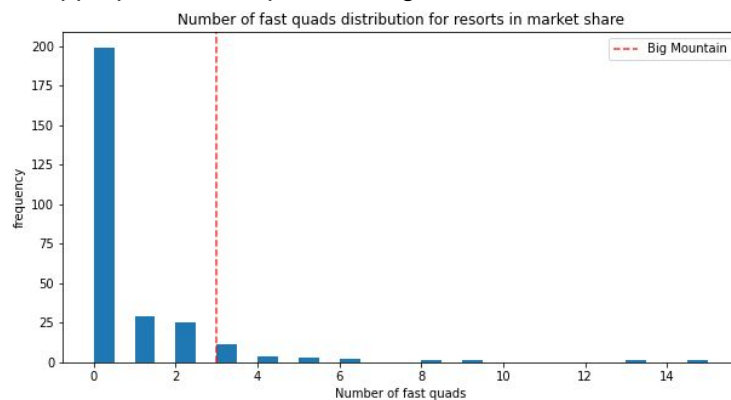


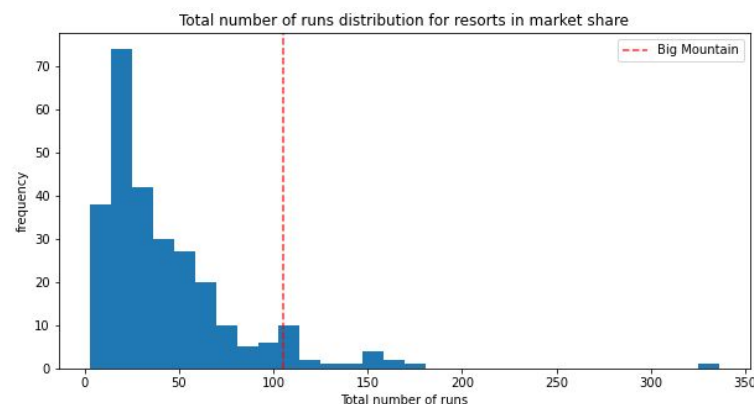
Big Mountain Resort Report

Big Mountain Resort currently charges \$81 for admissions; but after analyzing some of its important features and comparing them with other resorts in the United States, we have come to a conclusion that Big Mountain Resort's admission ticket can be repriced at a price of as low as \$85 and as high as \$105 in order to increase its revenue. Through machine learning models, four features were selected in order to predict the value of a ticket price at any given resort: The number of four person chairs, the number of runs present at the resort, the total area covered by snow making machines, and the vertical distance from the summit to the base.

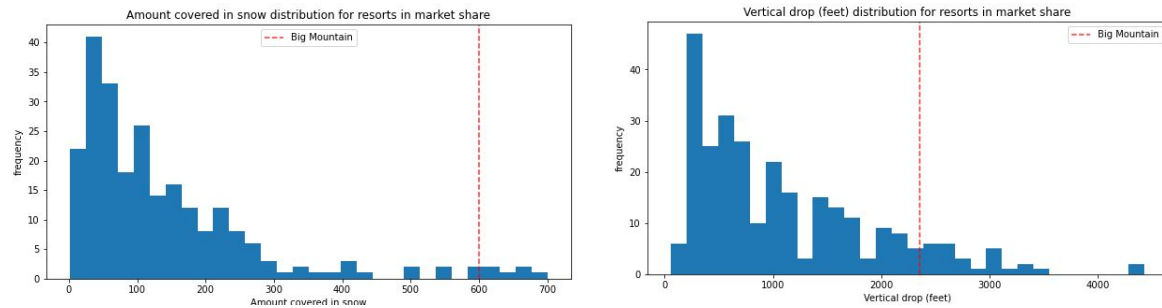
The number of four person chairs at a given resort showed the highest correlation with the resort's ticket price, which intuitively makes sense as that four person chairs provide better accommodation and transportation for large groups and families. As it can be seen on the figure below, more than 85% of the resorts in the United States have one or no four person chairs, as opposed to Big Mountain Resort having three four person chairs to accommodate for their visitors. This is a huge advantage that Big Mountain Resort has over most of the resorts in the nation, and the fact that this feature shows the biggest correlation to ticket price, is a very good sign in predicting the appropriate ticket price for Big Mountain resorts.



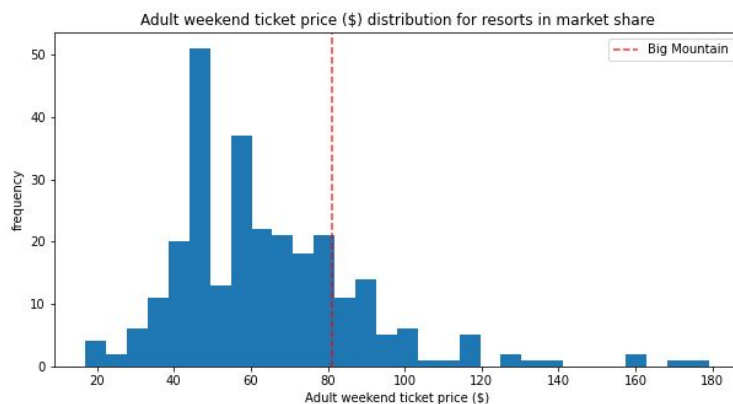
The number of runs present at the resort had the second highest correlation to the ticket price at resorts throughout the nation; and Big Mountain Resort was at a 91st percentile as shown in the figure below. This was another good indication that there is room for increase in the ticket price.



The total area covered by snow making machines and the vertical distance from the summit to the base had the third and the fourth highest correlations in determining the ticket price; and Big Mountain Resort was placed at 96th percentile and 89th percentile respectively. Several other important features such as the number of trams, the total number of chairs, the length of the longest run, and etc. were also examined, all of which Big Mountain Resorts also produced very good relative scores compared to the other resorts.



Despite all these superior features that Big Mountain Resort boasts, as shown in the figure below, setting its ticket price at merely \$81 only puts the resort at the 80th percentile for ticket prices. This clearly shows that the price should be readjusted to maximize the revenue for the resort.



Further ideas to increase the revenue for the resort is to decrease the number of runs at the resort; based on the correlation between the number of runs at other resorts and their resulting ticket prices, a decrease in one to 5 runs resulted in a very minimal decrease in the actual value of the ticket price, of around 25 to 80 cents..