Big Mountain Ski Resort

Problem Identification

Over one ski season, how should Big Mountain Ski Resort alter its ticket pricing strategy to create better value relevant to market conditions and to obtain better clarity around its investment strategy after increasing operating costs by $1,540,000?

Recommendations and Key Findings

- Leveraging our model, market conditions support a higher adult weekend ticket price
  - Current ticket price: $81
  - Modeled ticket price: $95.87 (mean absolute error is $10.39)

- Recommendations based on management's shortlisted options:
  - Permanently close at least one undesirable run immediately, consider closing up to five runs depending on net financial impact (scenario 1)
  - Increase vertical drop by adding a new run to a point 150 feet lower. Requires installation of additional chairlift (scenario 2)

Modeling Results and Analysis

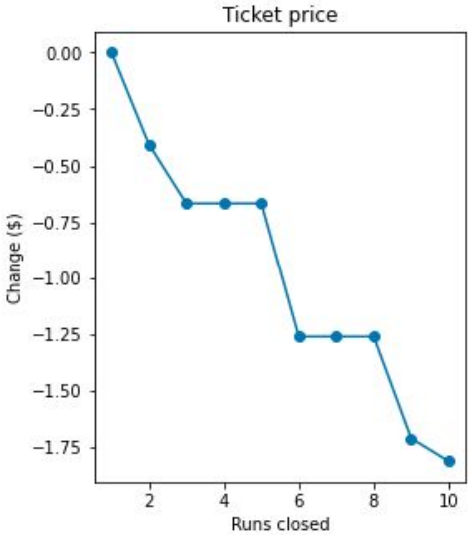
- Multiple models were tested but the model used for this analysis is a random forest regressor model. It was used to gain insight into deriving Big Mountain's adjusted pricing strategy.

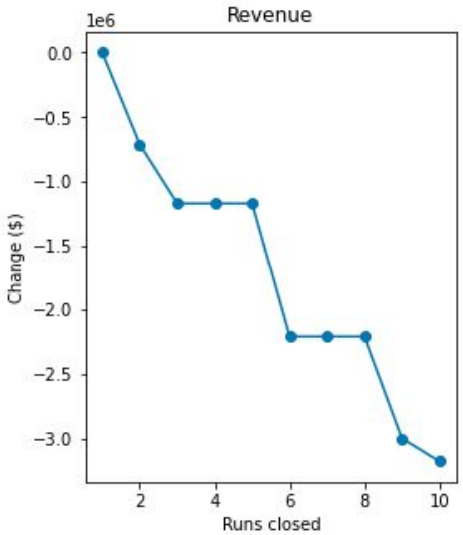
- Key resort features the model identified as most impactful on ticket price are: fast quads, runs, snow making, and vertical drop.

Modeling Results and Analysis - Scenario 1

- Closing one run has no impact on ticket price and revenue while closing two runs or more impacts ticket price and revenue

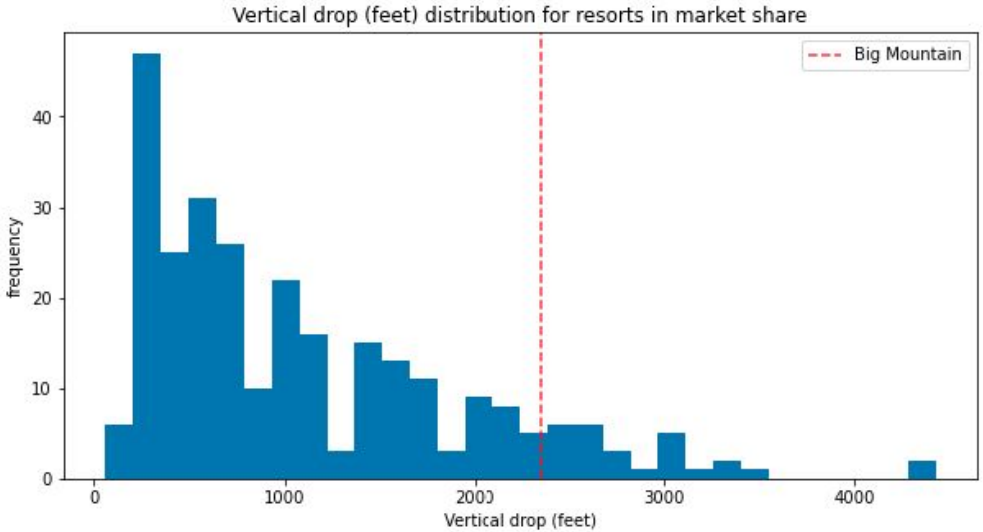
- Recommendation:
  - Close the least used run that maximizes cost savings
  - Consider closing 2 or 5 runs of the least used runs*
  - Do not close 6 or more runs





Modeling Results and Analysis - Scenario 2

- Install additional chairlift to increase vertical drop by 150 feet by adding a run to a lower point. Additional snow making is not needed.
    - Result: Ticket price increase of $1.99 or seasonal revenue increase of $3,474,638.
    - Would give resort further edge compared to market



Modeling Results and Analysis - Scenarios 3 and 4

- Scenario 3:
  - Identical to scenario 2 but with the addition of two acres worth of snow making. Would increase operation related costs.
  - Result: Ticket price increase of $1.99 or seasonal revenue increase of $3,474,638.
- Scenario 4:
  - Increase the longest run by 0.2 miles to boast a 3.5 mile run. Requires adding four acres of snow making.
  - Result: No impact on ticket price. Would only increase operation related costs.

Summary and Conclusion

- Market analysis supports a higher ticket price than the current price Big Mountain Ski Resort charges.
- Big Mountain can increase prices with their facilities as-is. Adjustments to their facilities are not needed.
- Operational and maintenance related costs can be reduced by closing at least one undesirable run and increasing the vertical drop of a run could assist in justifying a higher ticket price.
- Big Mountain has options to adjust its pricing strategy to offset its increased operational costs of $1,540,000.