Big Mountain Ski Resort Case Study

Nusrat Islam

The problem

Company

Big Mountain Ski Resort is in Montana. They offer many facilities and recently have invested $1.55M to install a new chair.

Context

Big Mountain wants to reform their pricing strategy to have a more data-driven approach that offers a better value for the facilities they offer.

Problem statement

Opportunities for Big Mountain to increase its profitability by 20% within the next season through (a) readjusting price, and/or (b) reducing operating cost?
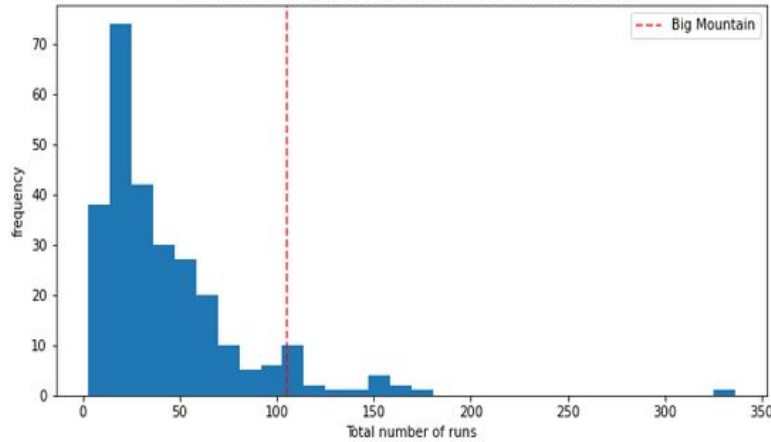
Modeling and Results

Modeling reveals that Big Mountain can increase ticket price.

It has have some unused facilities that can be reduced to cut down operating costs

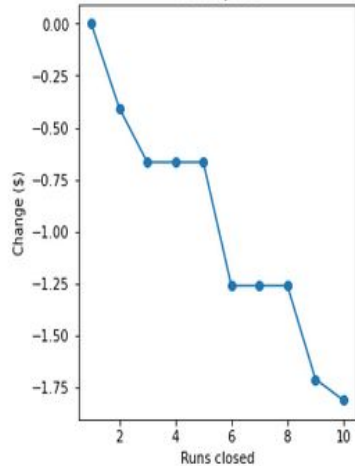Total number of runs distribution for resorts in market share

Ticket price

Revenue

Big Mountain Resort has been reviewing a potential scenario for cutting costs by Permanently closing down some unused facilities.
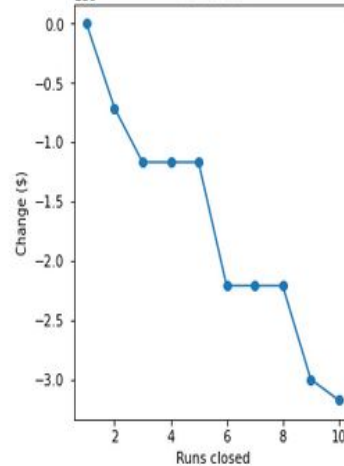
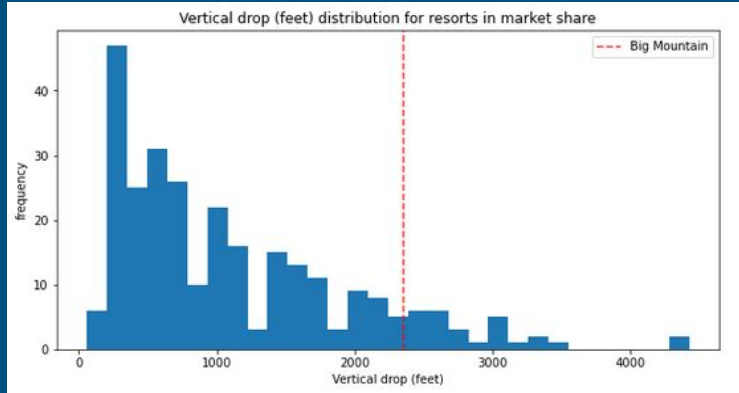**Our Model predicted the following when it comes to closing up to 10 Runs:**

1. **Closing 2 runs reduce support for ticket price and so revenue by $0.4 and $750,000 respectively.**
2. **Closing down 5 runs as there's same loss in ticket price and revenue by $0.67 and $1.250M respectively.**
3. **Closing 10 runs reduce support for ticket price and so revenue by $1.71 and $3M respectively.**
4. **Because we don't know the operating cost per used run, we can't determine how much cost saving will be offset the loss in revenue after closing more than one run.**

Vertical drop (feet) distribution for resorts in market share

Area covered by snow makers (acres) distribution for resorts in market share

Big Mountain Resort is not in the top league for vertical drop and snow making areas.

Our Model predicted the following when it comes to increasing <u>vertical drop and adding snow making area</u> :

1. Only adding a vertical drop increases ticket price by $8.61
2. A combined effect of increasing the vertical drop and increasing snow making area results in an increase of ticket price by $9.91
3. Because we don't know the capital cost per used run, we can't determine how much cost saving will be offset the loss in revenue after adding the vertical drop and snow making area.
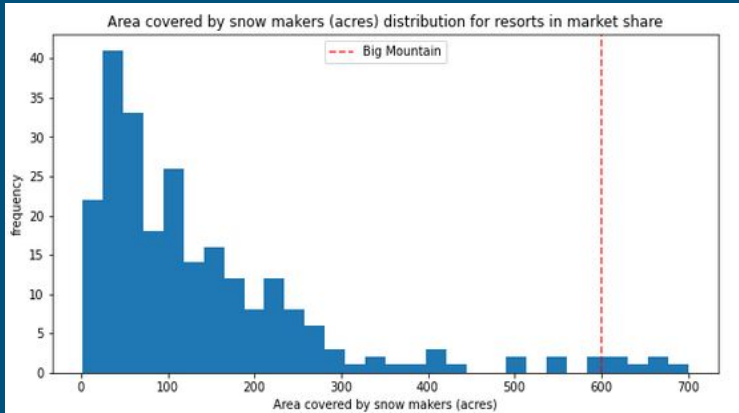
Summary

The best scenario where we managed to gain the highest revenue increase possible was by increasing the vertical drop by 150 ft, and adding 2 acres of snow making cover. This scenario has increased ticket price by 12% from $81 to $90.75, resulting in a bottom-line increase by $15,528,841 (After deducting operating costs = $1.54M).

•Due to lack of data in regards of operating cost per used run and weekdays ticket price, our model cannot recommend closing down used runs or implementing a dynamic ticket pricing.