

Big Mountain Resort

Report Deck



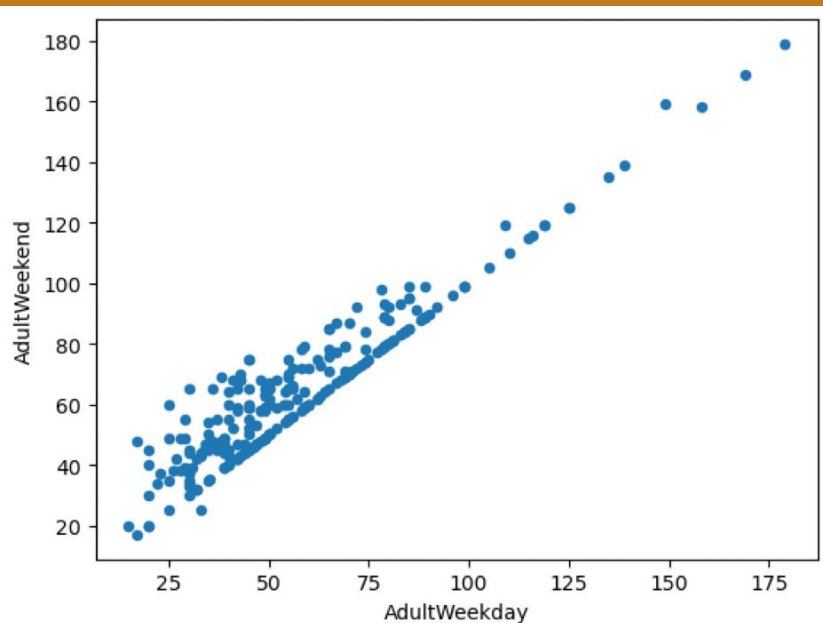
Problem Identification

How can we optimize pricing strategy?

- **Add value to justify higher ticket prices.**
- **Find ways to cut costs.**

Problem Identification

We are charging the same price for weekday and weekend tickets when the data says to do otherwise:



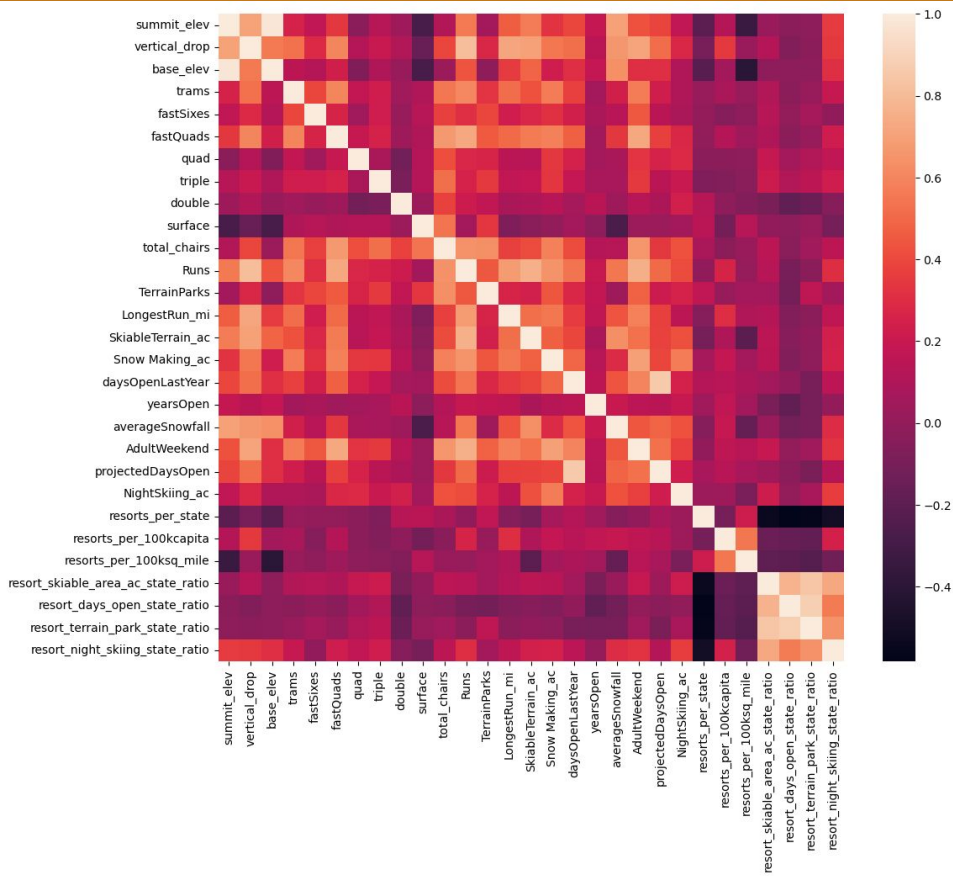
- Weekend prices are higher than weekday prices for most sub \$100 (ticket price) resorts.
- Big Mountain Resort is currently charging \$81 for both weekend and weekdays.

Recommendation and Key Findings:

Big Mountain Resort Should:

- **Increase vertical drop by adding an additional run 150 feet below its current lowest run.**
 - **\$3,474,638 revenue increase**
- **Permanently close its least used run.**
 - **Won't affect ticket price but will reduce costs**

Modeling Results and Analysis:



Heat Map Insights:

- Found several correlations with our target feature (adult weekend prices)
- These include:
 - Vertical drop, fastQuads, total_chairs, Runs, and Snow_Making_ac

Modeling Results and Analysis:

Choosing a Model:

- We tested both a linear regression and random forest models.
- Only the k amount of features that would lead to the best model were selected.
- Cross-validation was used to find the scores.
- Random Forest was the clear winner.

Modeling Results and Analysis:

Comparing to The Marketplace:

- We found that Big Mountain Resort could potentially charge \$95.87 per weekend ticket.
 - Mean absolute error of \$10.39
 - Range between \$85.48 – \$106.26
- Even the lower bound is above our current ticket price of \$81.

Modeling Results and Analysis:

Upgrading Facilities:

- Increase in vertical drop by adding an additional run 150 feet below current lowest run would increase support for ticket prices by \$1.99.
 - \$3,474,638 revenue increase - \$1,540,000 cost
- Permanent closure of least used run:
 - Won't affect ticket price but will reduce costs

Conclusion

- **Several ways to improve Big Mountain Resort's bottom line have been identified.**
- **Going forward, adding qualitative features to our analysis may also help uncover more insights. Some of these features might include:**
 - **The quality of views (how nice the landscape looks),**
 - **The quality of snow (powder vs ice)**
 - **Prevalence of high-end luxury hotels in the region, all of which could affect how tickets are priced**