Support for Increased Ticket Prices

Big Mountain Resort

Problem

Big Mountain Resort just installed a new ski lift that will incur an additional $1,540,000 in annual expenditure.

Is raising ticket price to offset this increase justified?

What changes can the resort make to help offset this increase?

How we do it

Compare the available facilities to other resorts' facilities. Doing this will allow us to determine whether the right price is being charged based on what is available.

- ➔ **By State.**
  How does Big Mountain compare to the rest of Montana?
- ➔ **By Features.**
  How does Big Mountain measure up to other resorts around the nation?
- ➔ **By Metrics.**
  Do states with higher populations or area have higher prices? How does that factor in with Big Mountain.

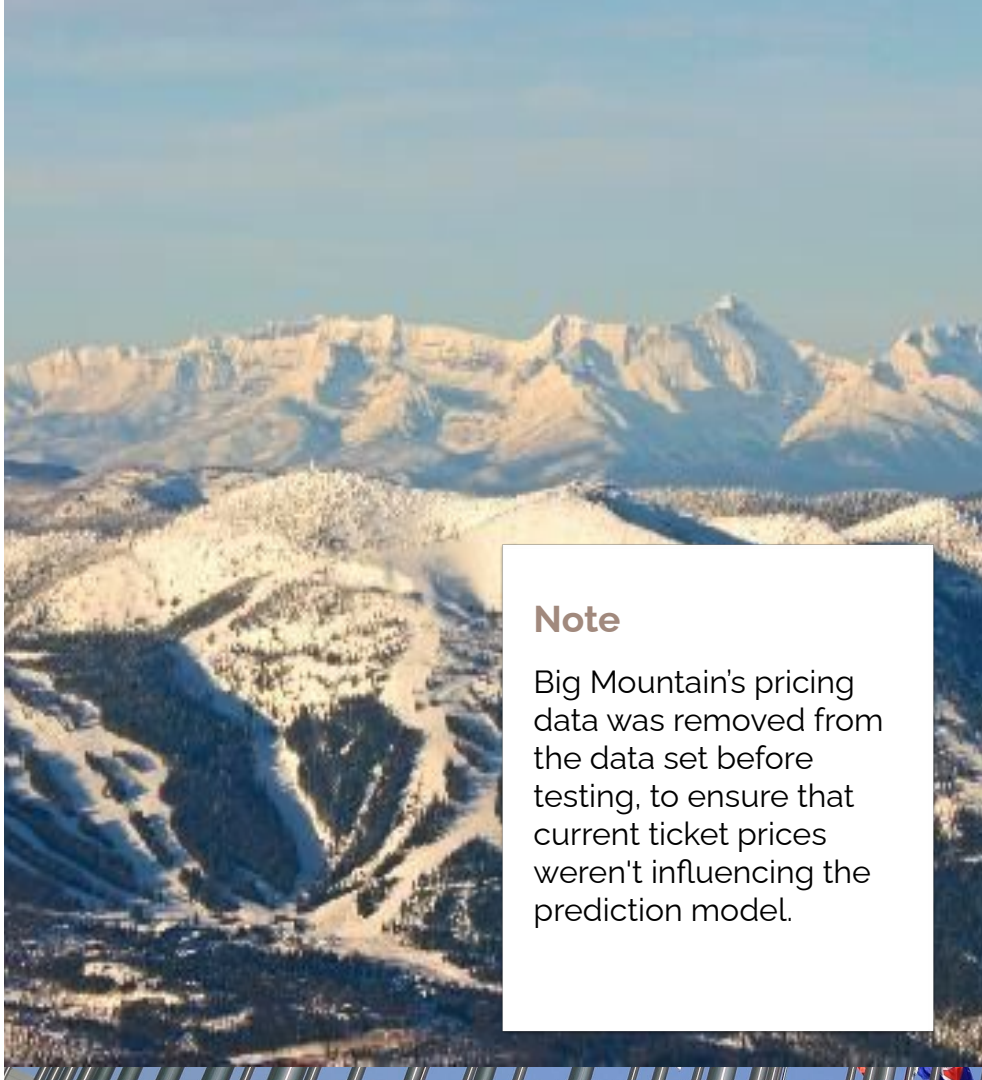
Key Findings

The first major insight.

Our Model:

We utilize a Random Forest model that considers the features of existing resorts nationwide as they relate to the resort ticket prices

Our model predicts Big Mountain's ticket price should be **$95.87.** A steep increase from the current price of $81



Note

Big Mountain's pricing data was removed from the data set before testing, to ensure that current ticket prices weren't influencing the prediction model.

The model estimates Big Mountain's ticket price based on the ticket prices of resorts with similar features. Because Big Mountain ranks **highly** among resorts, the model thinks its pricing should be in line with other more expensive resorts.

How can we support this increase?

Big Mountain is ranked highly among these popular resort features:

- Vertical Drop
- Snow-Making Area
- Number of Chairs
- Fast Quads
- Number of Runs
- Longest Runs
- Skiable Terrain

Proposed scenarios to offset the cost of the new ski lift

What combination of features can further justify raising ticket prices?

Further, what combination could have a negative impact?

Given Scenarios

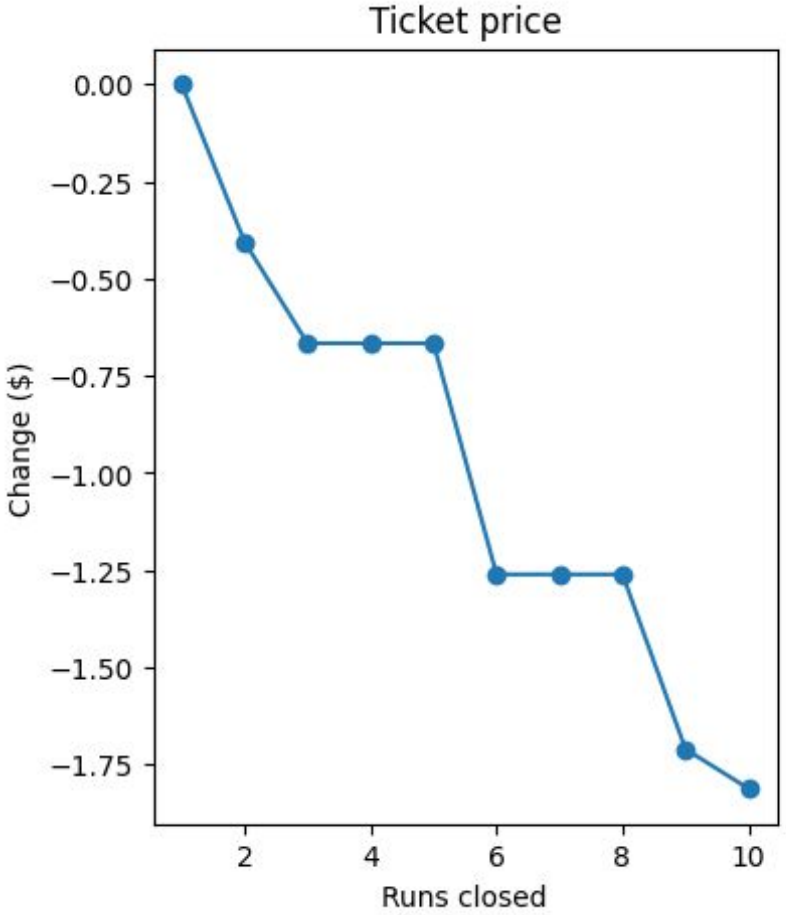
The following are the proposed scenarios are changes the resort can make to impact revenue.

- **Scenario 1**
  Close down up to 10 of the least used runs
- **Scenario 2**
  Increase vertical drop by 150 ft, add a run, increase number of chairs
- **Scenario 3**
  In addition to scenario 2, add 2 acres of snow-making
- **Scenario 4**
  Increase longest run by .2mi, add 4 acres of snow-making

Scenario 1

The model indicates that closing one run would not impact support for raising the ticket price.

Closing two or more removes support for raising ticket prices.



$8.61 per ticket

Scenario 2 results show support for an $8.61 increase per ticket, amounting to an extra **$15065471** over the season.

Additional $1.29 per ticket

Scenario 3 shows support for an additional $1.29 per ticket on top of the increase in scenario 2. This could amount to an extra **$2257246** over the season if implemented with scenario 2.

No Impact

The model shows that scenario 4 will not justify an increase to ticket prices or revenue. The model does not believe the length of the longest run is within the top most important features of the resort.

Recommendation:

Scenario 2.

Justification

This scenario has the greatest predicted impact.

- ➔ **Additional chairs**
  Since Big Mountain already added a new ski lift, so adding additional chairs is already taken into account.
- ➔ **Increasing the Vertical Drop**
  Increase vertical drop by 150 ft, add a run, increase number of chairs
- ➔ **Adding a Run**
  This increases the total skiable area and total number of runs metrics, increasing support for a higher price

Next Steps

To get a more accurate estimate for costs vs. profits, additional information will be needed.

- **Operating costs**
  How much does it cost to operate a new run, longer vertical drop, and chair lift? How does this impact revenue?
- **Maintenance costs**
  Will the increase in maintenance costs make the increased income too small to be worth it?
- **Installation costs**
  How much does it cost to add these new features and how does that impact the bottom line?