

2025

# Big Mountain Resort Pricing Strategy Model

# CONTEXT

- Big Mountain Resort's current Adult Weekend ticket price is \$81
- Big Mountain currently sets prices based on a premium above market average
- Big Mountain's pricing strategy does not consider how its specific offerings compare with competitors
  - Lost revenue?
  - Pricing misalignment with customer expectations?

# PROBLEM STATEMENT SUMMARY

**Can adjusting Big Mountain Resort's ticket pricing based on high-impact facility — rather than using the regional average — increase revenue?**

- Developed an interpretable model using features and ticket price data from 330 US based ski resorts to evaluate Big Mountain's relative pricing position

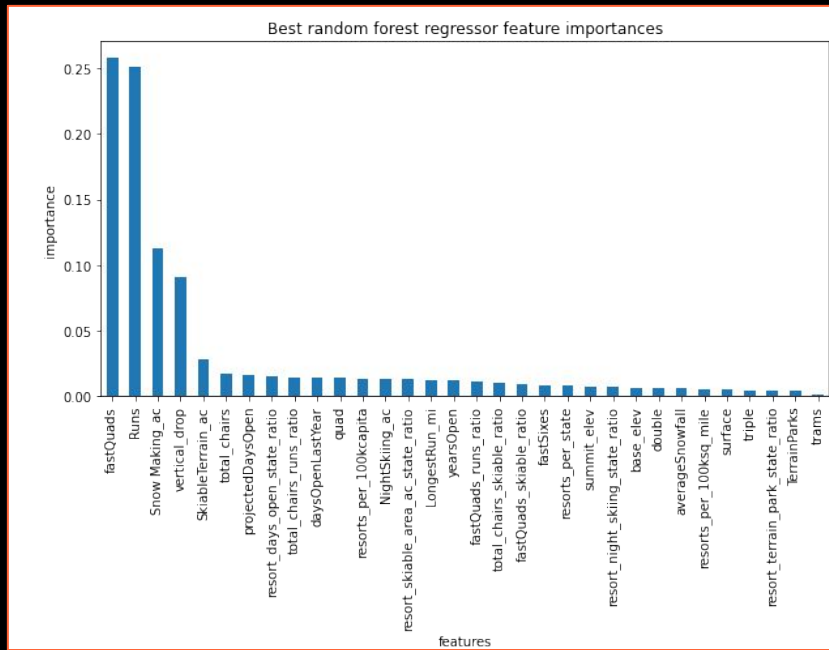
## RECOMMENDATION

Big Mountain resort can increase its ticket pricing to match the overall US market.\*

→ \*Should this increase be considered relative to the local market of Montana?

# MODEL SUMMARY

- The model used is a **Random Forest model**: ensemble of decision trees, capturing non-linear relationships and feature interactions
  - Showed strong performance on test data
  - Surfaced key features to ticket pricing:
- The most important features are:
  - # fast quads
  - # runs
  - snow making acreage
  - vertical drop

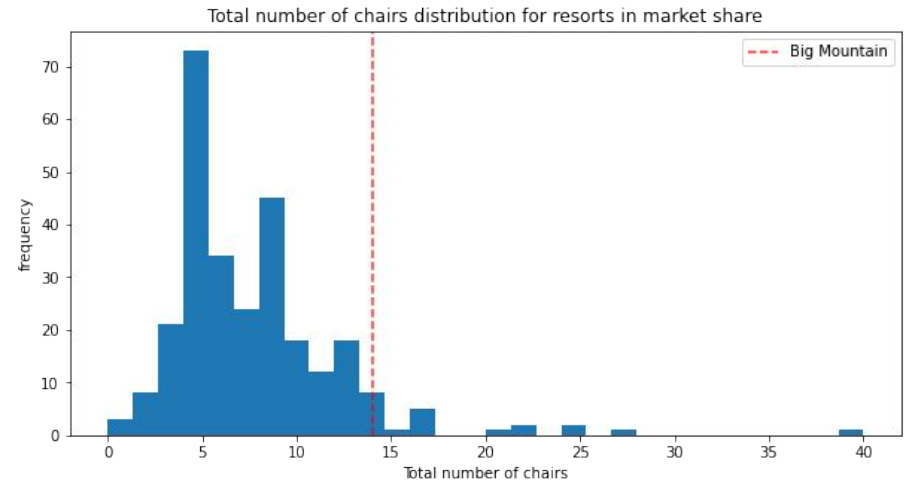
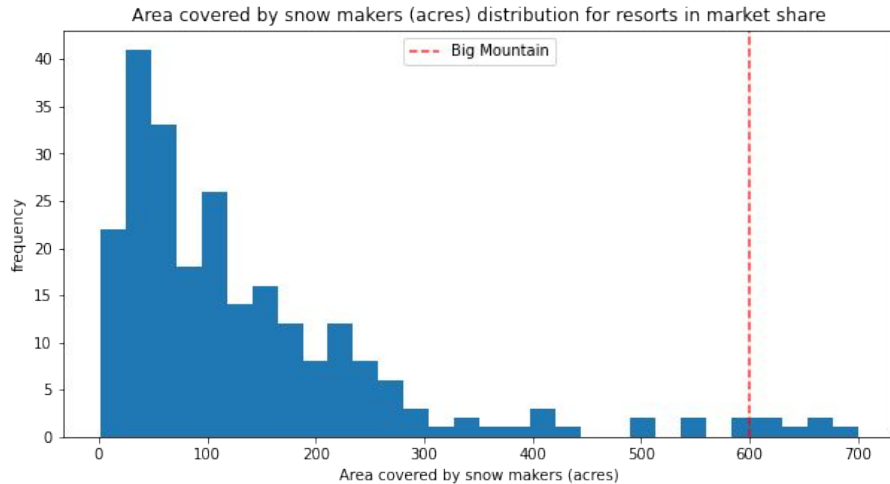


# MODEL RESULTS

- ★ Our modeled suggests that Big Mountain Resort's Adult Weekend ticket price should be **\$95.87** to match the US market
  - +\$14.87 > actual price
  - Larger than the mean absolute error of our model (\$10.39)
    - **Suggests room for increase in price**

# WHY?

- Big Mountain's facility offerings are highly competitive relative to the US market



# MODEL LIMITATIONS

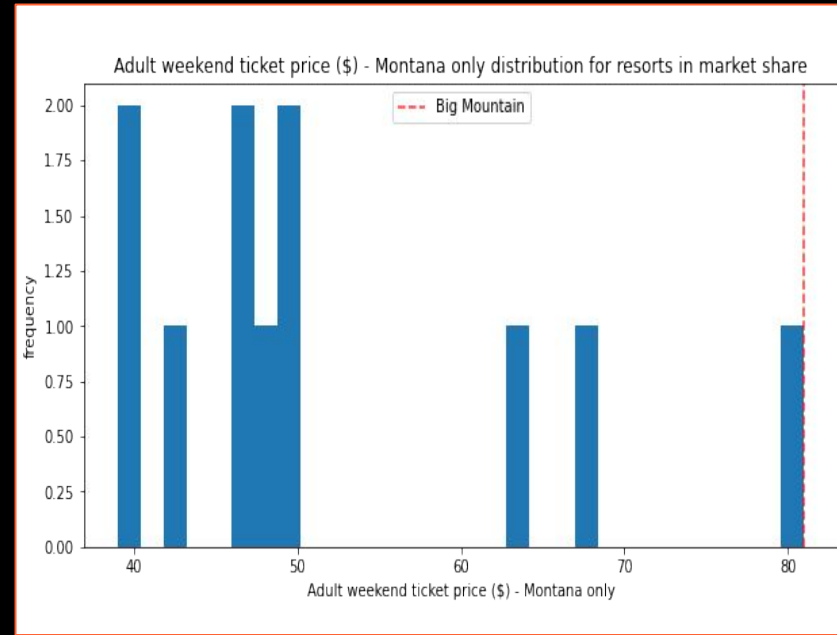
- Pricing data limited to ticket prices, omitting:
  - Fixed costs
  - Variable costs
  - Seasonal adjustments
- Model does not consider customer purchasing behaviors



# POTENTIAL GEOGRAPHICAL LIMITATION

- Big Mountain's location in Montana may be limiting ability to raise price:
  - Competition in the area
  - Community price agreements
  - Local socioeconomic factors

Big Mountain already has some of the highest ticket prices in the state of Montana



## Summary and Conclusion

- ★ Big Mountain Resort can increase its Adult Weekend ticket prices to match the US market, but must consider:
  - Model limitations
  - Geographical limitations