Big Mountain Pricing Analysis

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Problem Identification

In what ways can Big Mountain Resort implement changes in their ticket price valuation, as well as alterations to features like number of runs and snowmaking resources, to optimize their ticket price before opening day of the next ski season?

Implementation Strategies

Suggestions from Business Leadership

1. Permanently close up to 10 of the least used runs

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

3. Same as 2, but adding 2 acres of additional snow making coverage

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

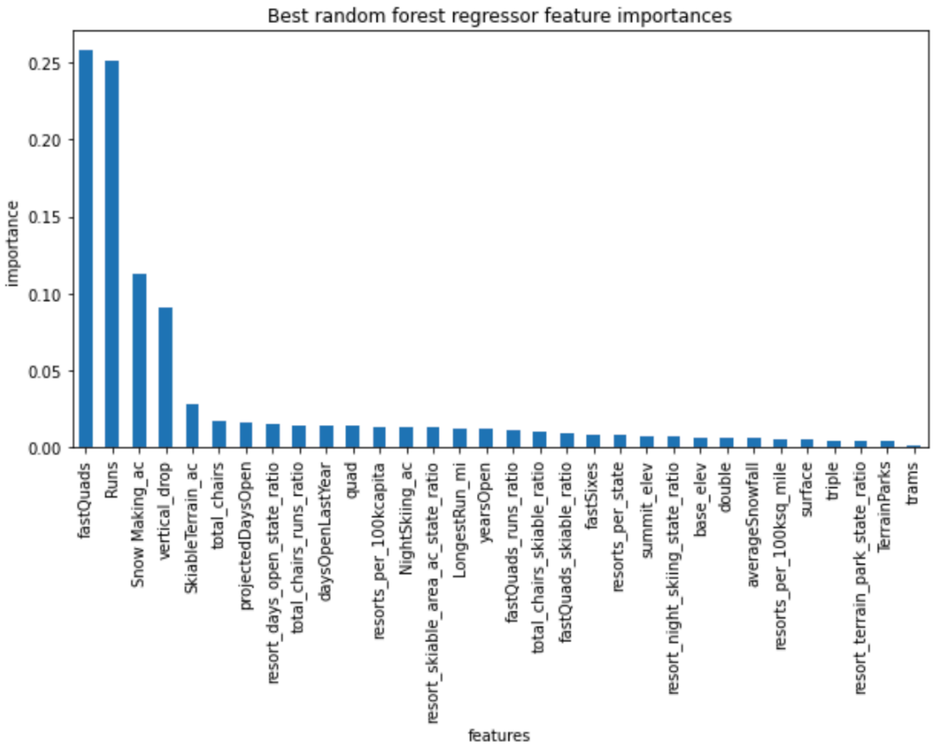
Recommendation and Key Findings

Our model suggests that the ticket price for Big Mountain is valued at $95.87

- This is almost $15 higher than current price of $81
- Among the suggestions from Business leadership:
  - Closing runs is a viable option if the right number of runs are closed
  - Option 2 would project an increase in revenue by $3,474,638
  - Options 3 & 4 will have no effect on ticket pricing

Modeling Overview

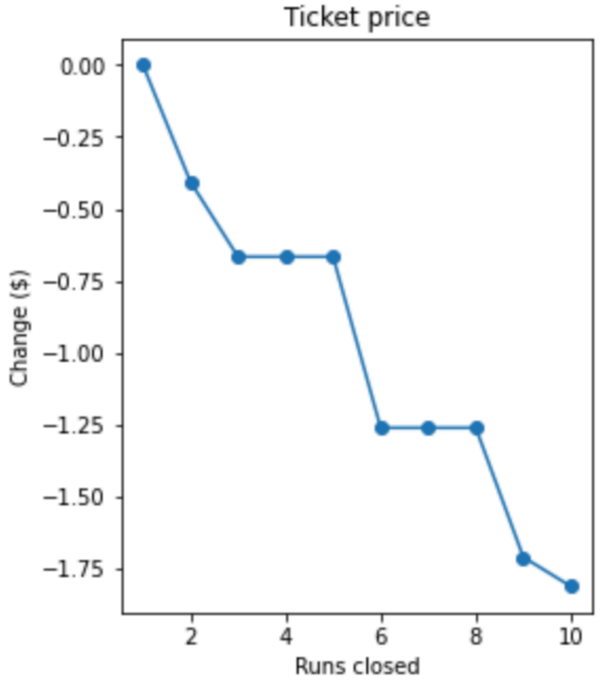
- Random forest model was deemed to be best fit for the data
- Key features for the model:
  - Number of fast quad lifts
  - Number of runs
  - Snowmaking area
  - Vertical drop

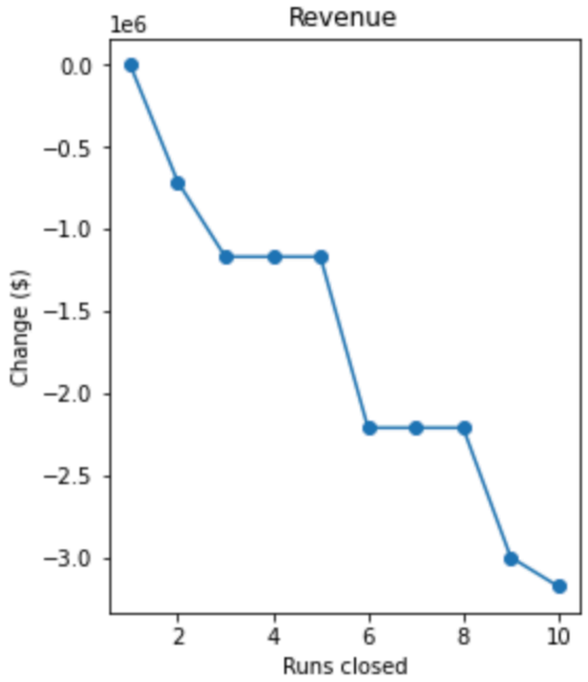


Results & Analysis

Permanently close up to 10 of the least used runs

- Figures display ticket price and revenue changes with each subsequent run closure
- Flat lines indicate no difference in price change needed to make up for run closure
- Cost analysis must be done to determine appropriate number of runs to close





Results & Analysis

- Increasing vertical drop and adding a new chairlift - $3,474,638 in revenue
- An additional 2 acres of snow making to the above strategy makes no difference in price valuation
- Likewise, increasing longest run to 3.5 miles has no effect
- This suggests that a fluctuation in the number of runs and chairlifts are what warrant a price increase

Summary & Conclusion

- Current ticket price is significantly lower than model projection for resorts with these features
- Business leadership can decrease number of runs to lower this projection, but not enough to keep price where it is
- A combination of run closures with the addition of 150 feet of elevation and a new chairlift could balance the cost projection
- Ultimately, an increase in ticket price is the best strategy for maximizing profit