BIG MOUNTAIN RESORT

GUIDED CAPSTONE

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Data Science Bootcamp
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CAPSTONE PRESENTATION GUIDED

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Problem Identification

Big Mountain Resort has 105 trails, 350,000 visitors yearly, many lifts and additional ones were built solely for increased distribution of the visitors. The investment in the new lift cost $1.5M with no increase of ticket price or cutting other existing costs.

How can Big Mountain Resort take advantage of available opportunities to develop and implement a new ticket pricing strategy to fully capitalize on their investments and break even on their additional $1.5M operating costs during the next season?

Key Findings

$10.39 expected mean absolute error
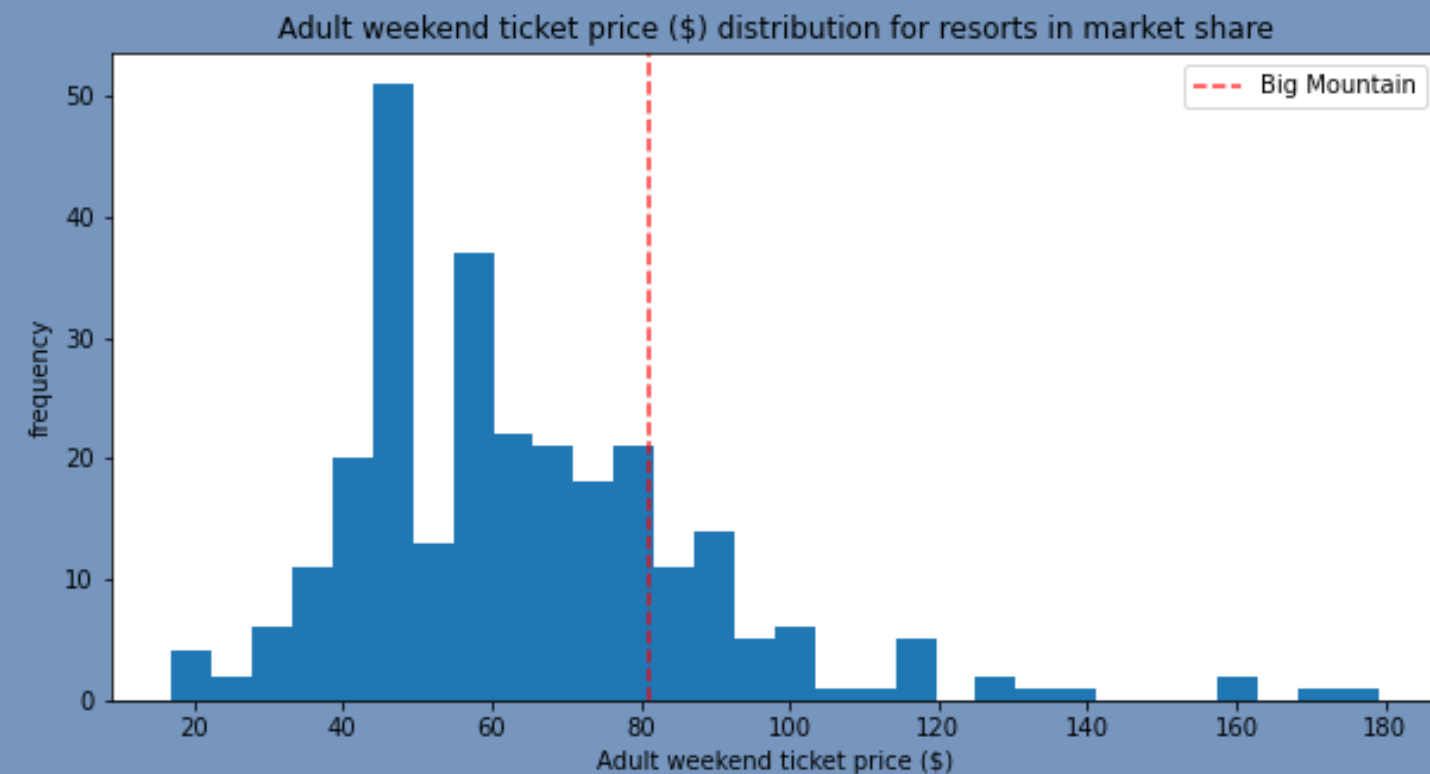
$1.99 ticket increase will generate over $3.4M revenue annually

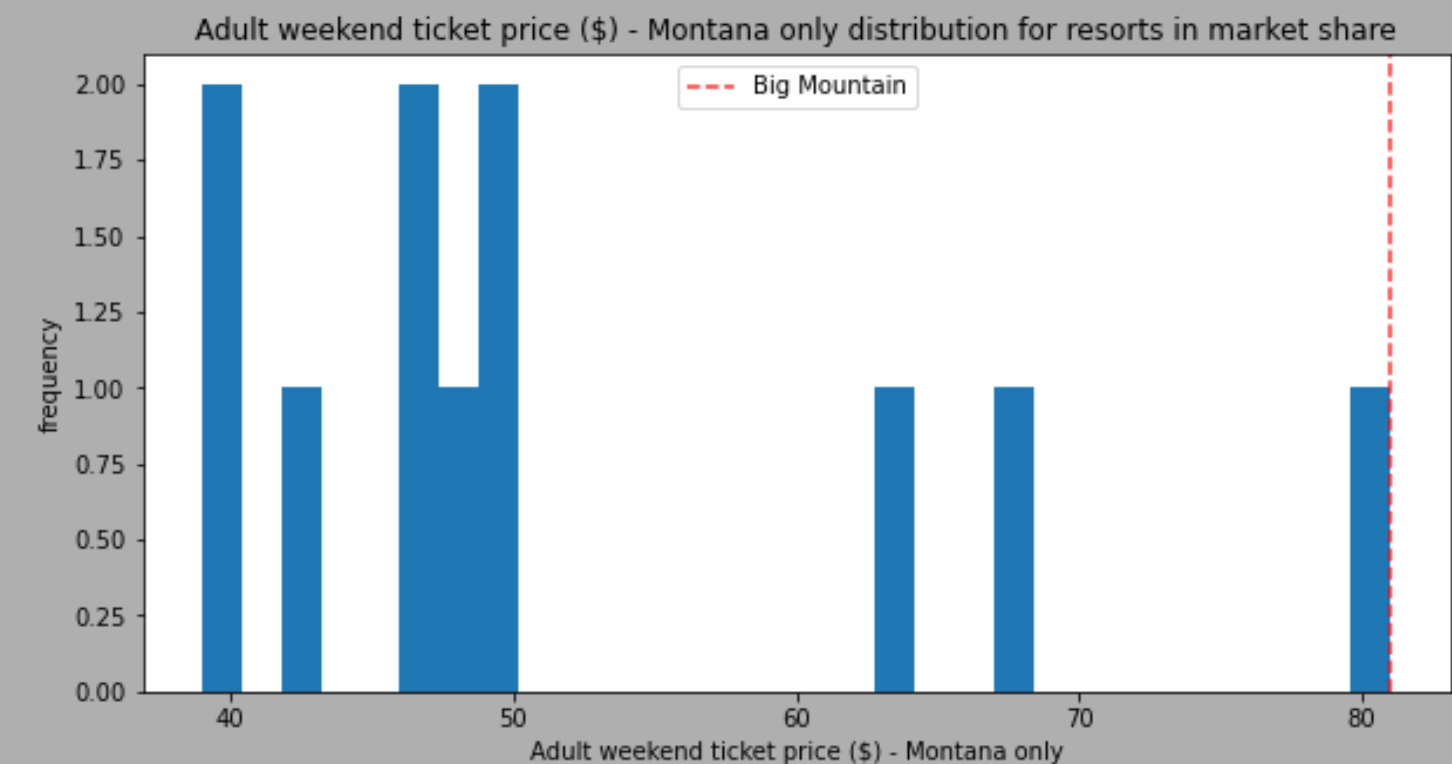**150 feet** increase of one run would support the price increase

Random Forest Model

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Modeling Results and Analysis

Big Mountain Resort Weekend ticket price compared to the other ski resorts in the nation.
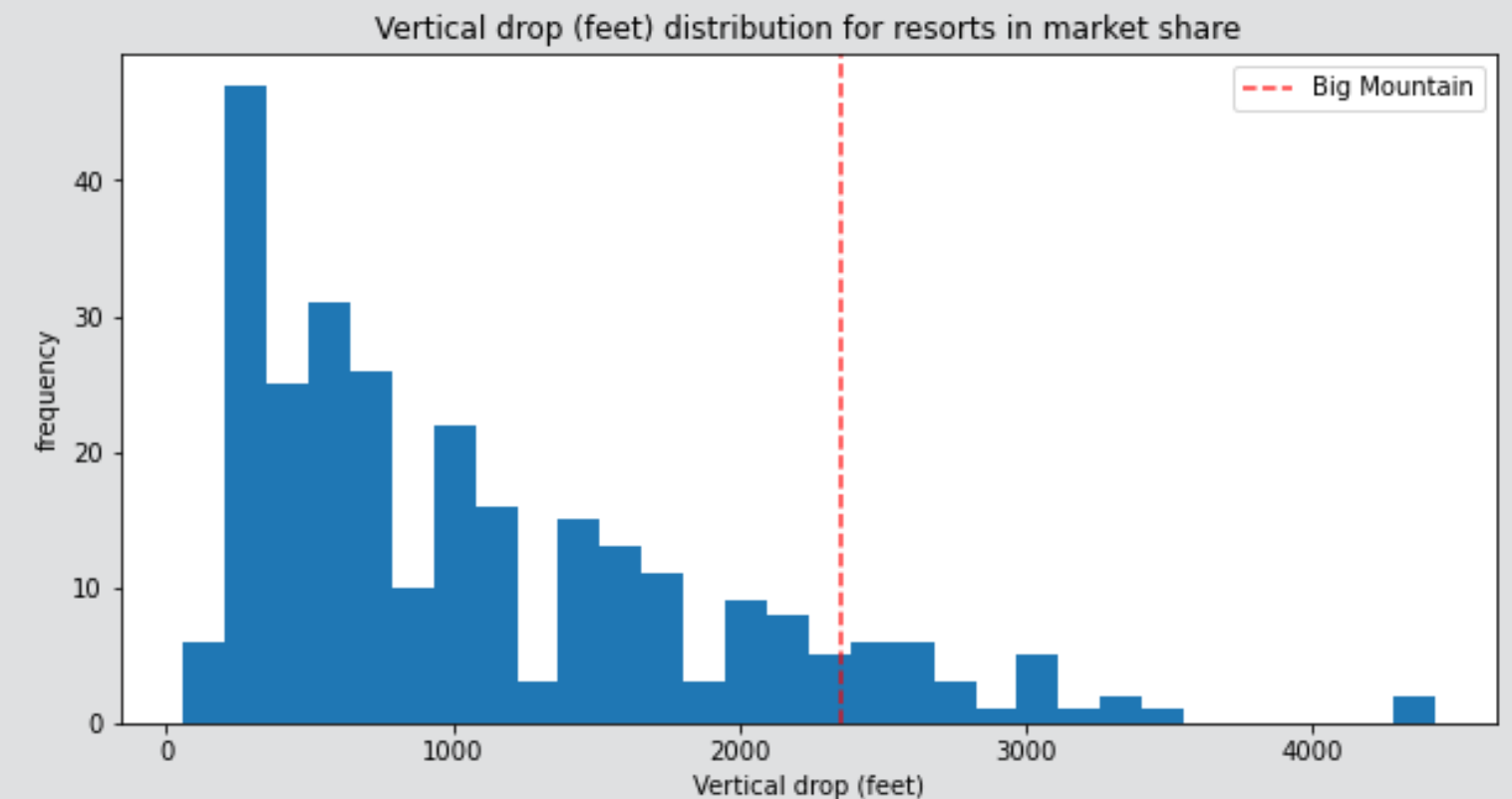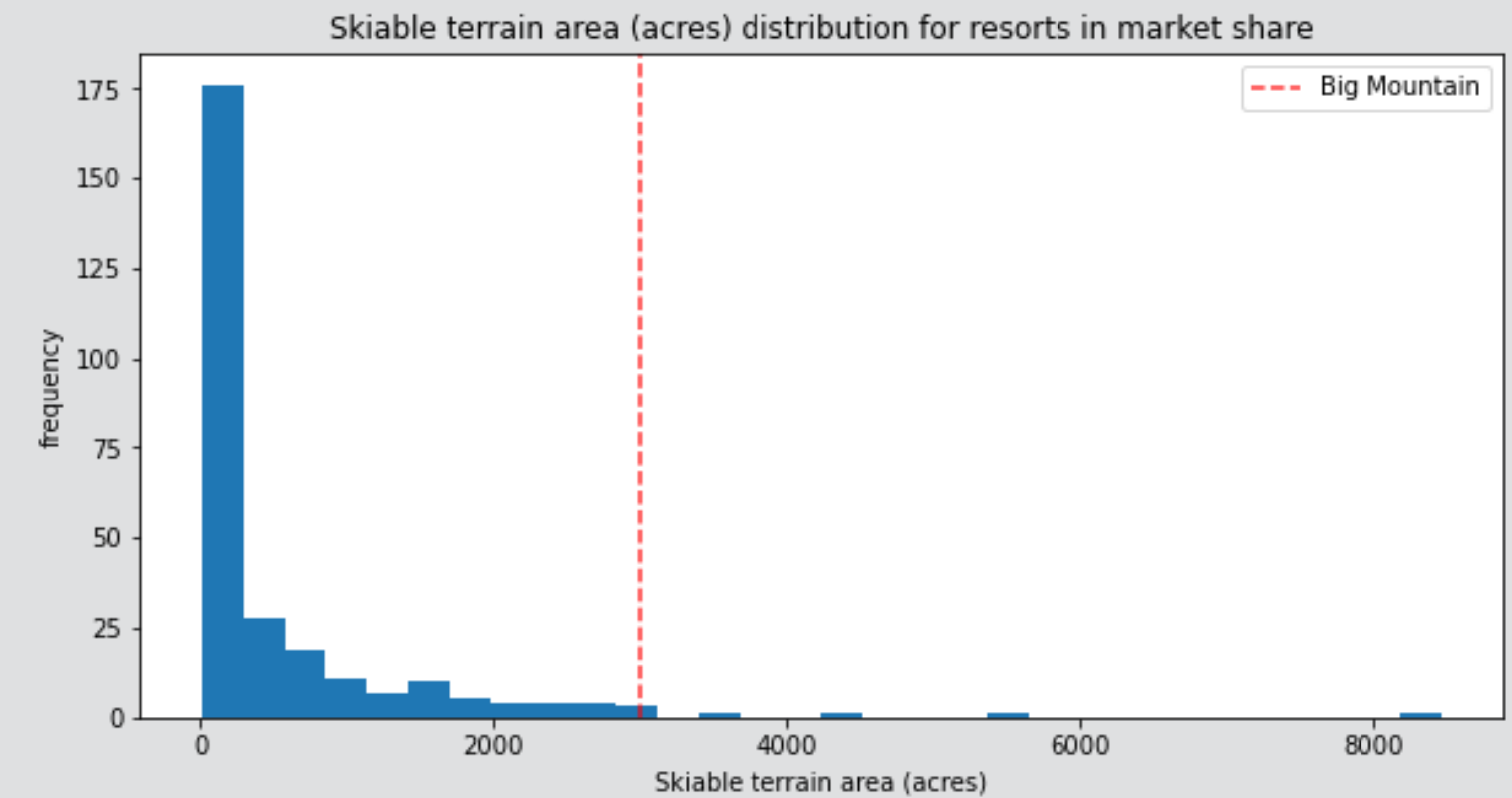
Big Mountain Resort Weekend ticket price compared to other ski resorts in Montana.

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Modeling Results and Analysis (cont.)

Big Mountain Resort has one of the largest total skiable terrain area (acres) in the nation, only a few outliers beating it out.
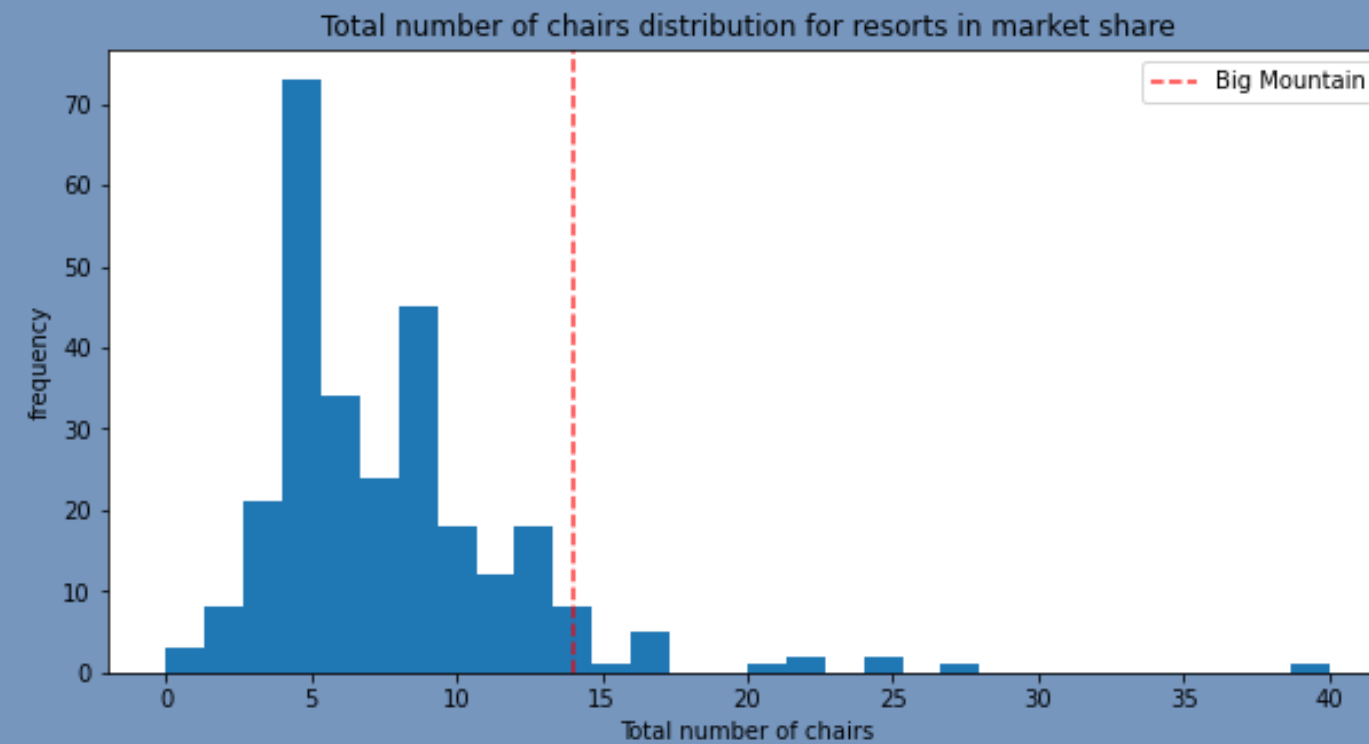
This resort is very strong on vertical drop (feet). Again, only a few resorts beating it out in the market.
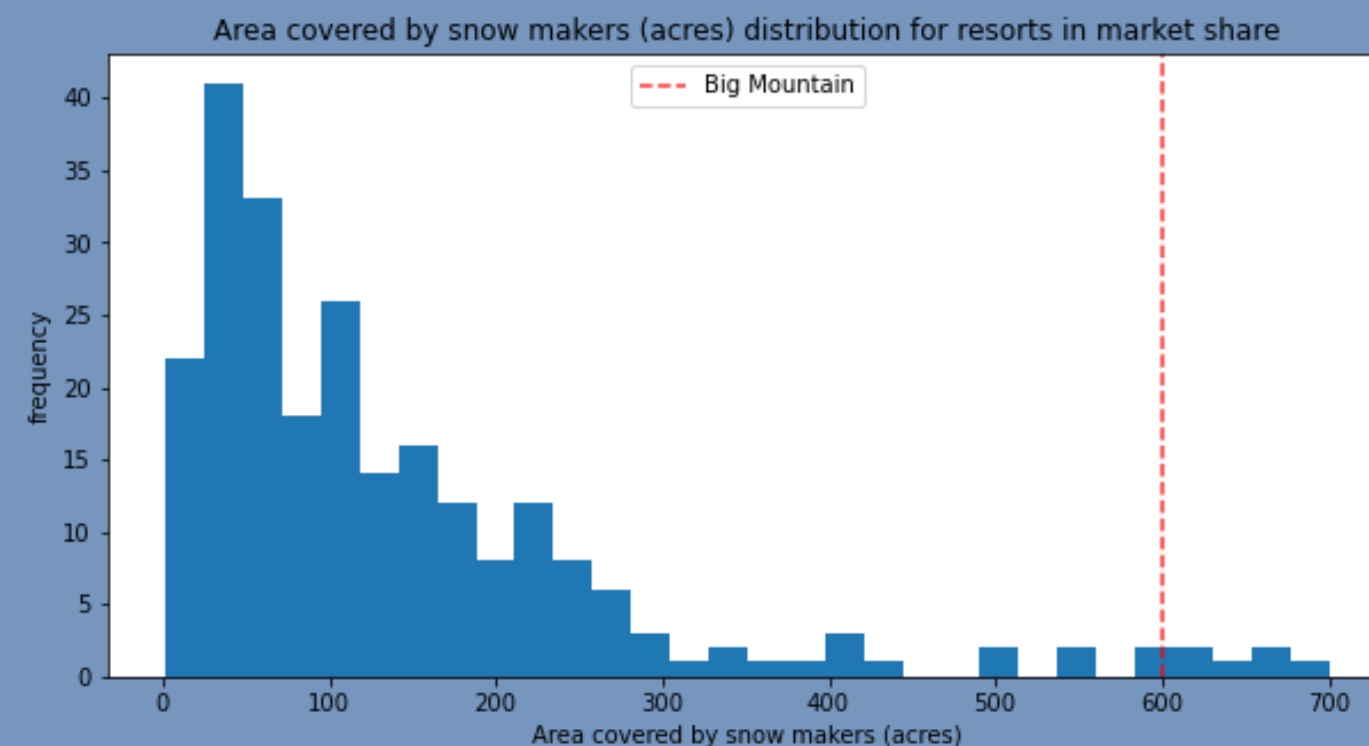
Modeling Results and Analysis (cont.)

Big Mountain Resort has many chairs, ranking it amongst the highest in the nation, with only a few resorts beating it.

With 600 acres of area covered by snow makers, it is one the highest in the nation.

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Modeling Results and Analysis (cont.)

The model predicted the potential scenario of closing up to 10 of the least used runs:

- Closing 1 run makes no difference
- Closing 2 and 3 successively reduces support for ticket price and so revenue
- If 3 runs were to close, may as well close down 4 or 5 as there's no further loss in ticket price
- Increasing the closures down to 6 or more leads to a large drop

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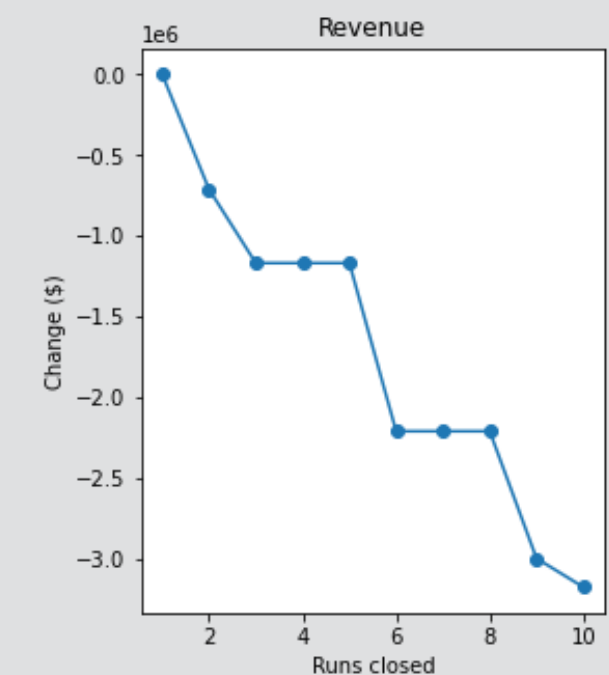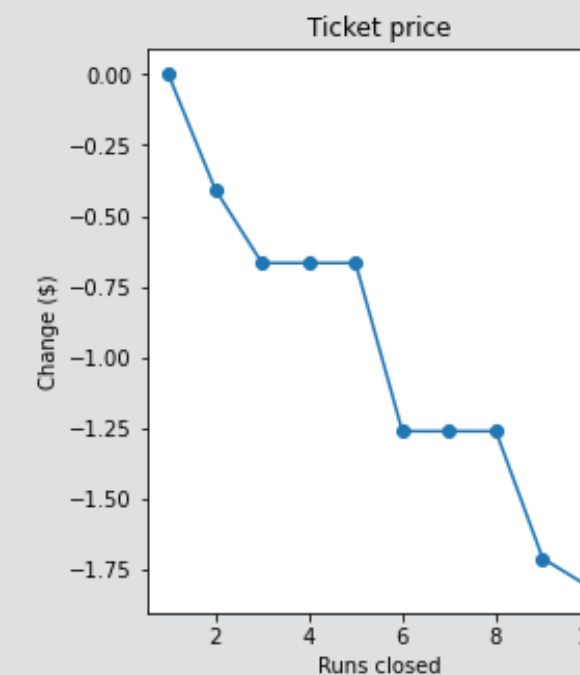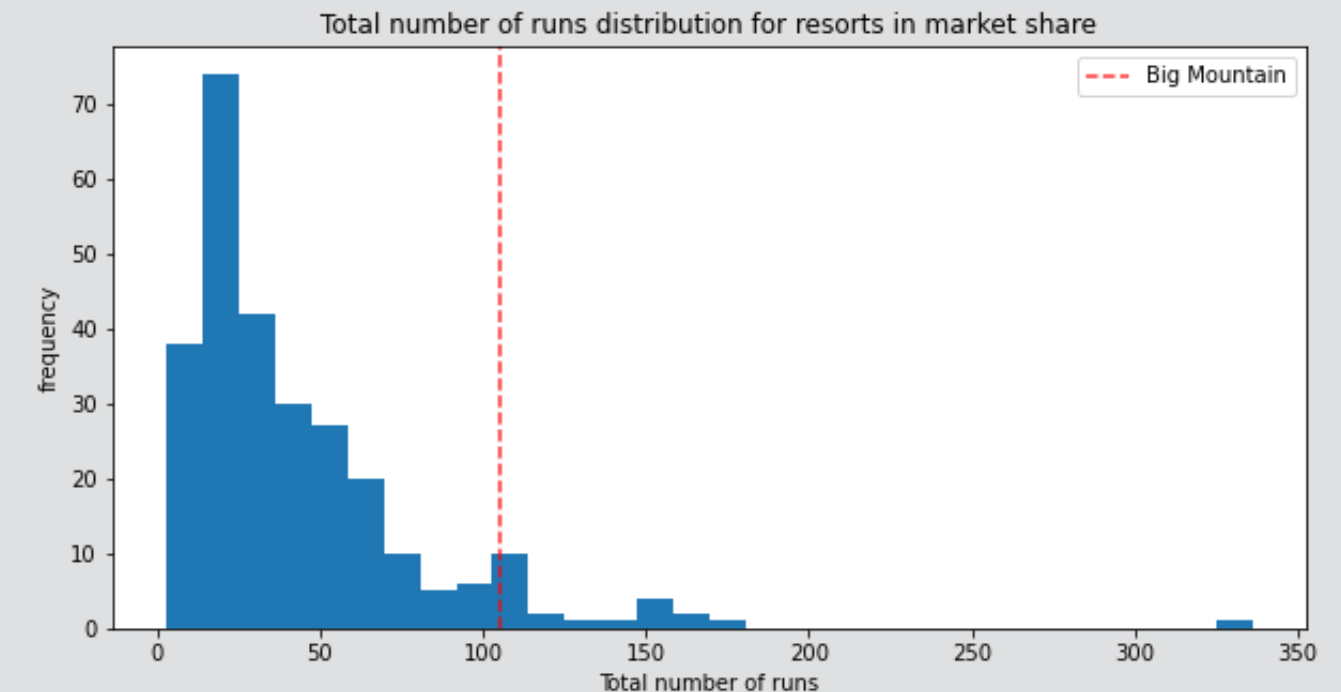
Recommendations

RAISE TICKET PRICE BY $1.99

- $3.47 million increase in revenue annually
- Can offset the new chair lift operating costs

INCREASE VERTICAL DROP BY 150 FEET

Supports the ticket price increase

EVERYTHING ELSE STAYS THE SAME

The other features are well supported compared to the rest of the nation/state and do not need any changes to make a difference in the price change.

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Thank you.