Guided Capstone Project Report
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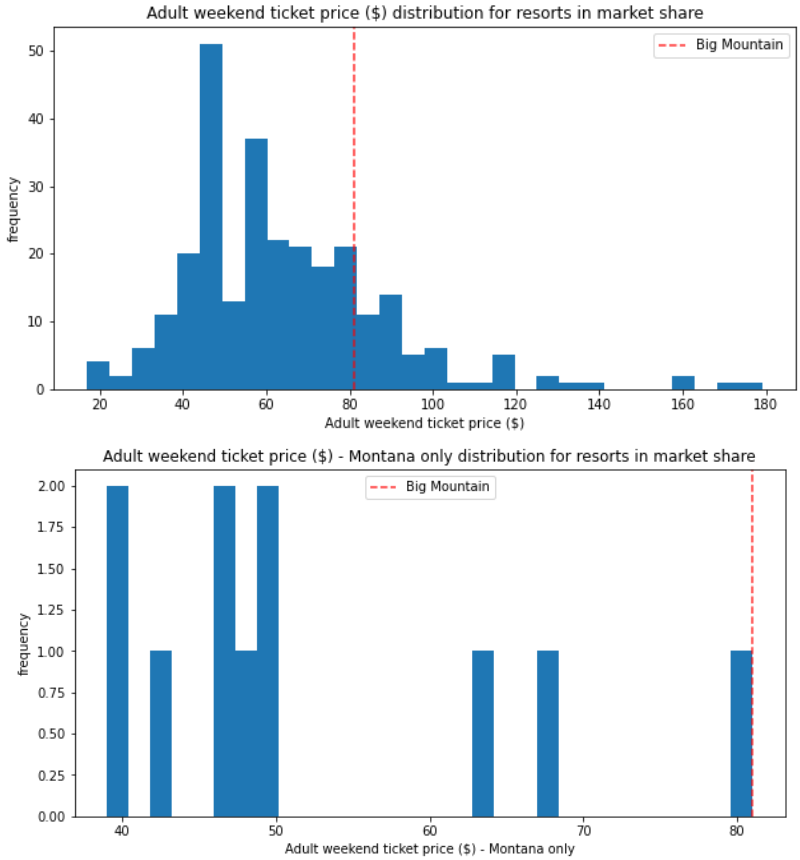
Introduction

We built a model with information from 277 resorts covering 25 features. With this model we were able to determine the optimal ticket price for Big Mountain Resort and projected changes to that ticket price based on improvements or reductions to a few key features of the resort.

Data Based Ticket Price:

Montana Resort Average Price:	$51.90
Nationwide Resort Average Price:	$63.81
Big Mountain Resort's Current Price:	$81.00
Projected Big Mountain Resort Price:	**$95.87**

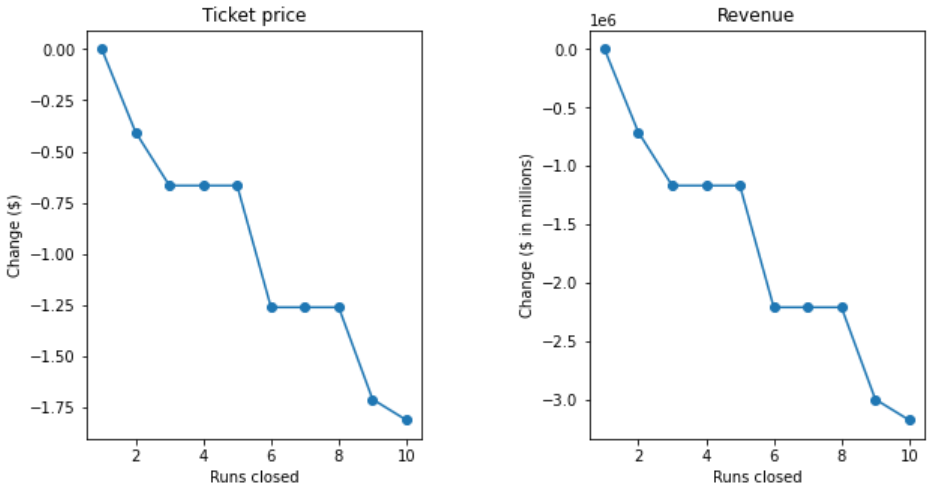
At first glance, a premium of $17 over the national average or $29 over the state average seems more reasonable than $32 or $44 respectively, but our analysis supports an increase to about $96. With 350,000 visitors buying an expected five tickets each, that's roughly **$26 million per year** in additional revenue. As you implement changes, please keep in mind that our model has an error of about ±$9.50 and Big Mountain Resort falls on the high end of several key feature distributions.



Our projected ticket price compared to the distribution of prices nationwide and in Montana

Business Strategy Options

1. **Closing Runs:** We examined how the projected prices would change if Big Mountain closed between one and ten runs. In general, there is a positive correlation between number of runs and ticket price, so it's reasonable that we found a decrease in ticket price as we removed runs from the model.



Drop in Ticket Price	Drop in Annual Revenue (in millions)	Number of Runs Closed
$0.0	$0.0	One Run
-$0.41	-$0.71	Two Runs
-$0.67	-$1.17	Three, Four or Five Runs
-$1.26	-$2.20	Six, Seven, or Eight Runs
-$1.71	-$2.99	Nine Runs
-$1.81	-$3.17	Ten Runs

Removing one run made no change to the model, and there were two platteaus at three and at six runs.

2. **Adding a Run, Increasing Vertical Drop, Adding a Chair:** We increased the numbers of runs by one, the vertical drop by 150 ft, and the total chairs by one, it would increase the ticket price by $1.99 and annual revenue by $3.48 million.

3. **Run, Vertical Drop, Chair, AND Snow Making Acres:** We reran the same increases as above except adding two acres to snow making. There was no change to the price, the snow making area appears to be too small to affect the model.

4. **Longest Run:** We added 0.2 miles to the longest run and four acres to the snow making area and found no change.