



# Big Mountain Resort



## Ticket Pricing Modeling



# Problem identification

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- Recently installed an additional chair lift increasing operating costs by \$1.5M.
- Our pricing strategy has been to charge a premium above the average price of resorts in its market segment
- We are likely not capitalizing on its facilities effectively
- A better value for our ticket price should be selected, in addition to cutting costs.

# Problem identification

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What opportunities exist for Big Mountain Resort to maximize revenue without lowering the ticket price or supporting an even higher ticket price within the next year, through reducing runs, adding drops, adding snow making cover, or increasing run lengths?

# Recommendation and key findings

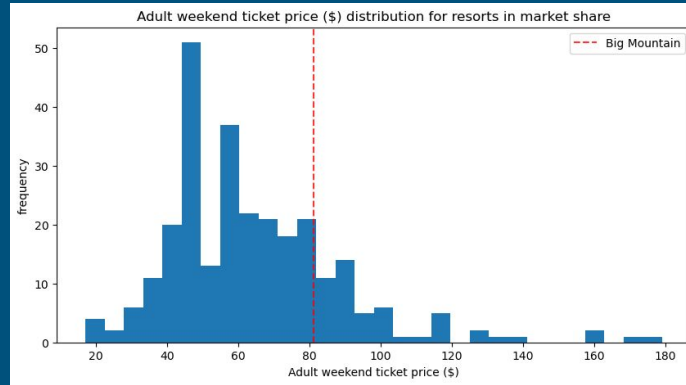
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4 potential scenarios to reduce costs and increase ticket prices:

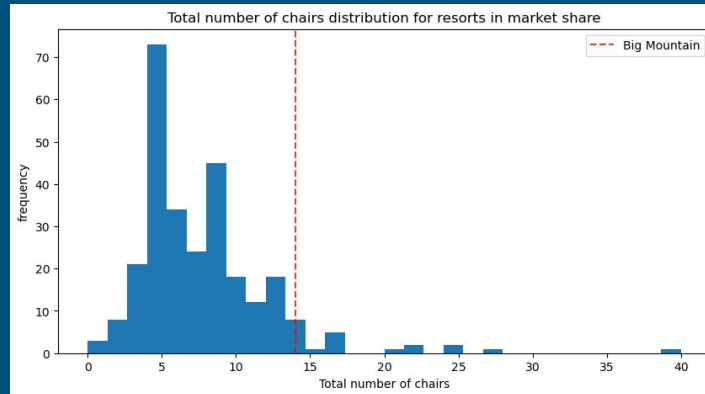
1. Permanently closing down up to 10 of the least used runs- **Only 5 runs recommended**
2. Increase the vertical drop by adding a run to a point 150 feet lower down (with the installation of an additional chair lift and, without additional snow making coverage)- **RECOMMENDED**
3. Same as number 2, but adding 2 acres of snow making cover- **viable, depending on costs**
4. Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres- **NOT RECOMMENDED**

# Big Mountain Resort in Market Context

Lower in adult weekend ticket price

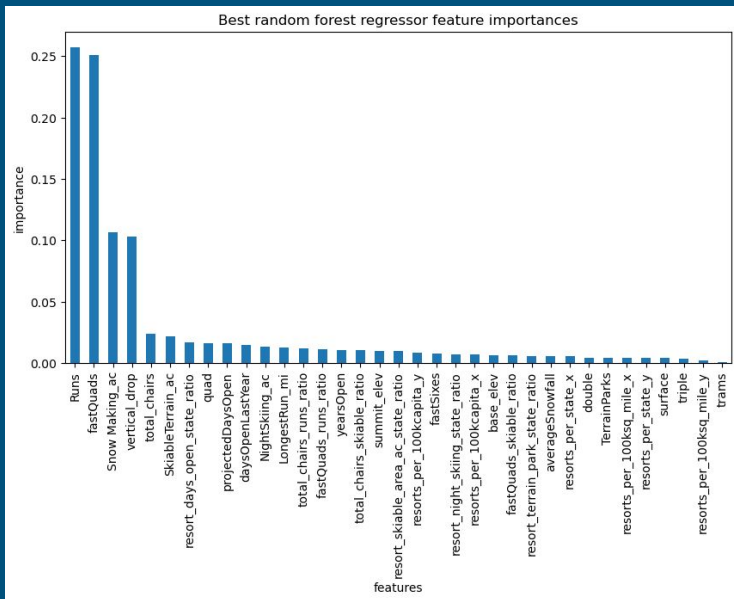


Above in vertical drop, snow making area, number of chairs, fast quads, runs, longest runs, and skiable terrains.



# Modeling results and analysis

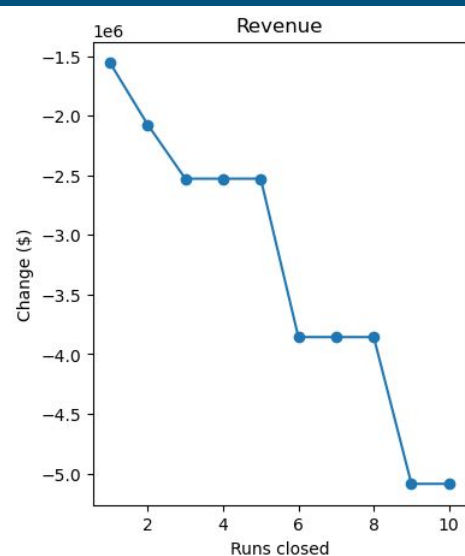
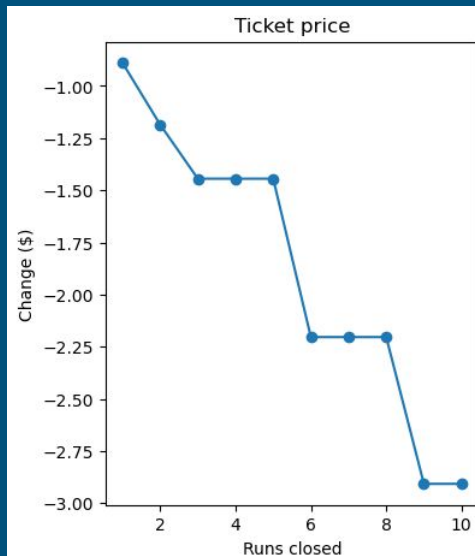
- Models tested: Linear regression vs Random Forest Regressor
- Cross validation score



# Modeling results and analysis

Scenario 1: Permanently closing down up to 10 of the least used runs.

- Tests showed price changes at closing 2, 3, 6, and 9 runs
- Closing up to 5 runs will not cause any significant decrease in recommended ticket pricing
- Any further closings would decrease the pricing too significantly.



# Modeling results and analysis

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Scenario 2: Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift

- Increased support for ticket price by 7 dollars. Over the season, this could be expected to amount to 12,250,324 dollars. It is recommended

Scenario 3: adding 2 acres of snow making cover (in addition to the previously added vertical drop)

- Increased support for ticket price by 8.26 dollars, and over the season by 14,454,028 dollars (not much difference from scenario 2).

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

- Analysis revealed no difference in prices, and thus this scenario is NOT recommended



# Conclusion

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- Closing 5 runs is a viable option in reducing costs. It is NOT recommended to close over 5 runs
- Adding a run, thus increasing the vertical drop by 150 feet, and installing an additional chair lift is recommended for significantly increasing ticket pricing.
- Adding 2 acres of snow cover could be beneficial or detrimental depending on the costs to implement.
- Increasing the longest run by 0.2 miles is NOT recommended.