

# Counteract The New Chair Operational Cost for the Next Year

By Increasing Ticket Revenue by up to \$4.9M  
Next Year

# Problem Identification

Big Mountain Resort (BMR) is a ski-resort in the Montana state with hundreds of thousands of skiers and snowboarders every year. Operational costs have been predicted to increase by over \$1.5M from newly installed lifts. We need to ensure we raise profit margins by \$1.5M this upcoming year by

- More efficient spending this upcoming year from snow and lift operations
- adjust ticket prices appropriately based on the market

# Recommendation

Ticket prices can be increased by up to **\$14 per ticket** according to the 4 most directly impactful features of other ski resorts across the country, which implicates an **annual revenue increase of \$1.4M to \$4.9M.**

# Recommendation

The immediate attention should fall on increasing the ticket price by \$1.99, if the following were accomplished:

1. Added a run
2. Increased the vertical drop by 150 feet
3. Installed an additional chair lift with no additional snow coverage

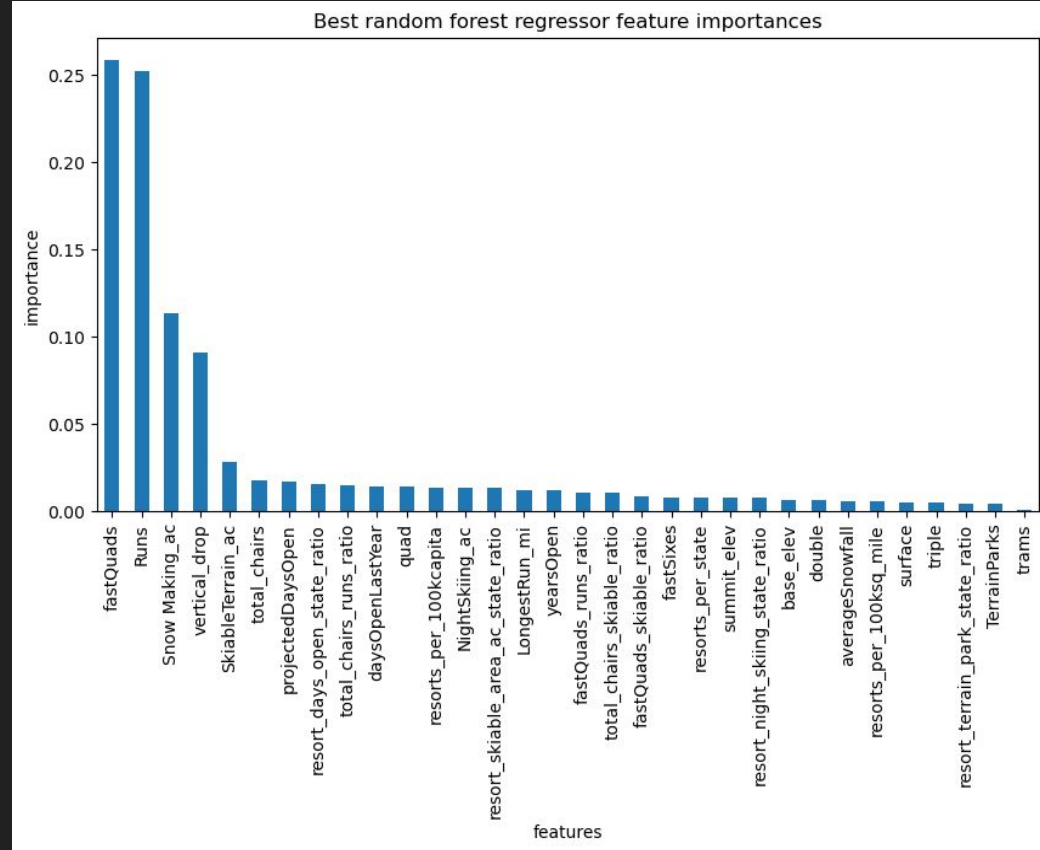
# Modeling Results and Analysis

1. Filter-based feature selection method was used for the Ticket Pricing Model
2. The Random Forest model was chosen from different modeling strategies for the Big Mountain resort feature selection
3. Further Analysis shows that the Big Mountain is providing enough features to attract tourists.

# Modeling Results and Analysis

These top 4 features were identified using random forest model

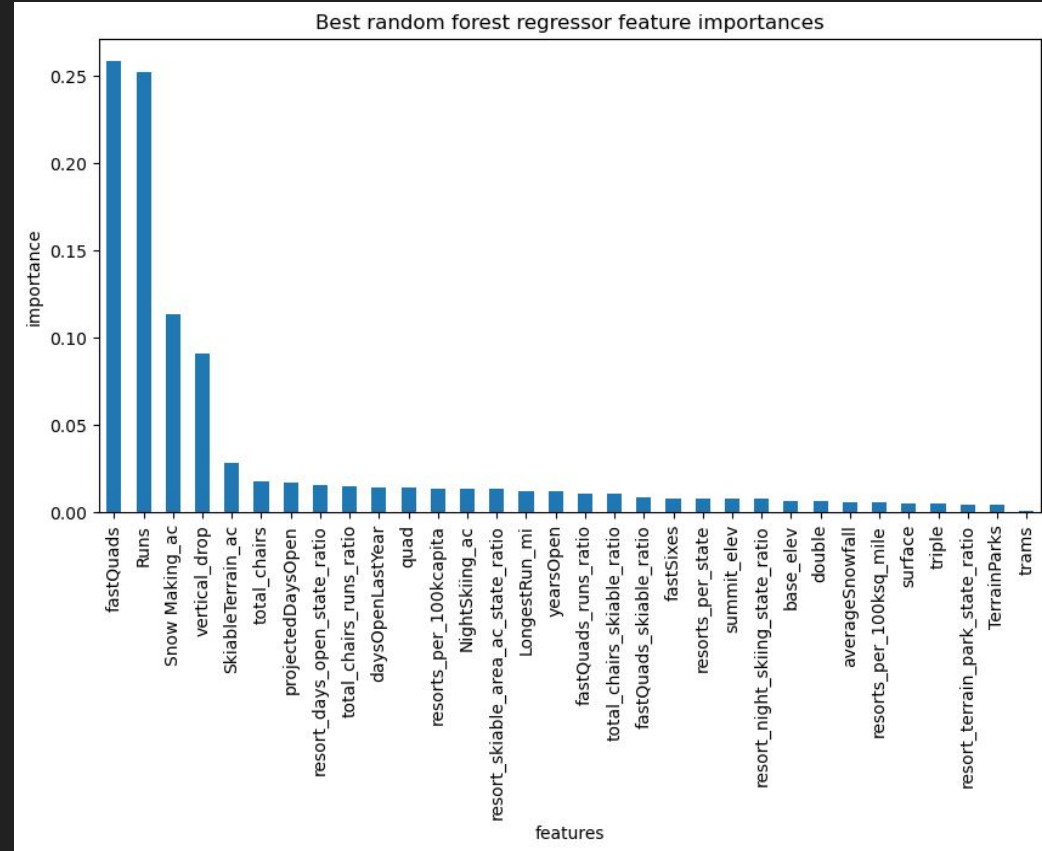
These features should be focused while planning future marketing strategy to optimize the revenue, costs, and profits



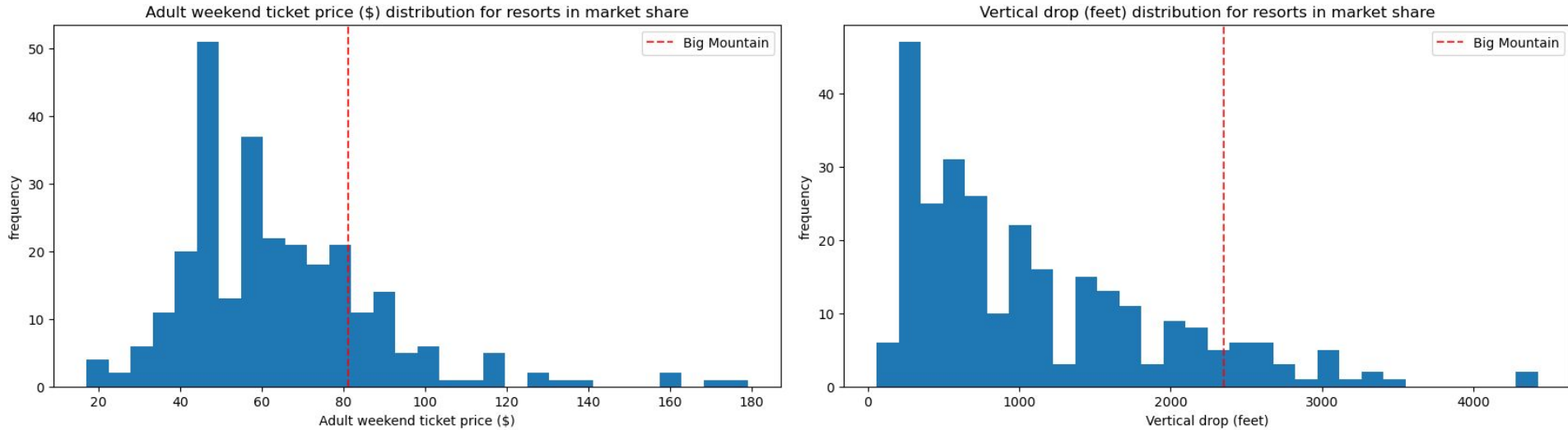
# Modeling Results and Analysis

These top 4 features were identified using random forest model

These features should be focused while planning future marketing strategy to optimize the revenue, costs, and profits



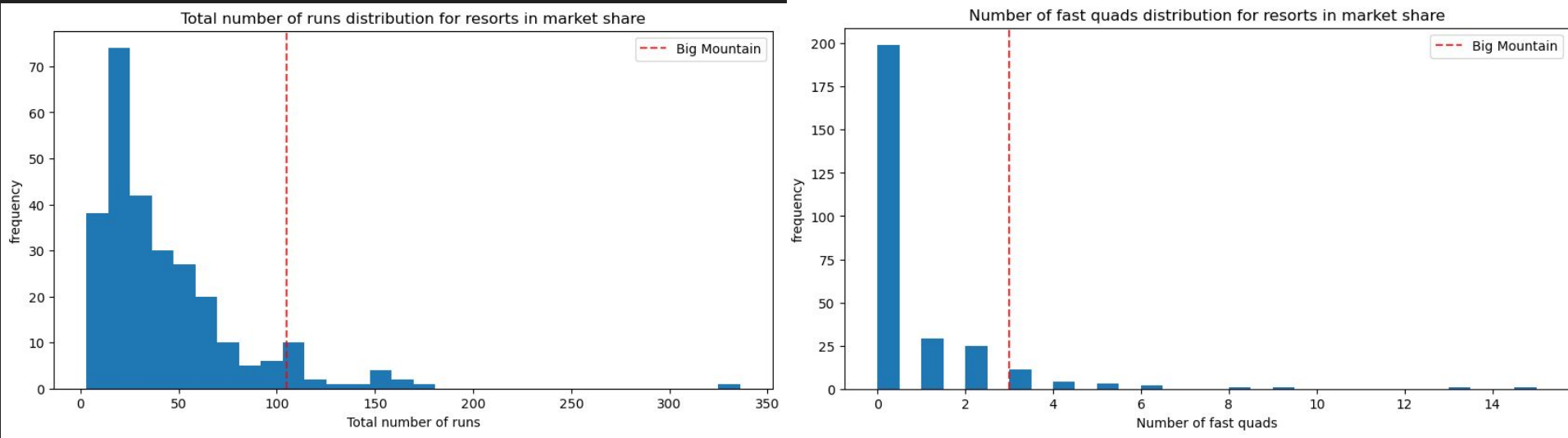
# Modeling Results and Analysis



Big Mountain Ski Resort has the top features to be considered a top dollar resort.



# Modeling Results and Analysis



The number of Runs and Fast Quad features support Big Mountain Ski Resort as a top value resort.

# Summary and Conclusion

In conclusion, the modeling results provide valuable insights for Big Mountain's leaders to optimize their ticket prices for counteracting the additional operating cost of the new chair lift and not only counteract the \$1.5M predicted operational but increase the profit by over \$2M.

Additionally, there is more data that should be collected to more accurately recommendations and careful testing. We have no means to capture any of the expenditures of the new lift and of any already ongoing operations because this data has not been provided. In fact, we've had to assume that the additional chair lift cost.