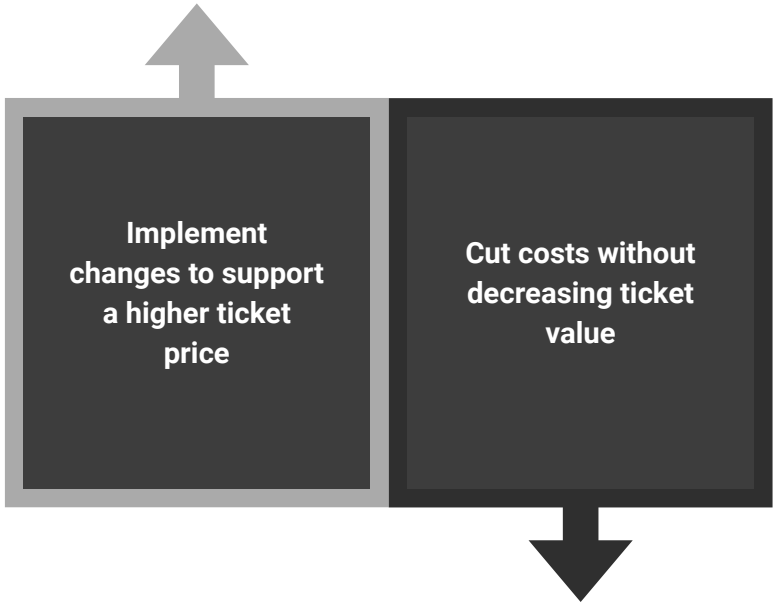
Guided Capstone Presentation

Big Mountain Resort

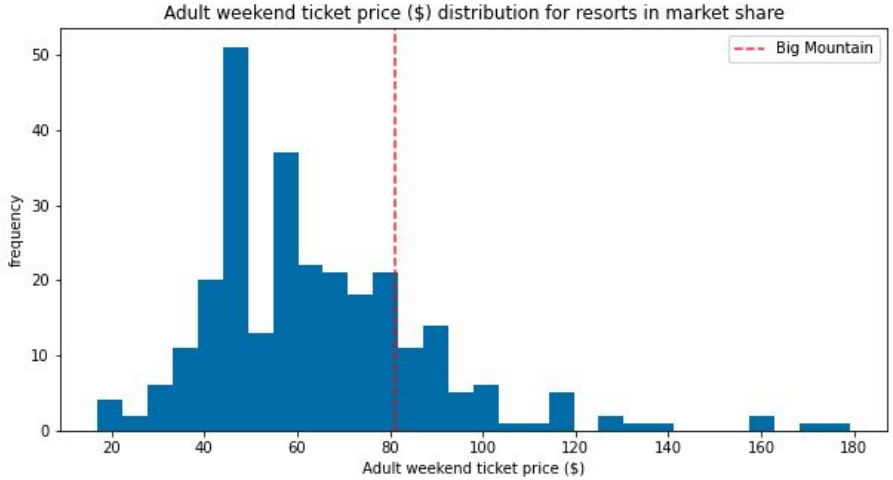
Problem Identification

How can Big Mountain Resort set their ticket price to capitalize on facilities and make changes to either cut costs (without devaluing ticket price) or increase ticket prices?



Recommendation & Key Findings

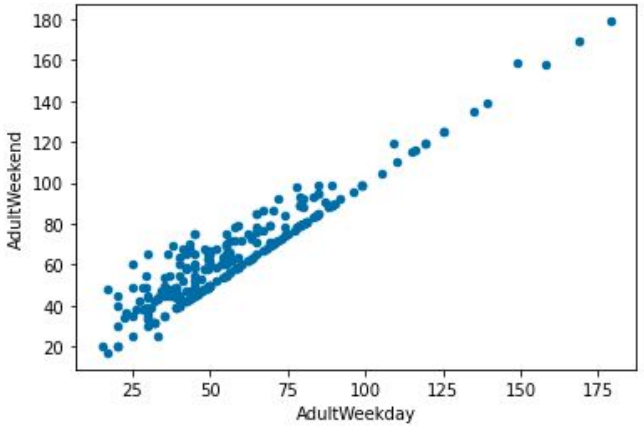
- Increase ticket price to $95.87 from $81.00
- Annual revenue increase of $26 million



Modeling Results and Analysis

The weekend price was chosen to be used in the model.

- Similarity in weekend vs. weekday prices for resorts above $100
- Similarity of prices in Montana,
- Greater number of data points for weekend tickets



Modeling Results and Analysis

Exploratory Data Analysis

- Several features were seen to have a correlation with ticket price, including the number of **fast quads, runs, snow making ability and total chairs**

- No clear patterns emerged between states and that the state label was not particularly useful; **all states should be treated the same**

Modeling

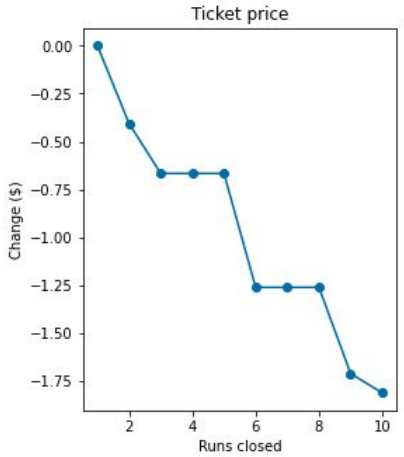
- A baseline model and a simple linear regression model were developed as initial models

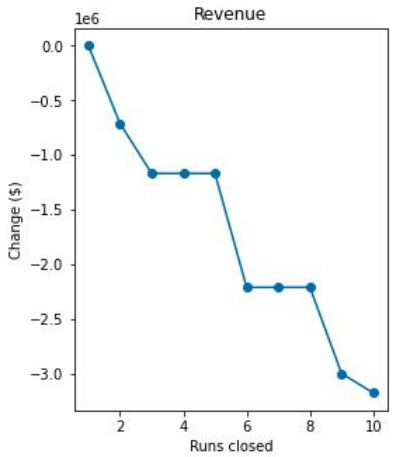
- A **random forest regressor model was selected** for having the lowest cross-validation mean absolute error and the lowest variability

Modeling Results and Analysis

Closing the six least used runs could potentially cut costs without decreasing ticket prices substantially

Adding a run that would increase the vertical drop by 150 feet and add a chair lift would likely result in a ticket price increase that would be greater than the operating cost of a new ski lift ($3.5 million vs. 1.54 million)





Summary & Conclusion

Big Mountain should consider increasing the weekend ticket price to align with pricing in the current market share