Big Mountain Ski Resort

Springboard Guided Capstone Project

Problem for Analysis

How can Big Mountain Resort optimize its net profit through a combination of:

- Increasing ticket prices without hampering current customer demand
- Decreasing operational costs by closing X amount of runs/lifts/snow making equipment whilst minimizing impact to expected customer demand
- Adding additional runs to the resort to justify further ticket price increases.

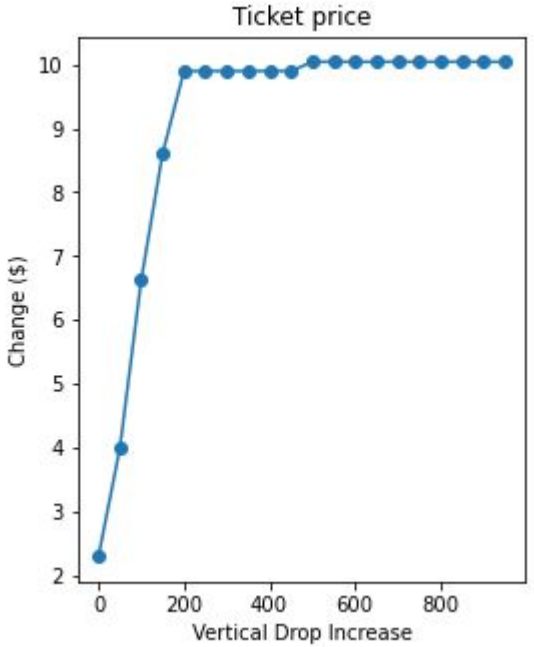
Each of these strategies was tested by our model which was built using the company's available dataset on its 330+ nationwide competitors before determining our final business recommendation.

Recommendation: Current vs Proposed

Current (per data from last season):	Proposed:
● Runs: 105 ● Maximum Vertical Drop: 2,353 Ft ● Chairlifts: 14 ● Ticket Price: $81/Adult	● Runs: 101 ● Maximum Vertical Drop: 2,503 Ft ● Chairlifts: 15 ● Ticket Price: $100/Adult Required Actions: 1. Add an additional run that will extend the maximum vertical drop by 150 feet. 2. Install one additional chairlift (any type will do) to facilitate this additional run. 3. Close the 5 least used runs on the resort to reduce operating costs.

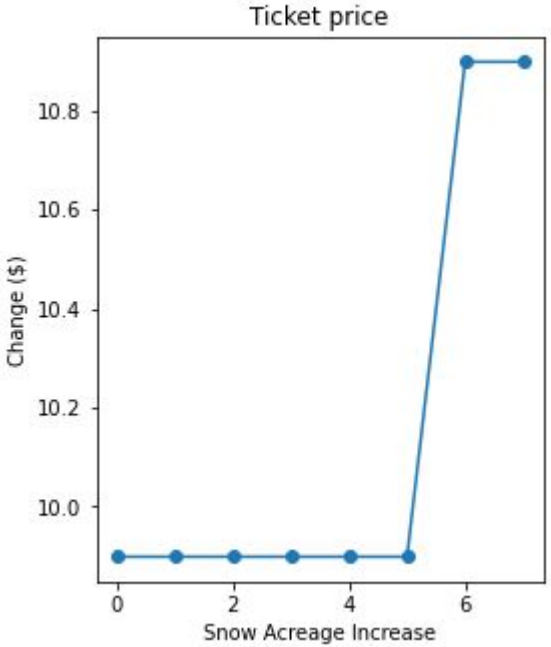
Modeling Results - Add an Additional Run to Extend Vertical Drop

- These graphs show the result of successively increasing the maximum vertical drop of the resort assuming that the resort will be adding a single run and a single additional chairlift in order to accommodate.
- Note that the model suggests that increasing up to 200 feet would support a further ticket price increase (but then it would stagnate thereafter).
- However, at the proposed 150 feet, the benefits of this additional run/vertical drop are already mostly observed.



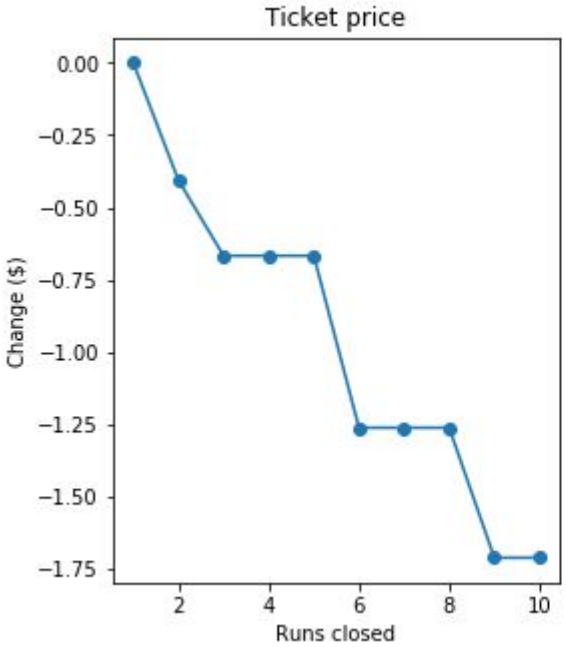
Modeling Results - Increasing Snow Making Coverage?

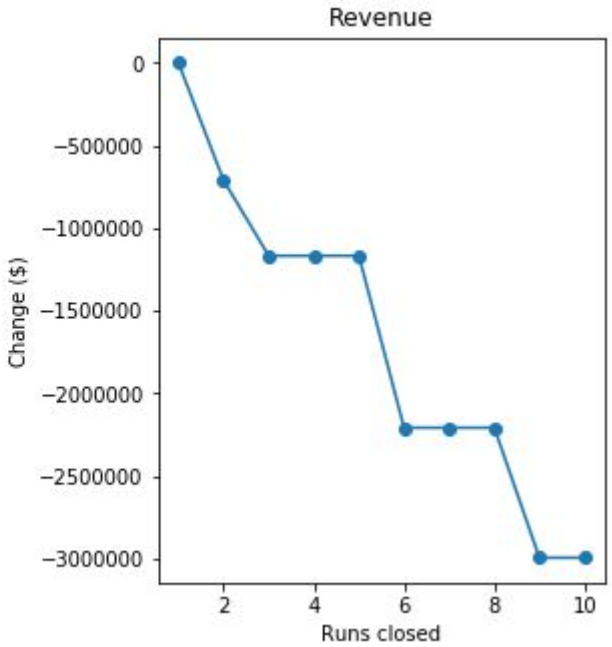
- We also considered an increase to snow making coverage to see if this would further optimize our ticket price increases.
- Surprisingly, the impact is minimal. Note that at the starting point of this graph, assuming that no additional snow coverage is added but we do add the additional run and chairlift to increase the vertical drop by 150 feet, this gives us a starting value of $9.90. Adding anywhere between 0-4 acres has virtually no effect on the modeled price increase, and it is only when we add a whopping 5 acres that the price increases by a mere $1.00. The low efficiency of these results led us to recommend **not changing anything concerning the existing snow making amount.**



Modeling Results - Closing 5 Least Runs

- Closing anywhere from 1-3 runs will successively have negative impact on supported ticket pricing.
- However, closing 4-5 runs will have minimal impact compared to closing 3. It is suggested that the resort closes 5 in order to maximize cost saving efficiency.





Conclusion

- Adding a single additional run to extend the vertical drop of the resort is the most impactful change that the resort can make to justify customer demand for higher ticket prices.
- Closing some of the lesser used runs on the resort has minimal impact on demand.
- These recommended changes could **increase ticket prices by ~$19/adult** which translates into a potential **$33,250,000 additional ticket revenue** (not including the added costs of the additional run and chairlift and cost savings from closing the 5 least used runs)