

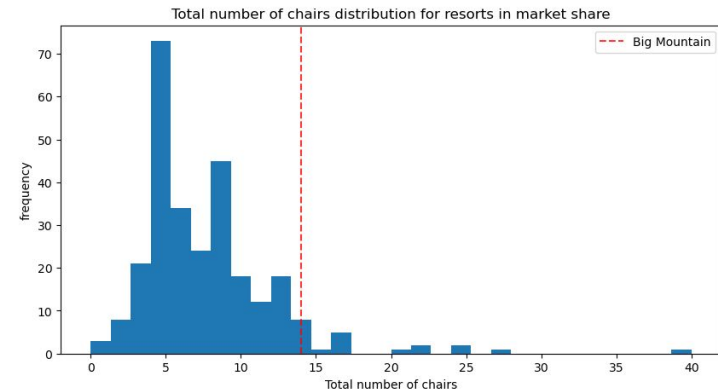
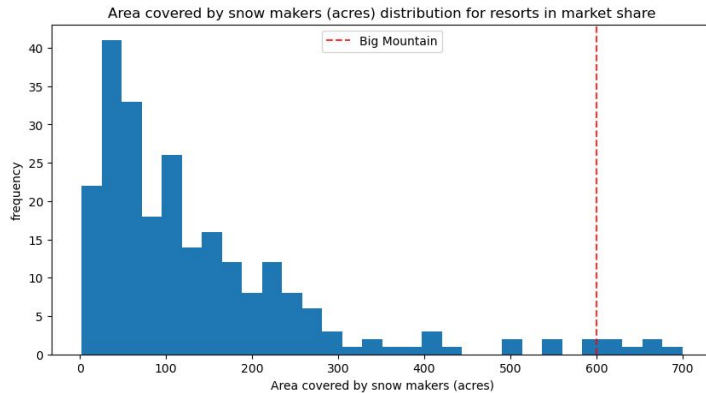
# Problem Identification

A new lift is being built in Big Mountain Resort which will cost around \$1.4M and prices of tickets should be reassessed in the next 3 months to create increased revenue to cover the cost of the lift.

Prices of the tickets should accurately reflect the features our resort has and should also be able to support the idea of the lift being built.

# Key findings

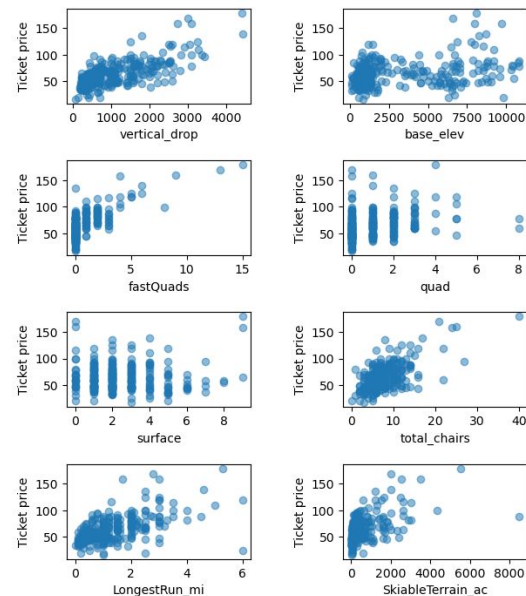
We found that our resort sits ahead of the other results when it comes to the main correlated features that resorts which higher prices have which are number of chairs, and amount of skiable land in acres. This supports the idea that we can charge more per ticket.



# Modeling Results and Analysis

The model we made computed that we can increase our ticket prices from \$81 to \$96 based on the data for the other results that it was trained on.

The figures show that resorts with higher amounts of certain features such as vertical drop, total chairs, and skiable terrain tend to have higher ticket prices



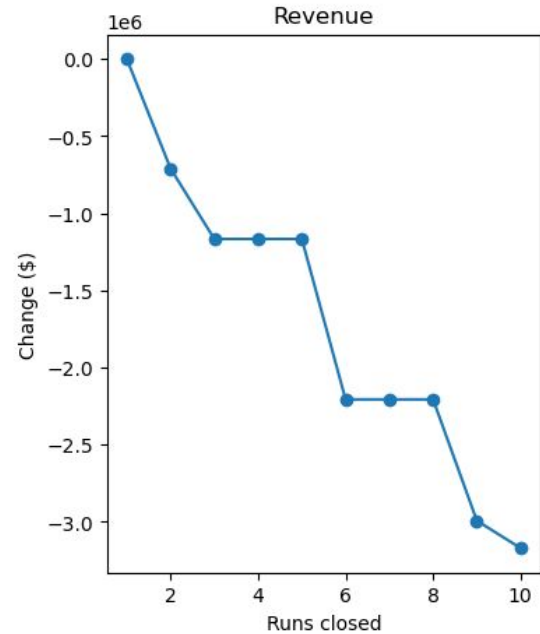
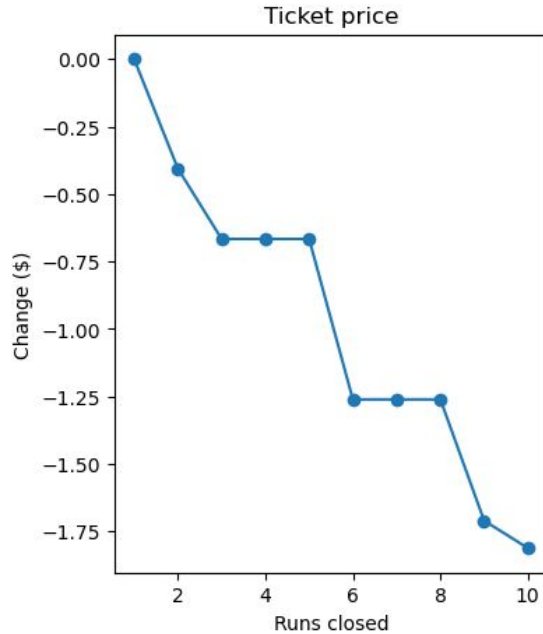
# Validation

We chose the random model because it has a lower cross-validation mean absolute error by almost \$1 which is better than the mean absolute error model.



# Additional Info

Our model even shows that we could close a couple runs if needed and there wouldn't be much variability in the prices of our tickets based on other resorts and their data.



# Conclusion

In summary we can appropriately justify raising our ticket prices to accommodate for the new lift price and be able to increase our revenue by \$1,506,5471 for the next year to cover that cost and ear more the following year. Not only for this reason but we found that with the many features our resort has, we can appropriately increase the price and still stand out to the consumers when they decide where to spend their time skiing.