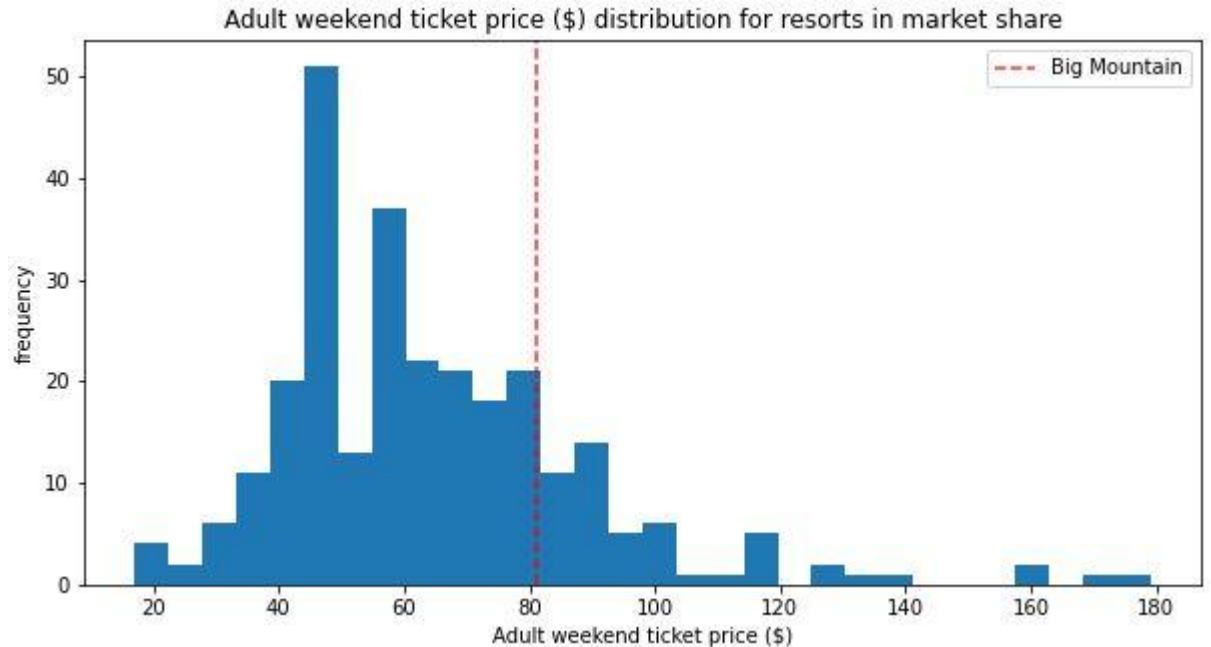


Big Mountain Pricing Report

By, Emeka Nwosu

Problem Identification

How can Big Mountain charge X% above the average price of resorts in its market segment for its ski resort tickets by cutting costs of trams, chairlifts, snow machines, of its ski resorts or making changes that will support the higher price by the next ski season.



Recommendation and Key Findings

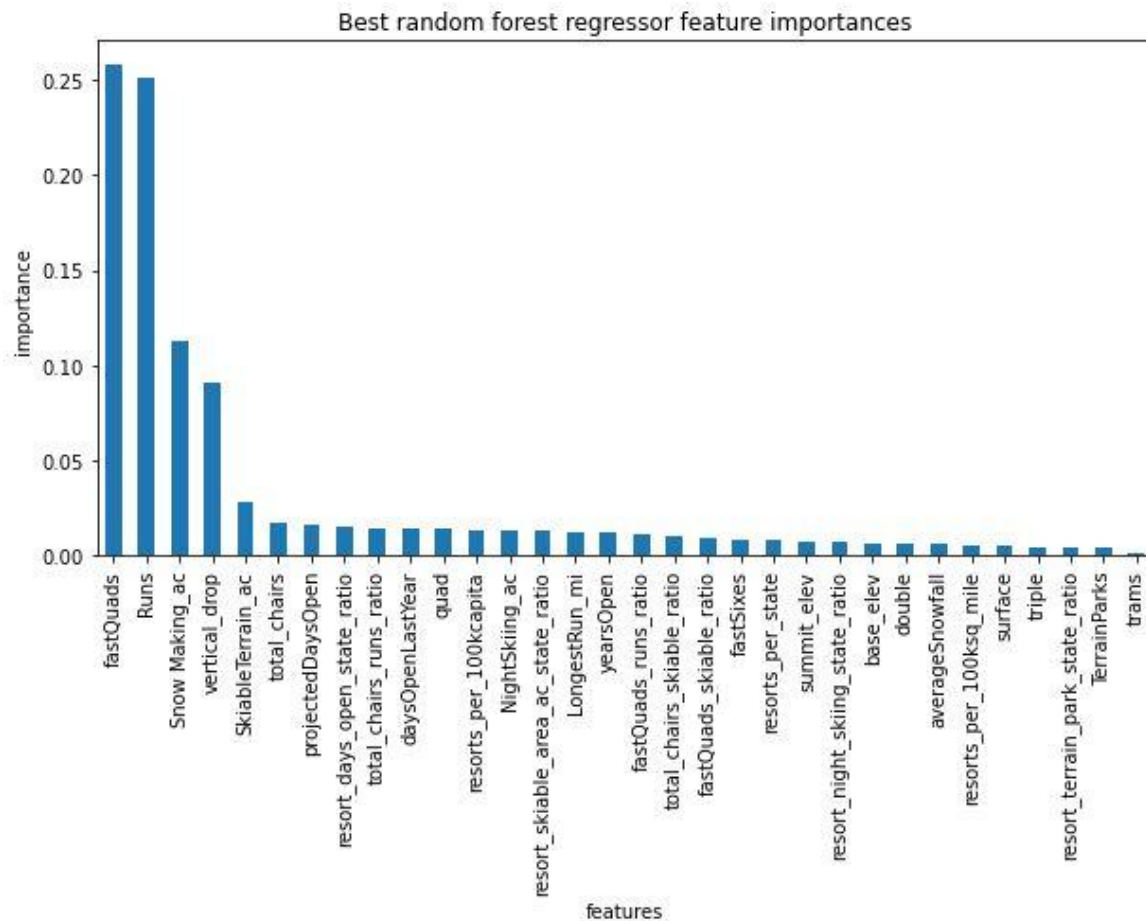
- **~\$5 price increase**
- **Strategically close runs**
 - 0-1 runs closed have same ticket price value
 - 3-5 runs closed have same ticket price value
 - 6-7 runs closed have same ticket price value
- **Suggested additions for \$3,474,638 in seasonal revenue**
 - 1 additional run
 - 150ft vertical drop increase
 - 1 additional chair lift
- **Non-useful additions:** Additional 2 acres of snow making

Model Selection & Accuracy

- **Model Chosen:** Random Forest
- **Other Models Tested:** Linear Regression
- **Error Rates:**
 - **Random Forest:** \$9.54
 - **Linear Regression:** \$11.79

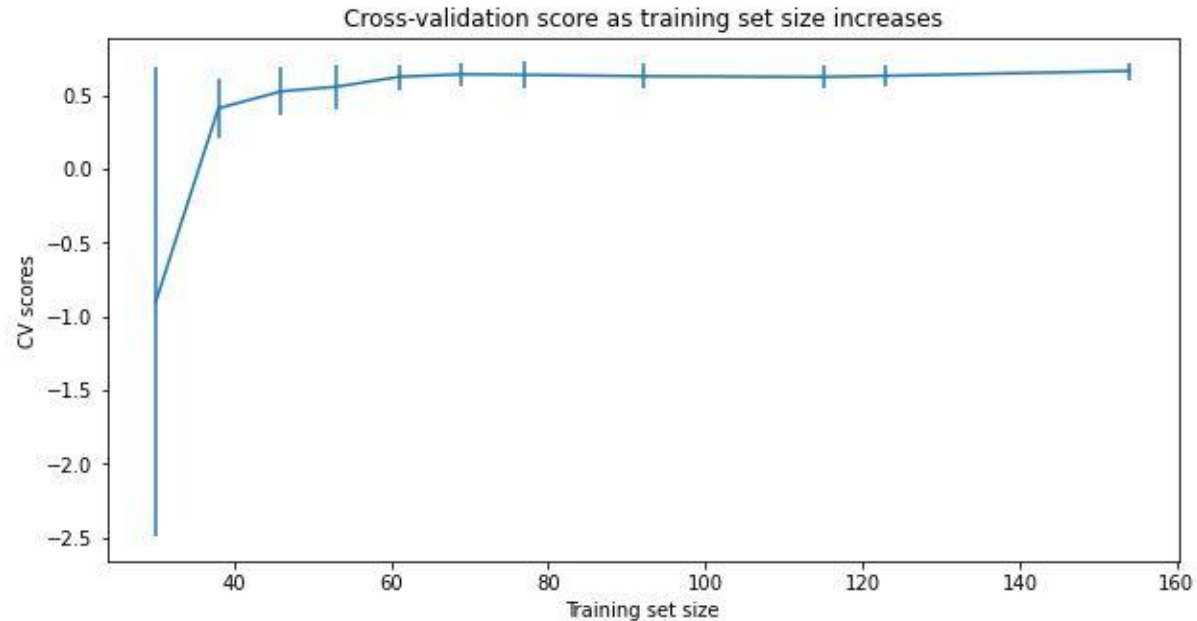
Top Predictors of Ticket Price

- fastQuads
- Runs
- Snow Making_ac
- vertical_drop



Data Quality

- Sample size is sufficient
- Cross-validation score levels off around 40-50
- We can reliably use this data for price modeling



Summary and Conclusion

- Big Mountain can safely increase ticket price by ~\$5 before any changes are made
- If runs are to be closed, do so incrementally. 1 closed run does not affect value
- 1 additional run with an additional 150ft in vertical drop and 1 additional chair lift justifies a ticket price increase of **\$1.99 (\$3,474,638 seasonal revenue)**
- Don't get caught up in being at the top of every category such as **Trams** or **Terrain Parks**