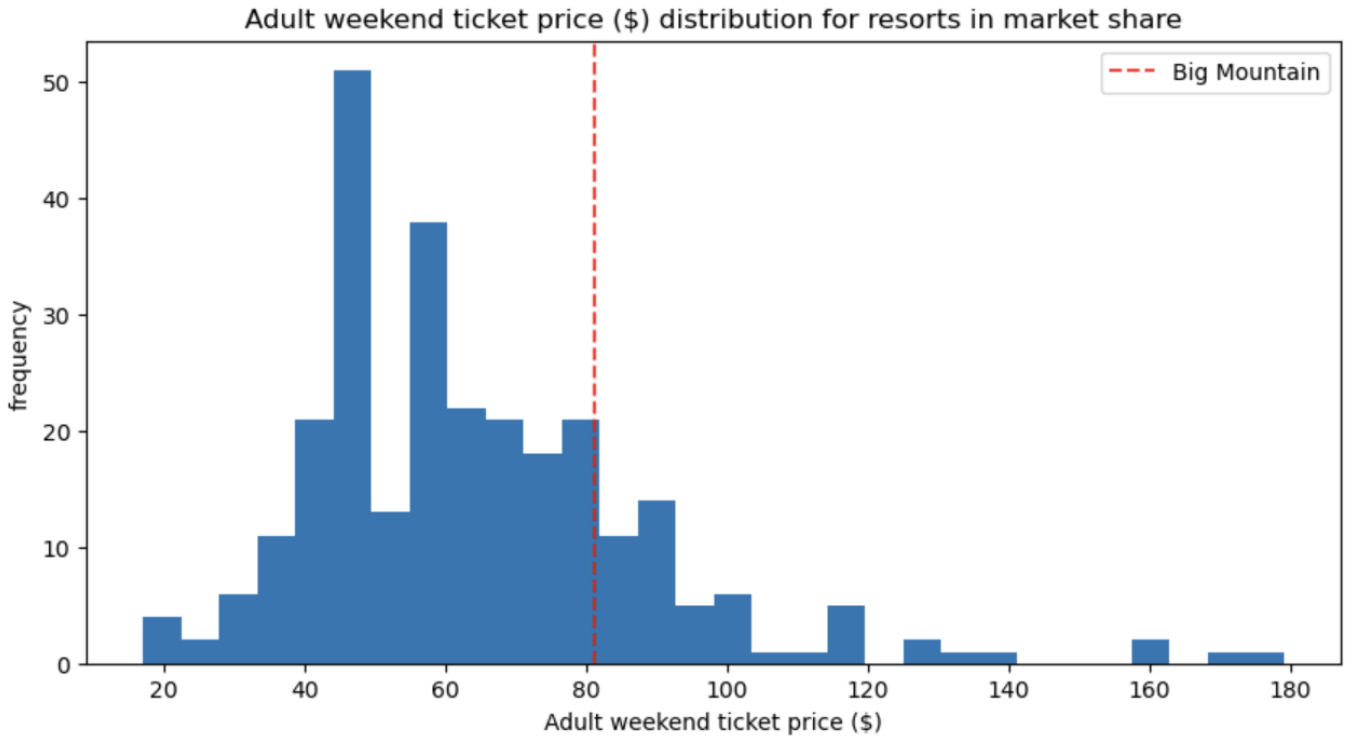
BIG MOUNTAIN RESORT

Report by Audrey Malloy

BUSINESS PROBLEM:

- Big Mountain Resort is increasing operational costs by $1,540,000 this season for the installation of an additional chair lift.

- To accommodate the increase in company costs, the resort strategy is to charge a premium above the market's average price.

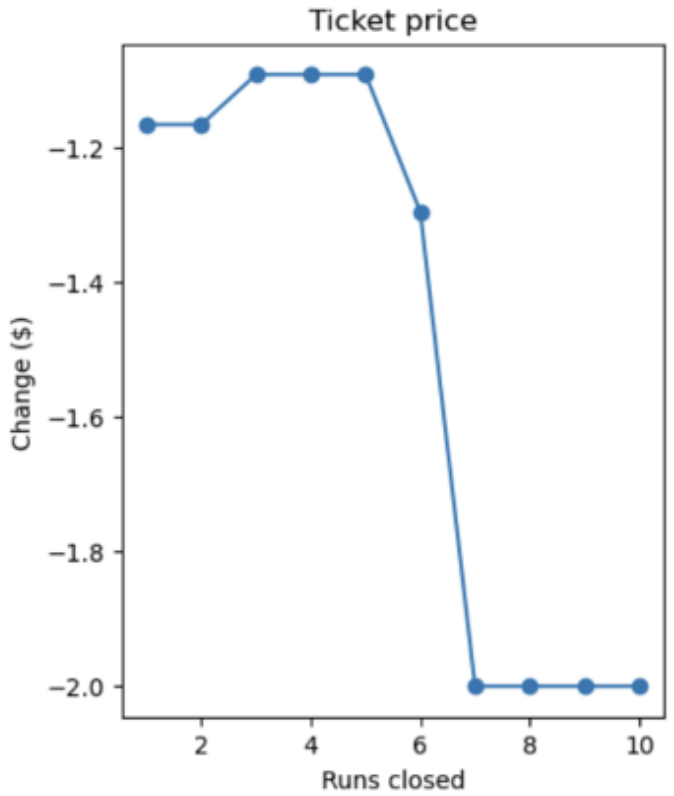


RECOMMENDATIONS

- To reduce the resort's operational cost, it is wise to consider closing one of the less popular trail. From the data it is not recommended to close more than 2 as seen in the graph.

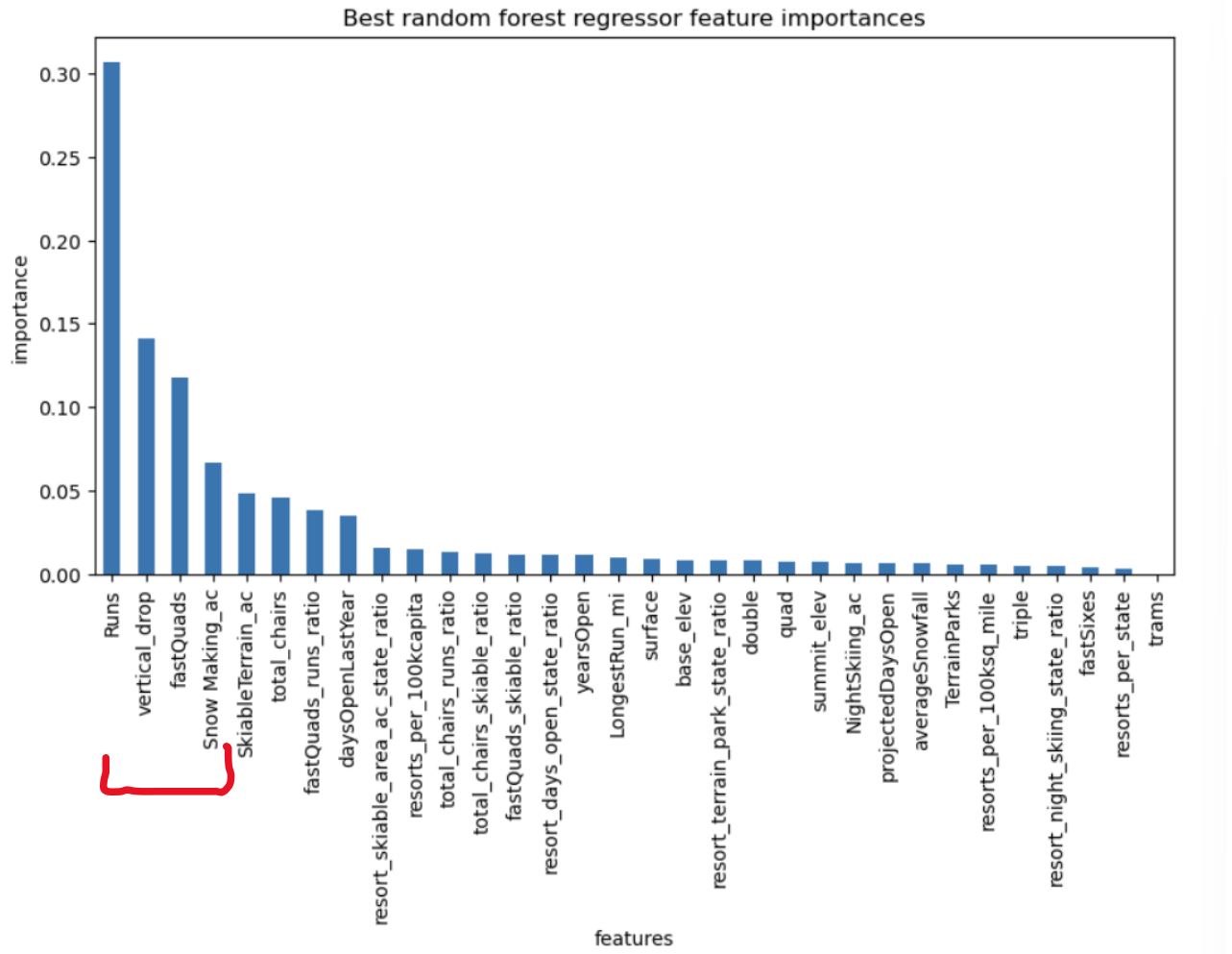
- To attract more support on the increased ticket pricing, data suggests that adding a run with more vertical drop.

- Models suggest that an increase in tickets will be acceptable with Big Mountains standing in the competitive market.

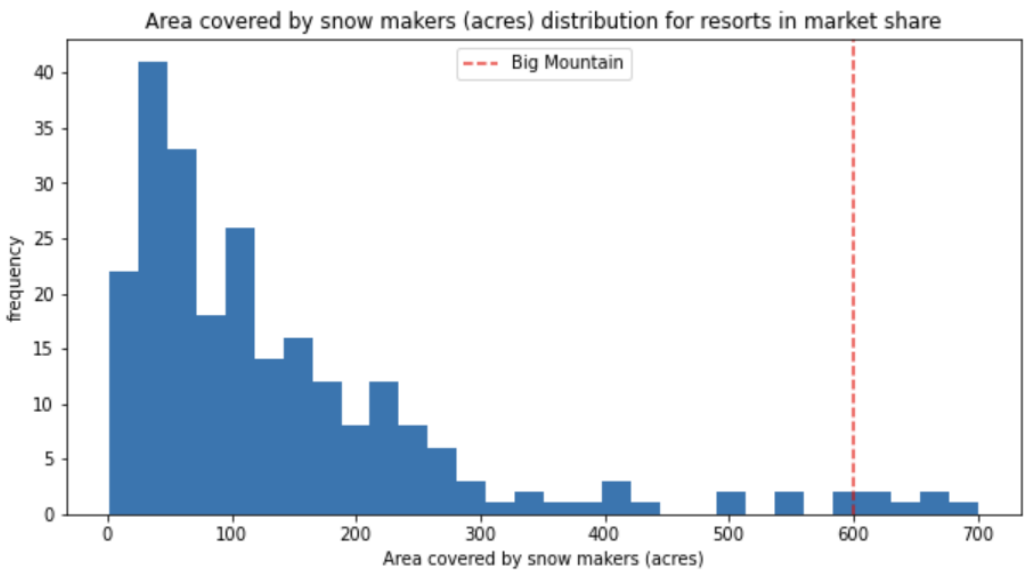


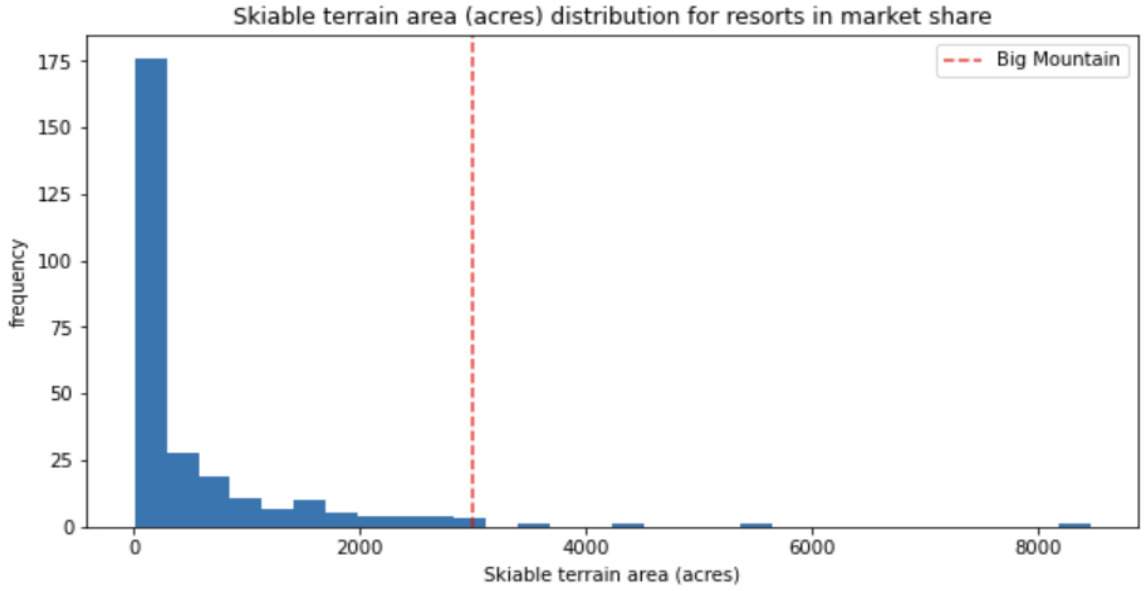
MODELING RESULTS

- The results of the linear regression model suggest that the four most influential features are
  - The number of runs,
  - Vertical drop of runs
  - Fast quad lifts
  - Area of snowmaking acreage



COMPETITOR IN KEY FEATURES

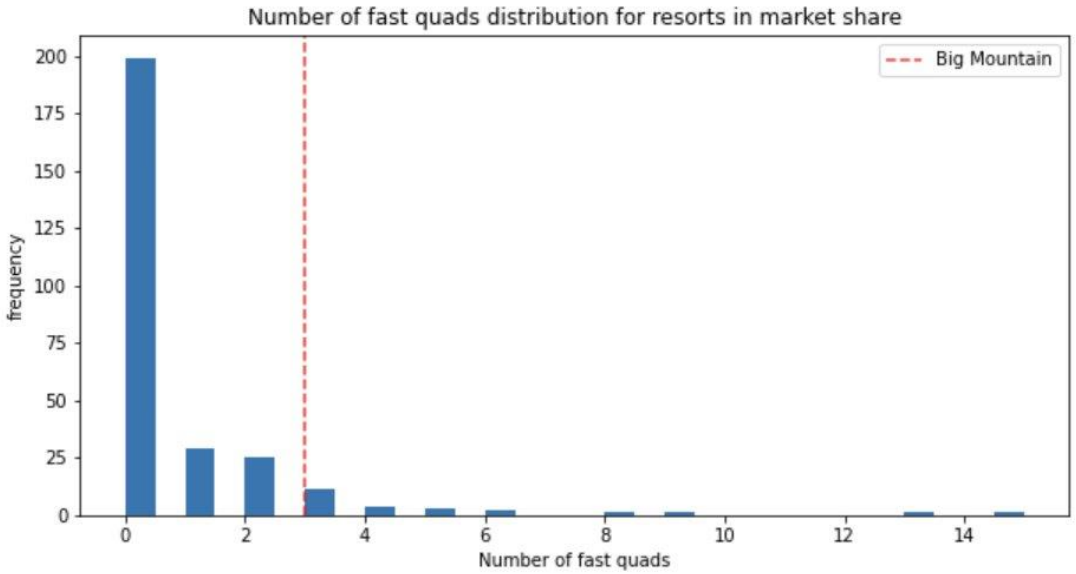




Big Mountain demonstrates significant potential for achieving our predicted price, as the resort exhibits strong market value based on key influential features identified through a Random Forest Regression analysis.

JUSTIFICATION FOR A PRICE CHANGE

- Value of the resort's enhanced facilities should justify the price hike.
- The installation of a new chair does not deter visitors and certain lift features are ideal according to our model such as fast quad lifts.
- The resort's appeal lies in the quality of its amenities and the unique skiing experience it offers.



CONCLUSION

- Our original ticket price was $81 per day. The new recommended price, based on the model's output, is $92.39. This adjusted price is competitive within the market and highlights the higher revenue potential of Big Mountain's facilities. Even with a projected mean absolute error of $10.44, an increase in ticket prices is beneficial for the upcoming season.