EXECUTIVE SUMMARY

BIG MOUNTAIN RESORT

Springboard Guided Capstone Project Report for Andrew Vo

Big Mountain Resort has engaged with us to explore their pricing strategy in light of their plan to install an additional chair lift to increase their distribution of visitors across the mountain.

Leveraging extensive data from over 300+ ski resorts in the U.S., we gained insights into the pricing market.

Our recommendation is two-fold.

First, we recommend Big Mountain Resort increase their daily ticket prices to $94, representing about an 18% premium over their current price.

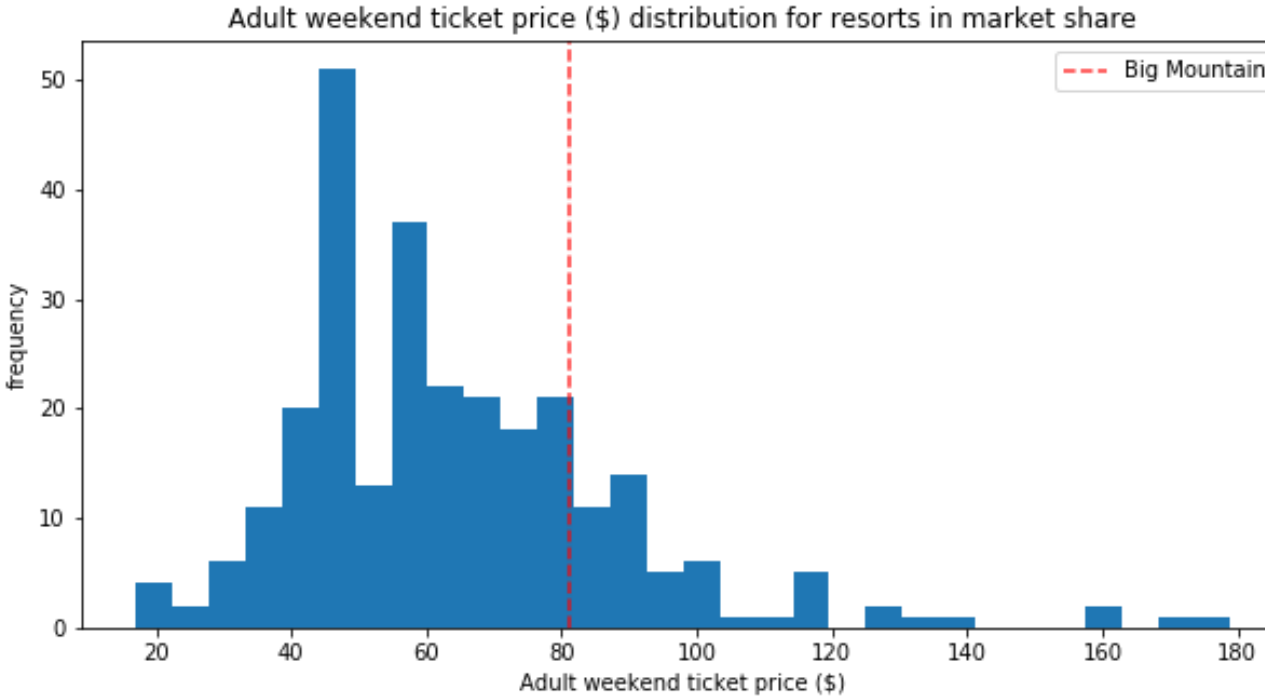
Our recommendation is based on extensive analysis using Random Forest Regression which leverages feature engineering we did using Principle Component Analysis to identify novel features of the data.

Second, we recommend closing one of the runs as we believe there won't be a material impact on revenue.

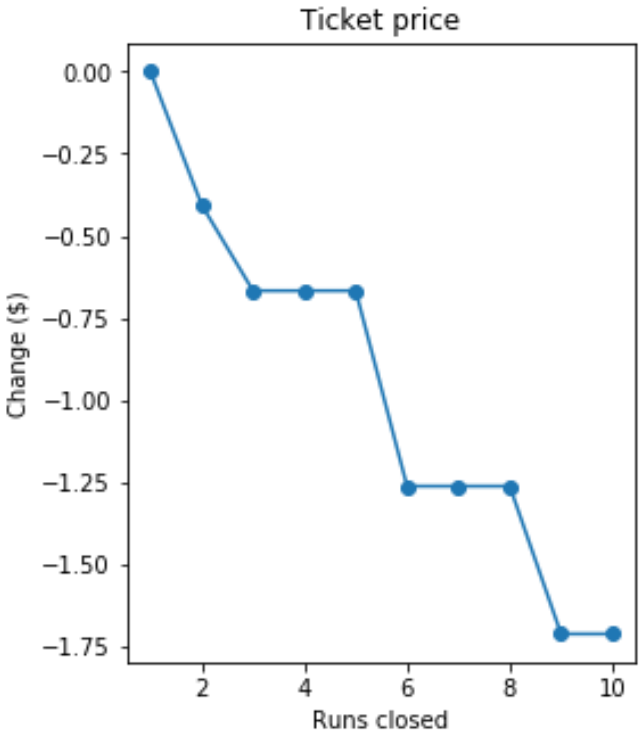
Third, once the additional chair lift is operational, we recommend increasing the ticket price another $2 to $96, which would be in line with the market rate for a ski resort of Big Mountain Resort's caliber.

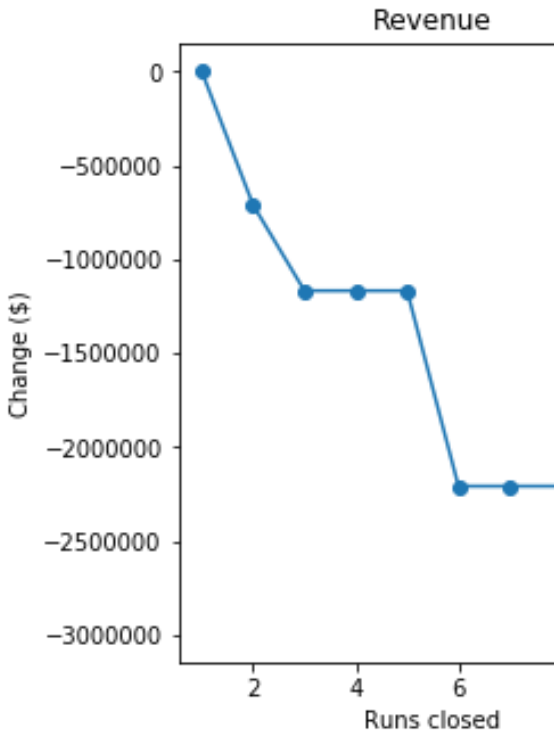
"Big Mountain Resort is currently under-pricing its tickets and we believe there is significant justification from our data analysis and predictive analytics to increase ticket prices per our recommendations."

Big Mountain is currently under-pricing its tickets compared to the market and should increase price by 18% to $94.



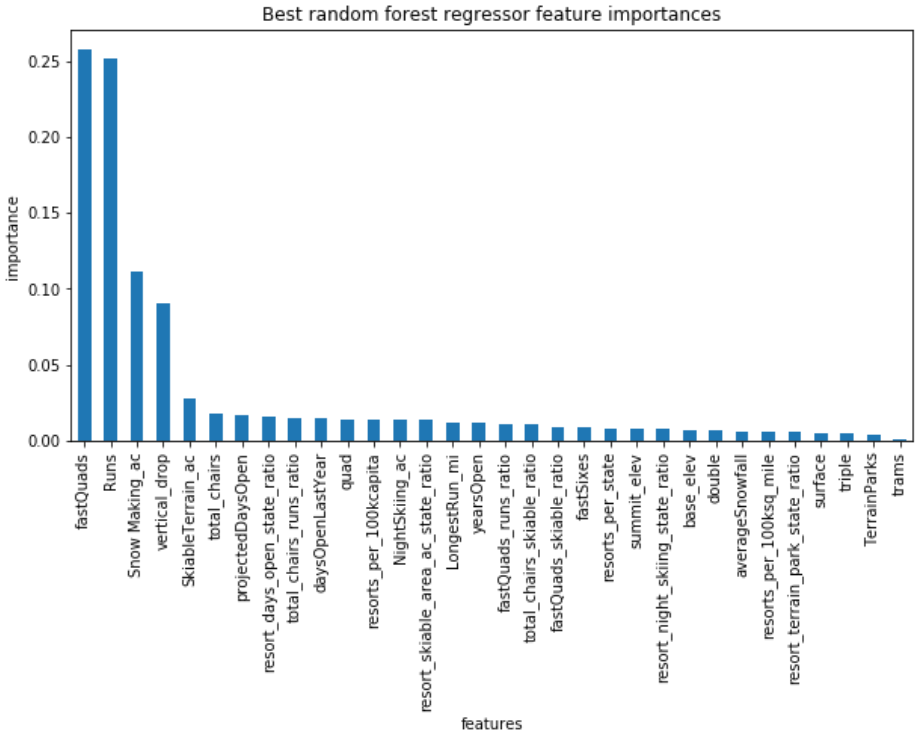
Closing a run is not expected to materially impact revenue.





DATA SCIENCE METHODOLOGY

Our machine learning model based on a Random Forest Regressor indicates the top four contributors to ticket pricing are the Number of "Fast Quads", Runs, Snow Making, and Vertical Drop.



A Correlation Analysis of our data set reveals generally low correlation, indicating that the prediction is not over-fitting the data.