



Big Mountain Resort



Ticket Price Analysis By Malak Mosly



Problem Identification

1. Context

- a. Big Mountain Resort has recently added an additional lift costing \$1,540,000. The goal is to support this cost by raising revenues this upcoming season by charging a higher ticket price.

2. Criteria For Success

- a. Whether Big Mountain Resort can increase total revenues by supporting a higher ticket price.

3. Scope of Solution Space

- a. Valuing the total number of lifts, in addition to other facilities such as the total chairs, longest run, vertical drop fast quads, and runs.

Problem Identification Continued

1. Constraints within solution space

- a. While ticket prices can be increased, they must do so in a way that keeps Big Mountain competitive with other resorts nearby, given facilities offered.

2. Stakeholders

- a. Jimmy Blackburn - Director of Operations
- b. Alesha Eisen - Database Manager

3. Key Data Sources

- a. CSV file containing data on key elements and facilities of each of the 330 ski resorts operating currently in the United States.

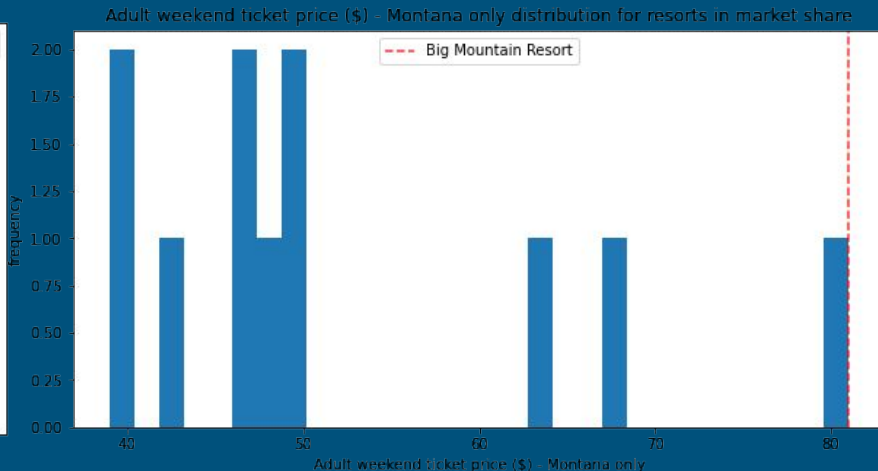
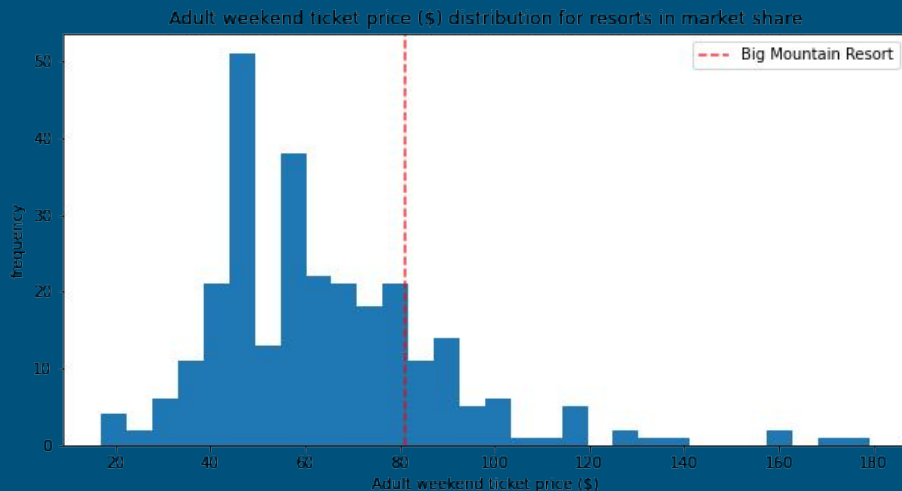
Recommendation And Key Findings

After cleaning the data, it was determined that the target feature is the Adult Weekend Price.

Given that, a random forest model was determined to be the best model to use, and the key features to determine price were Runs, Vertical Drop, Fast Quads, and SnoW Acres. The model determined that the Adult Weekend Price should be raised from \$81 to \$92.72, with an expected error of \$10.34. This suggests the price should be at least \$82.38 per adult on the weekend.

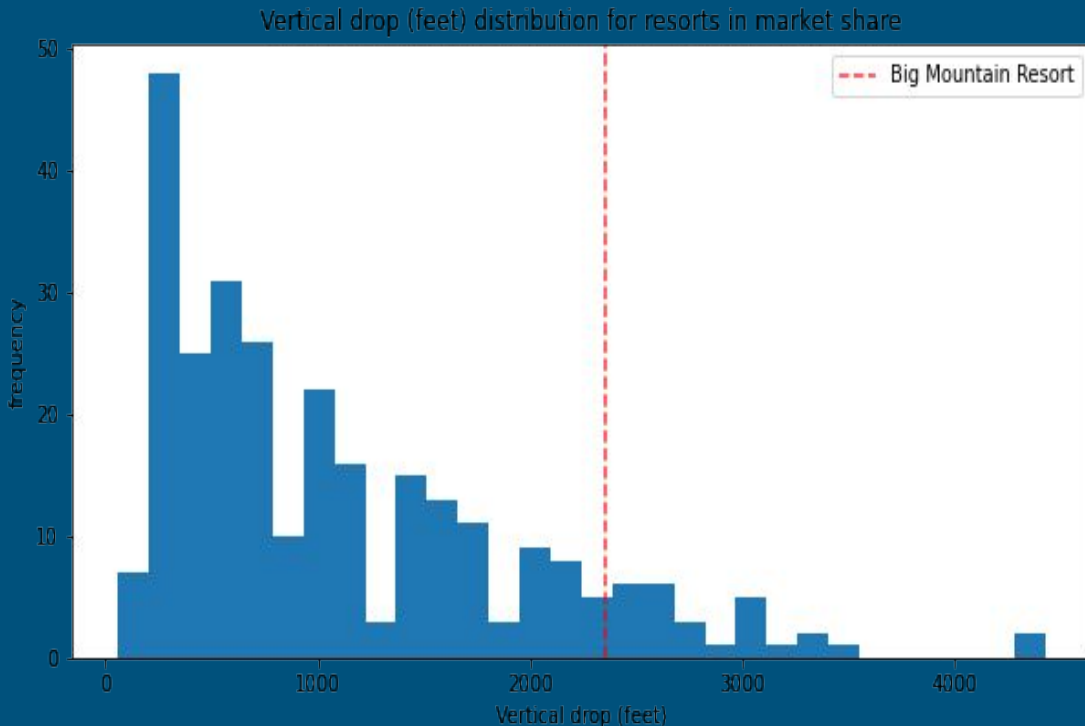
Modeling Results And Analysis

The Adult Weekend price of the resort is relatively high, but not nearly as high as some other ski resorts in the U.S.; it is however one of the highest in its state.



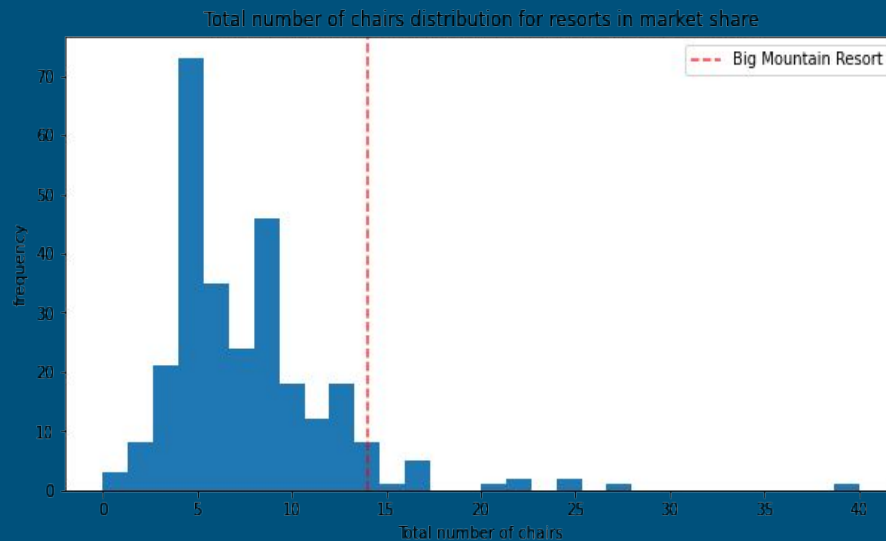
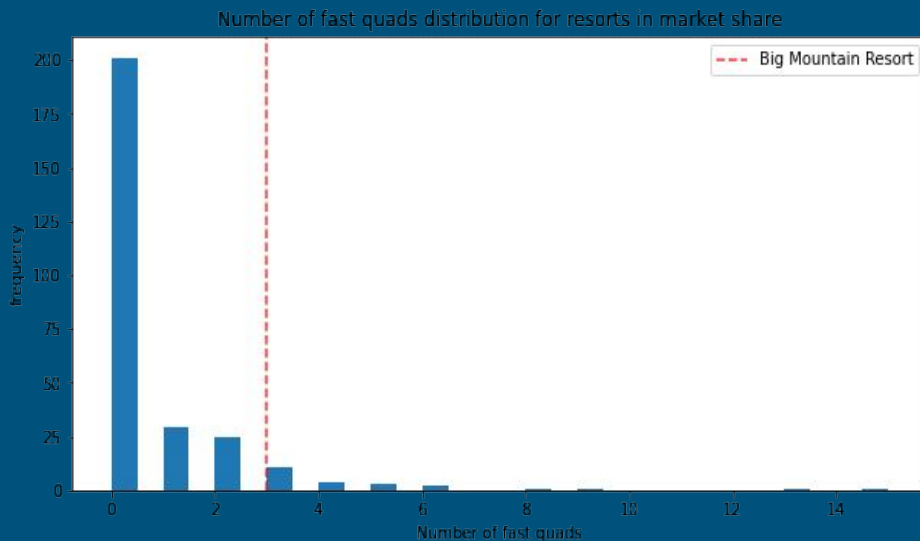
Modeling Results and Analysis

Now comparing where Big Mountain Resort stands in terms of the most important features determined by our model. Firstly, we compare the vertical drop, which Big Mountain is on the high end of resorts that offer it.



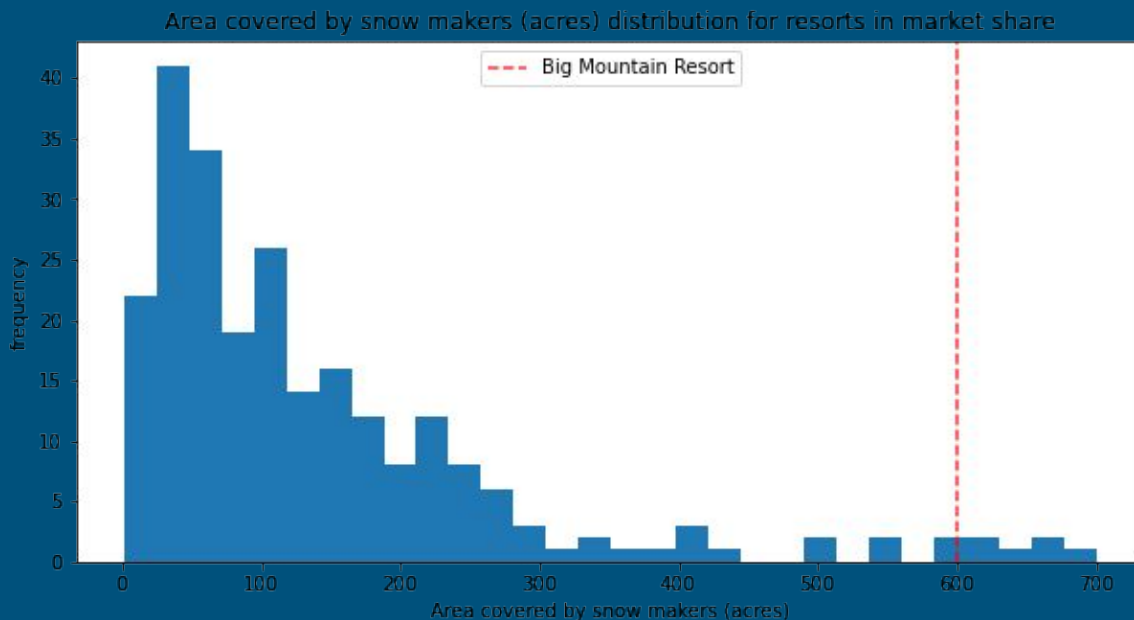
Modeling Results and Analysis

Big Mountain is also one of the few that offer a very high number of both total number of chairs available as well as fast quads.



Modeling Results And Analysis

Big Mountain is also very high up in terms of area covered by snow in acres.



Summary and Conclusion

Given that the four most important facilities determined by our model are the vertical drop, Snow Area in Acres, total chairs and fast quads available, and Big Mountain consistently offers amongst the most impressive numbers for all of these features, it is safe to say that increasing the Adult Weekend ticket price is the correct move. Although it already has amongst the highest prices in its state of Montana, this price is supported by its impressive facilities.

Therefore, I recommend raising the ticket price to at least \$82.38, and optimally \$92.72. This will support an increase in revenue this season while remaining competitive.