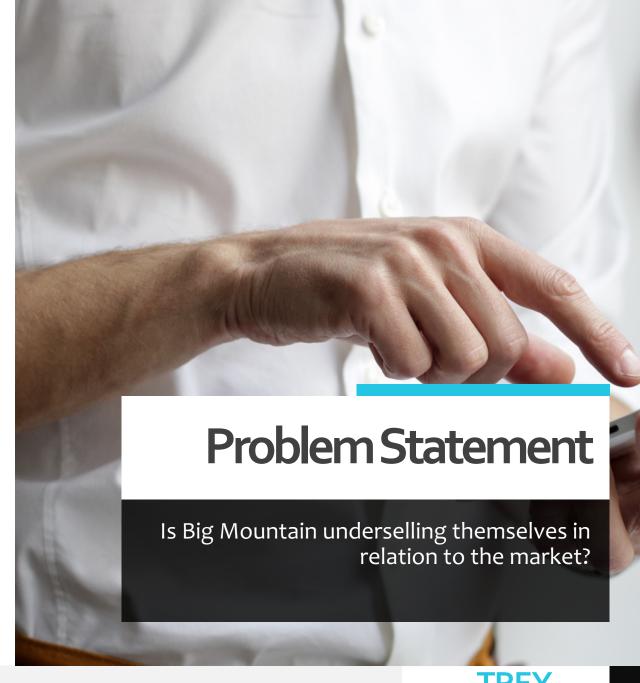


Objective:

- a. Understand where Big Mountain currently fits into the ski resort market (is Big Mountain charging enough for the experience they provide? How can we improve the experience?)
- b. Determine what opportunities exist to increase the top and bottom lines while improving the overall customer experience/perceived value of a lift ticket
- c. Create a pragmatic roadmap to realize future opportunities

Criteria for Success:

- a. Increase lift ticket sales by 12%
- b. Increase business profitability by 3-4%

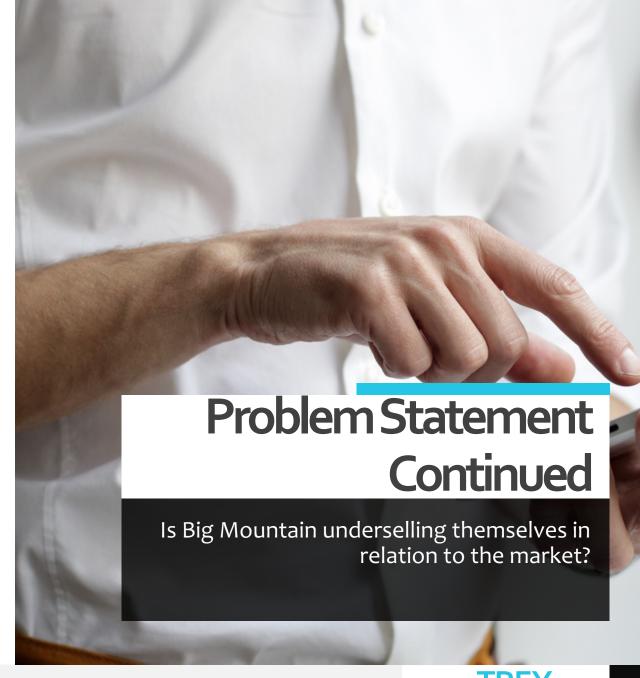


Scope of solution space

- a. Conduct cost-benefit analyses for proposed capital investments that may lead to higher returns
- b. Generate ideas to reduce waste/OPEX based on what the Customer considers to be "value-added"

Key data sources:

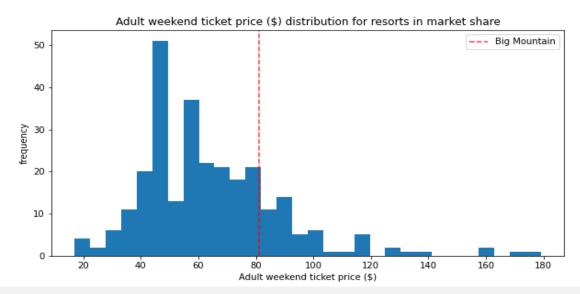
- a. Comprehensive ski resort dataset comprising of many features (independent variables) that may or may not influence ticket price
- b. State population data to create density/relational metrics



Key Findings

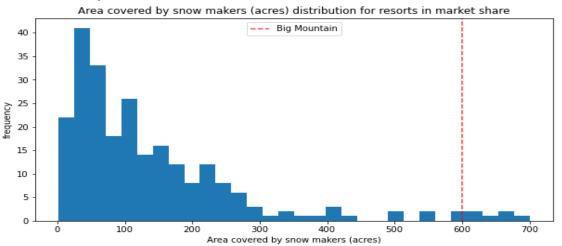
Current Market Position

- Based on the predictive model, it appears that Big Mountain Resort is undercapitalizing the Business
 - Modeled ticket price based on current conditions = \$95.87 +- \$9.65
 - Current average rate = \$81



What justifies the potential Premium?

- What do Customers really care about?
 - Total runs, Snow Making Area, Vertical Drop, # of Fast Quads, Total Skiable Area, Longest Run Length
- After analyzing the major variables, Big Mountain sits near the upper quartile for most (1 example shown below)





Recommendations

- Review the current topographic landscape and popularity of available runs
 - Get feedback from Customers on which runs they enjoy the most as well as pain points
- Discuss the viability of immediately increasing the ticket price by \$5-10 to support proposed improvements
 - Socialize the improvement roadmap with the Customers
- Finalize a price appreciation plan that coincides with the improvement roadmap to fully capitalize on market positioning



Preface on Modeling Results and Analysis

- Key assumptions:
 - Prices are set by a free market dictated by consumer demand versus available supply (all domestic resorts)
 - Not accounting for annualized visitor data or operating costs
 - Not accounting for demographic and gross household income differences as it relates to states/regions
- Is this analysis region-specific or all encompassing?
 - To determine this, we analyzed the state population to determine if certain states/regions should be characterized differently
 - Based on the PCA, we determined that it was best to consider all states/regions to be equal

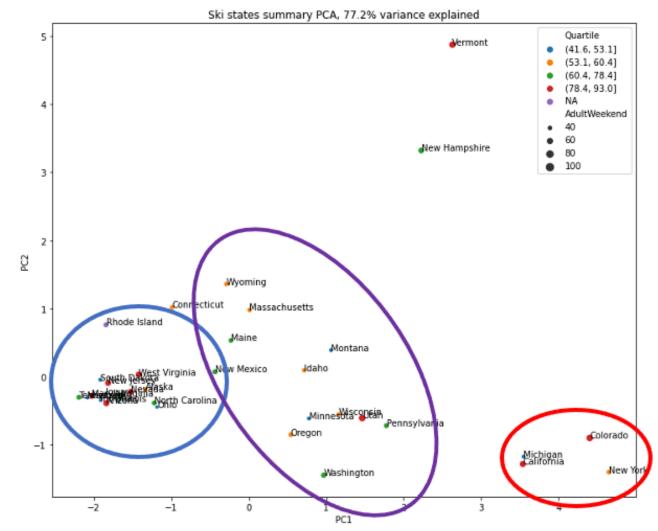
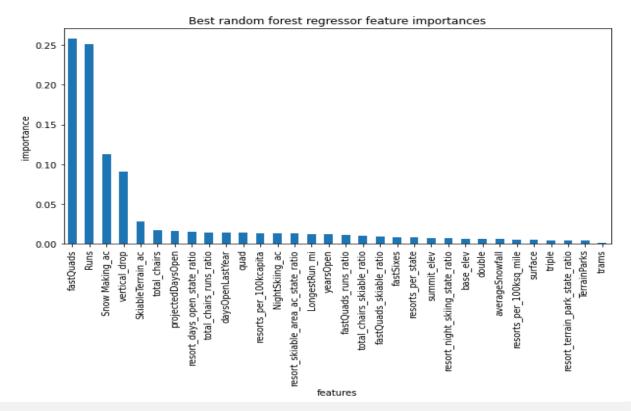


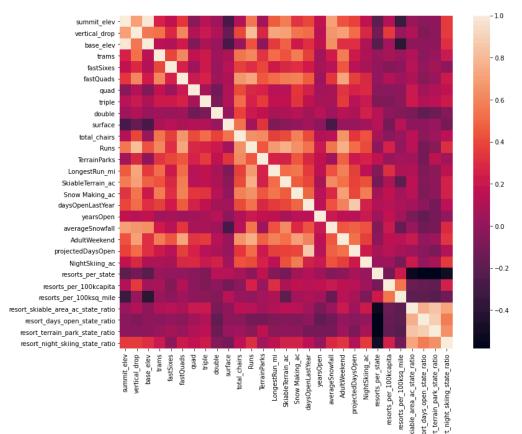
Fig. E - PCA analysis of state_summary data



Modeling Results and Analysis

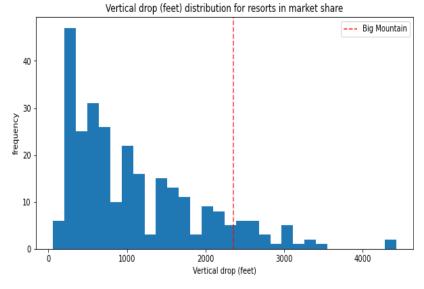
- How did we determine what the major features were and Big Mountain's current position?
 - Developed a correlation matrix to visualize magnitudes of influence for each feature
 - Created two models (simple linear regression and random forest)
 - Optimized the most accurate model (random forest)

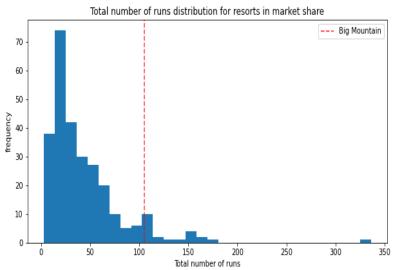


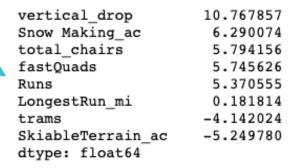


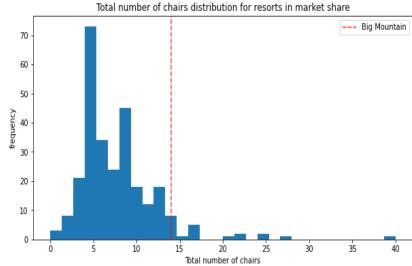
Modeling Results and Analysis Continued...

- What features are most important from a quantitative perspective
- How does Big Mountain fit in?





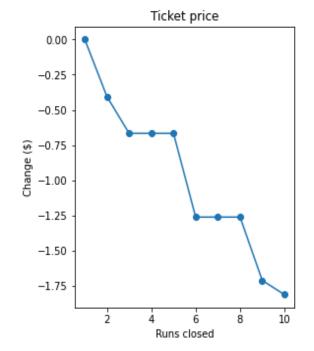


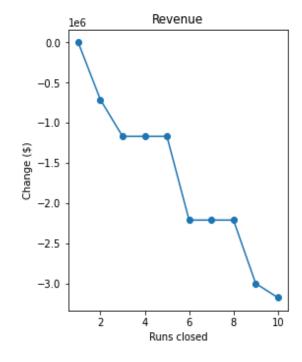


Modeling Results and Analysis Continued...

Modeling scenarios with subsequent results \rightarrow

- Scenario 1 close up to 10 of the least popular runs
 - See diagrams
- Scenario 2 add a run + increase vertical drop by
 150 ft + installation of new chair lift
 - Results from model yielded a ticket price increase of \$1.99
- Scenario 3 replication of scenario 2 + adding 2 acres of snow
 - Results from model yielded a ticket price increase of \$1.99
- Scenario 4 increasing the longest run by .2 miles + adding 4 acres of snow-making capability
 - Results from model yielded a ticket price increase of \$0





Summary and Conclusion

- Big Mountain is currently undercapitalizing their business and relative position in the marketplace (model calling for ~\$96 per ticket)
- Vertical drop, snow making capabilities, readily available transportation (lifts) and total amount of available runs influence the ski lift ticket price
 - Some potentially pertinent data was excluded from this analysis (gross household income/demographic data, annual visitors for each resort, operating parameters/costs)
- The model is capable of modeling additional scenarios based on adjusting inputs
- Leadership team should review their current pricing strategy and create an improvement roadmap to further enhance the customer experience (model can serve as guidance and justification)

