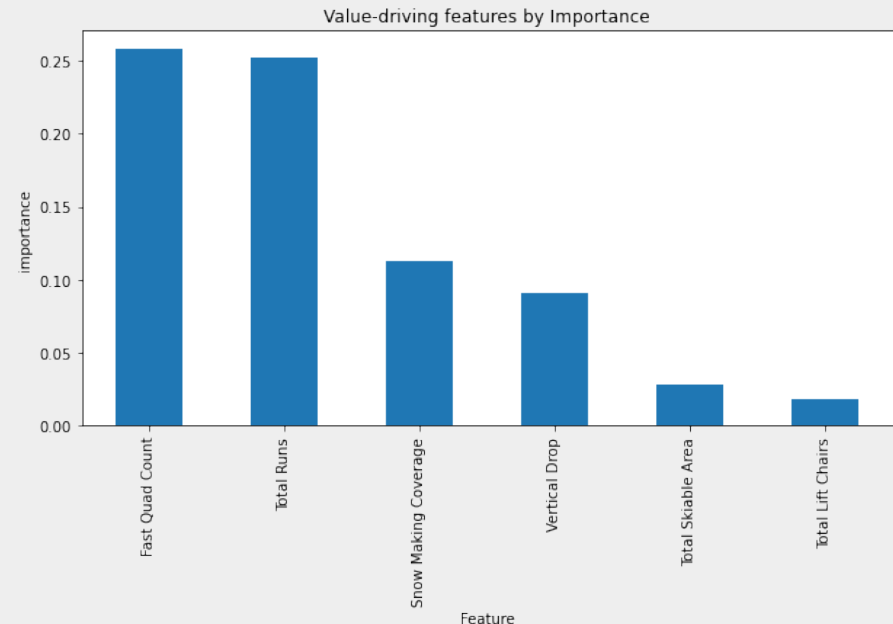
How can Big Mountain Resort establish a new, data-driven business strategy to increase projected net income by \$1.6 million for the upcoming season?

- Increase projected revenue by at least \$1.6 million
 - Adopt a new ticket pricing model
 - Reduce operating costs
 - Make better use of existing facilities
- Use market data to guide changes in
 - Ticket pricing
 - Investment strategy
 - Asset management and operating procedures
- Implement these changes at least 4 months before this season's opening date

Key Findings:

The expected market value of a ticket is closely tied to:

- Vertical drop
- Snowmaking coverage
- Total number of available lift chairs
- Total number of fast quad lifts
- Total number of runs
- Length of the longest run
- Total lift-accessible, skiable area



Recommendations:

- Raise ticket prices to \$84
 - Increases revenue by \$5.25 million
- Scenario 1 - Close the least used run for the season.
 - No impact on the value of a ticket to Big Mountain this season
 - Opportunity to measure operating cost reduction per run closure
- Scenario 2 – Consider investing in an additional lift and an additional run, increasing vertical drop by 150 ft.
 - Increases market value of tickets by ~\$2
 - Increases projected revenue by \$3.4 million

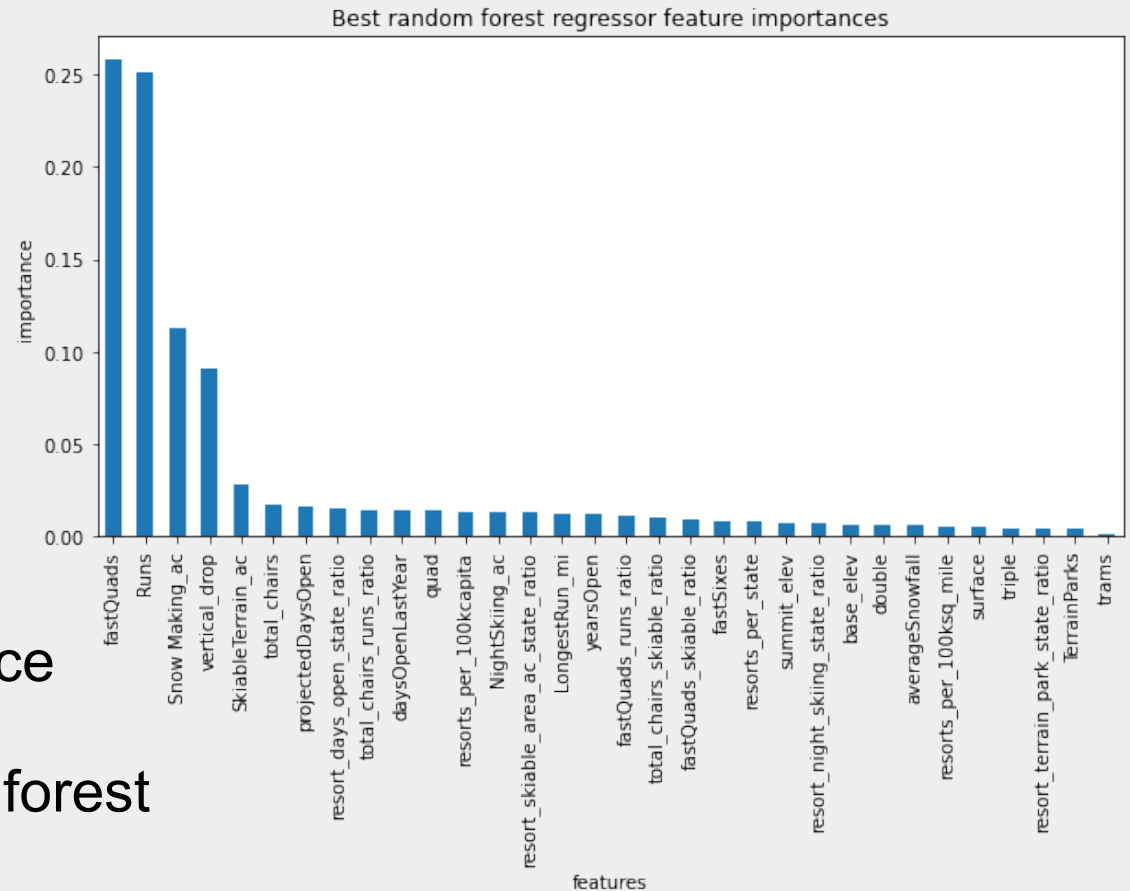
Analysis

- Cleaning and organizing data
- Analyzing resort data by state
- Augmenting existing data
- Calculating aggregates by state
- Analyzing in-state competition
- Looking for correlations
- Adding features

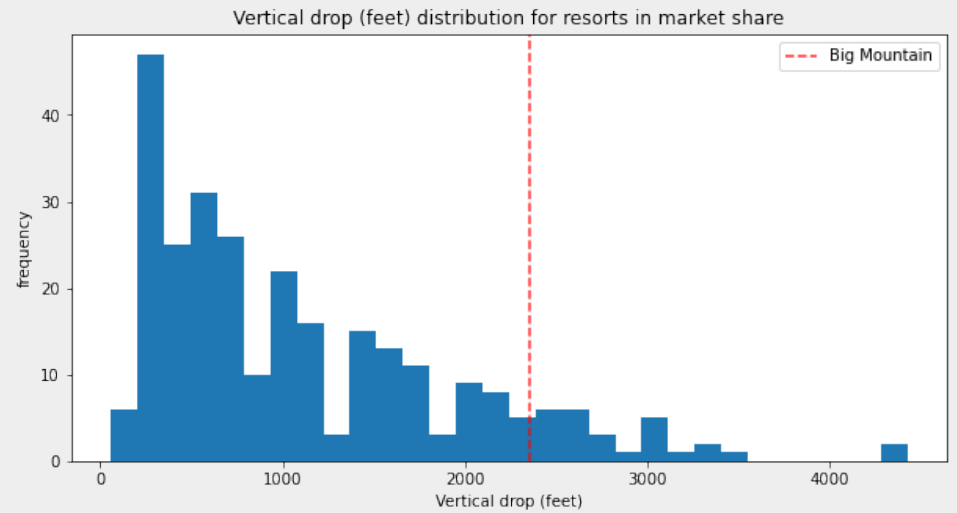
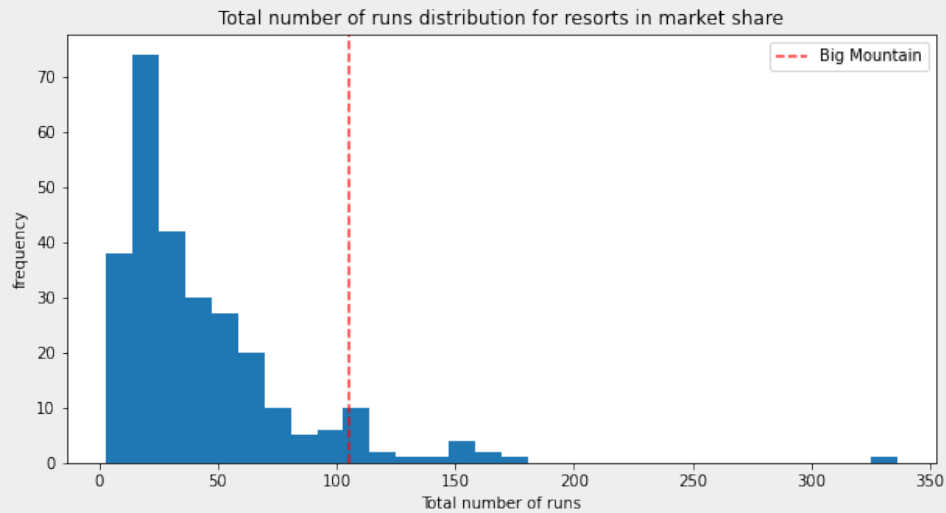
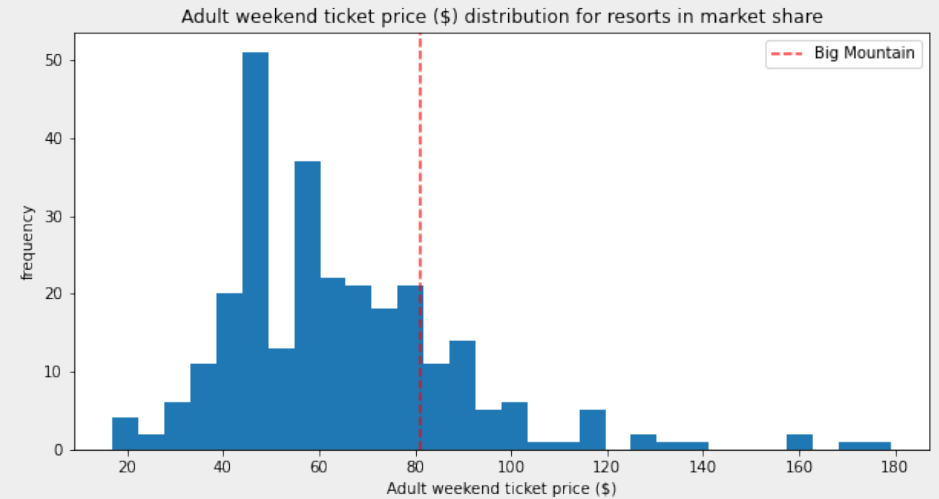
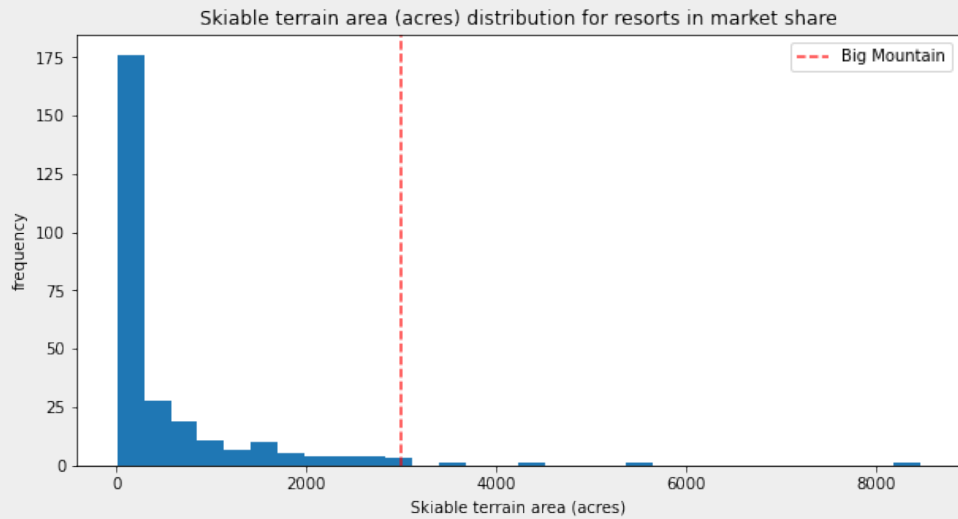


Ticket Price Modeling

- Creating models
 - Average ticket price
 - Linear regression
 - Random forest
- Testing models
 - Testing standards
- Calculating feature importance
- Finalizing selection: random forest model



BMR and its Market Segment



Conclusion

Raise prices now

- Price modelling suggests Big Mountain Resort is currently undercharging
- A \$3 increase in ticket prices will cover increased operating costs of the new lift and allow additional investments in value-driving features

To raise prices further

- Use revenue to invest in features with highest market value

To reduce operating costs this season

- Close the least used run

Use additional profit to

- Invest in better record keeping
- Invest in additional market research
- Perform cost analysis on feature investments
 - Additional lifts, especially fast quads
 - Additional runs
 - Additional real estate and lift access to increase total vertical drop