

Big Mountain Resort Modeling

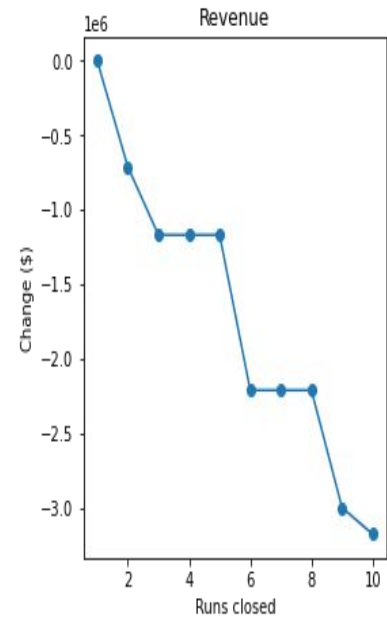
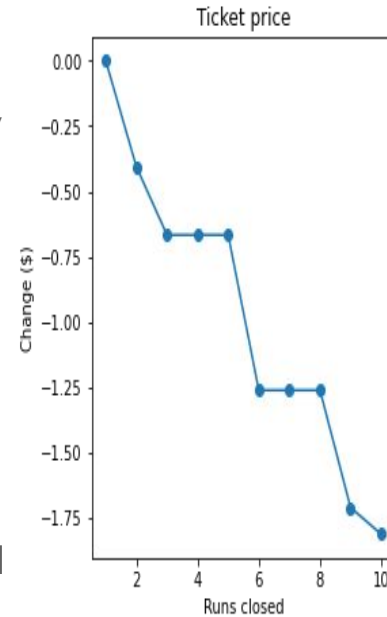
By Chandler Kinch

Initial Problem

- Big Mountain Resort has recently added a new chair lift, costing the resort \$1,540,000 for the season. This bill needs to be met.
- What is a good price point for ticket prices at the resort? What facilities are being underused and how can they be used to justify an increase ticket in prices?
- In order to solve this problem, we analysed data from 330 different resorts across the US. This data set included features such as number of chairs for each resort, skiable terrain, vertical drop, number of rus, etc.

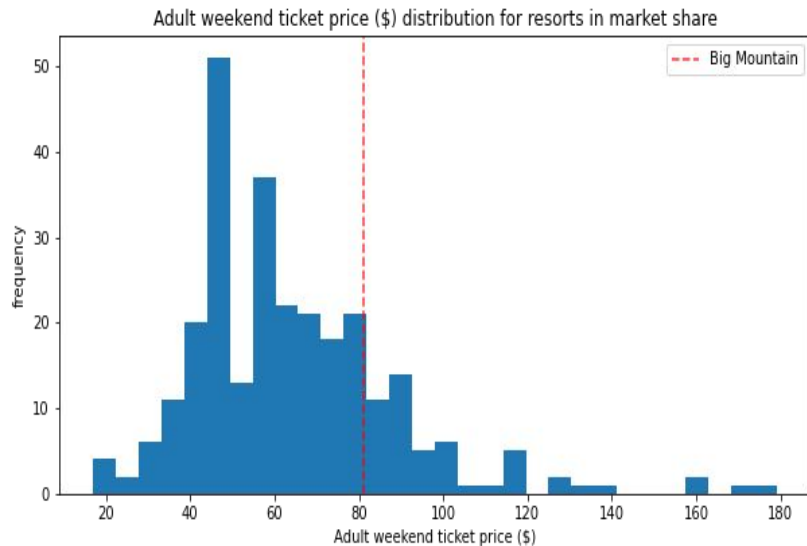
Recommendations and Key Findings

- Using our model, we found one scenario would justify a ticket increase of \$1.99. Assuming 350,000 visitors per seasons and that each visitor would buy five tickets(as they would stay five days), this would increase revenue for the season by \$3,474,638. This scenario was adding a run 150 ft lower, also requiring a new chair.
- Another scenario that could produce results was closing down some runs. We found that closing one run had no effect on ticket prices. Closing 2 and 3 each came with decrease in pricing, but there was no difference between closing 3 and 5 runs. Closing some runs could reduce maintenance costs for the season.



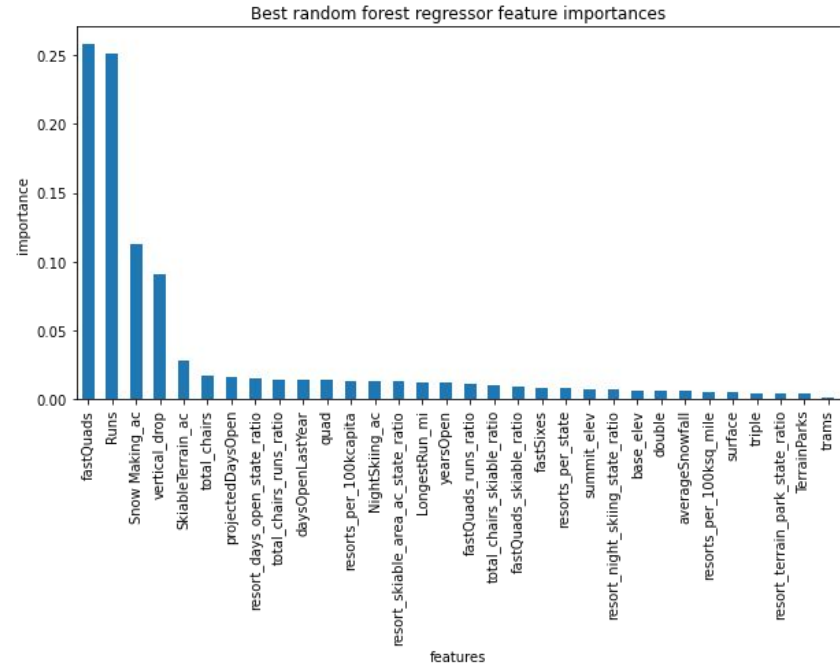
Modelling Results

- Our model showed that the market could currently support a ticket price of \$95.87 for Big Mountain. The current ticket price is \$81.00.
- Why the big difference?
- While it is true that Big Mountain is among the most expensive resorts in Montana, it finds itself somewhere in the middle among resorts across the US.



Key Features

- Through our model we found that there were a few features that stood out among others when it came to predicting ticket pricing.
- Some of these were vertical drop, snow making coverage, total number of chairs, fast quads and number of runs.
- Big Mountain ranks high among these features. This is what is getting us the predicted ticket price of \$95.87



Error in the Model

- One could use the average to predict market pricing. Doing so produces an error of \$19.
- Using our model, one gets a error of \$10. Much easier to work with!
- Even being conservative, Big Mountain could raise its ticket price to \$85 as things currently are.

Conclusion

- Big Mountain has many opportunities for meeting its bill for a new chair, and even increasing revenue beyond that.
- With ranking so high in many important features, the ticket price could conservatively be raise to \$85.
- Adding a new run that is 150 ft lower and adding a chair for that run would justify a ticket increase of \$1.99
- Closing runs could also produce revenue increased based on maintenance costs.
- The model presents a way to test future business decisions to ensure they are data driven.