

Big Mountain Ski Resort Ticket Price Value Analysis

Big Mountain Ski Resort in Montana accommodates roughly 350,000 skiers and snowboarders every year. The resort is serviced by 11 lifts, 2 T-bars, and 1 magic carpet for novice skiers as well as the new chair addition that adds \$1,540,000 to operating costs this season. The strategy to charge a premium above average market price may not be accurate to facility usage and operating costs. Big Mountain Ski Resort would like to select a new best value ticket price that is supported by the most efficient facility used to increase revenue.

The problem at hand is to identify the best adult weekend ticket price for Big Mountain Ski Resort given the popularity of resort services offered to guests. The value of each service to resort customers also needs to be re-evaluated so that any renovations made will best reflect what customers value in their ticket purchase.

The information about resort density that considered the resorts per state, total skiable area, total days open, total terrain parks, total night skiing, resorts per 100k capita and resorts per 100k square mile were generated into principle components. According to the feature correlation heatmap in Figure 1 in relation to the target feature, adult weekend ticket price, the services fast quads, runs, total chairs, snow making and resort night skiing ratio seem to be the most correlated.

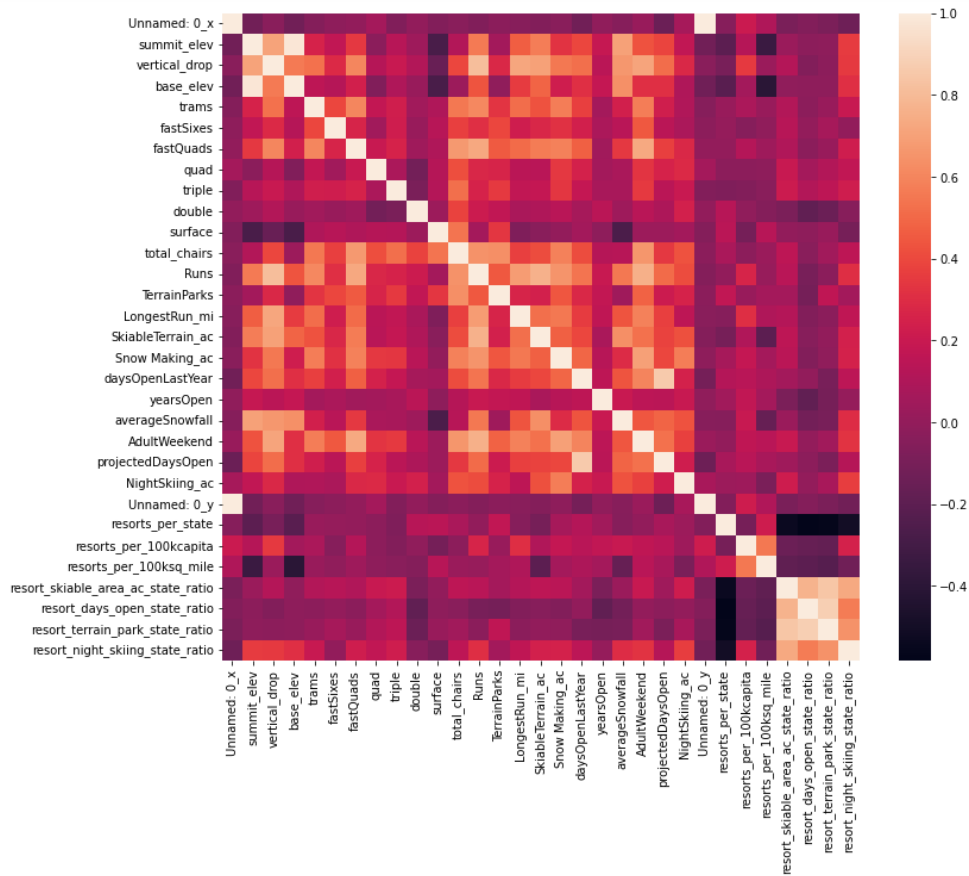
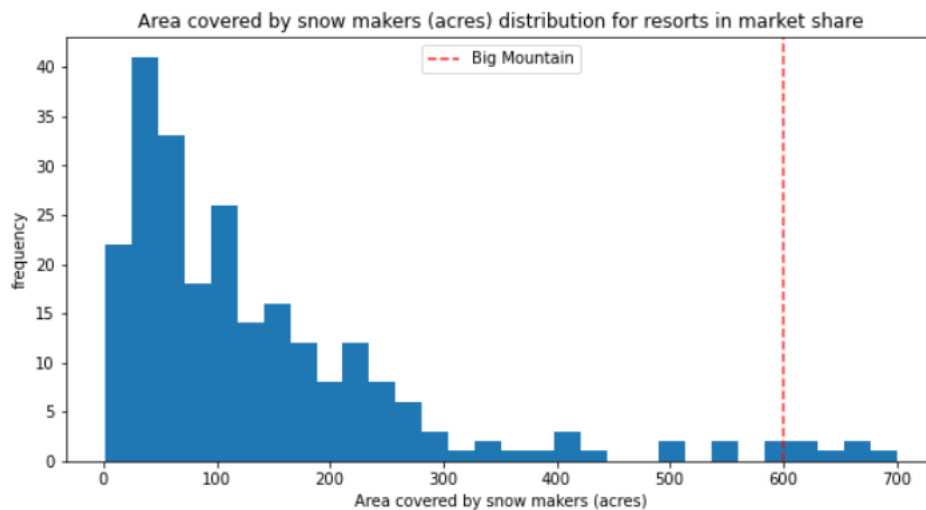
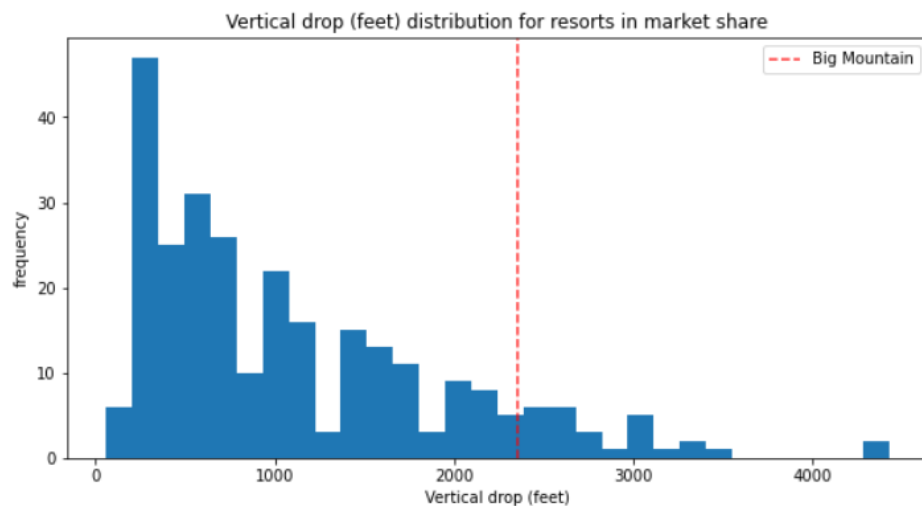
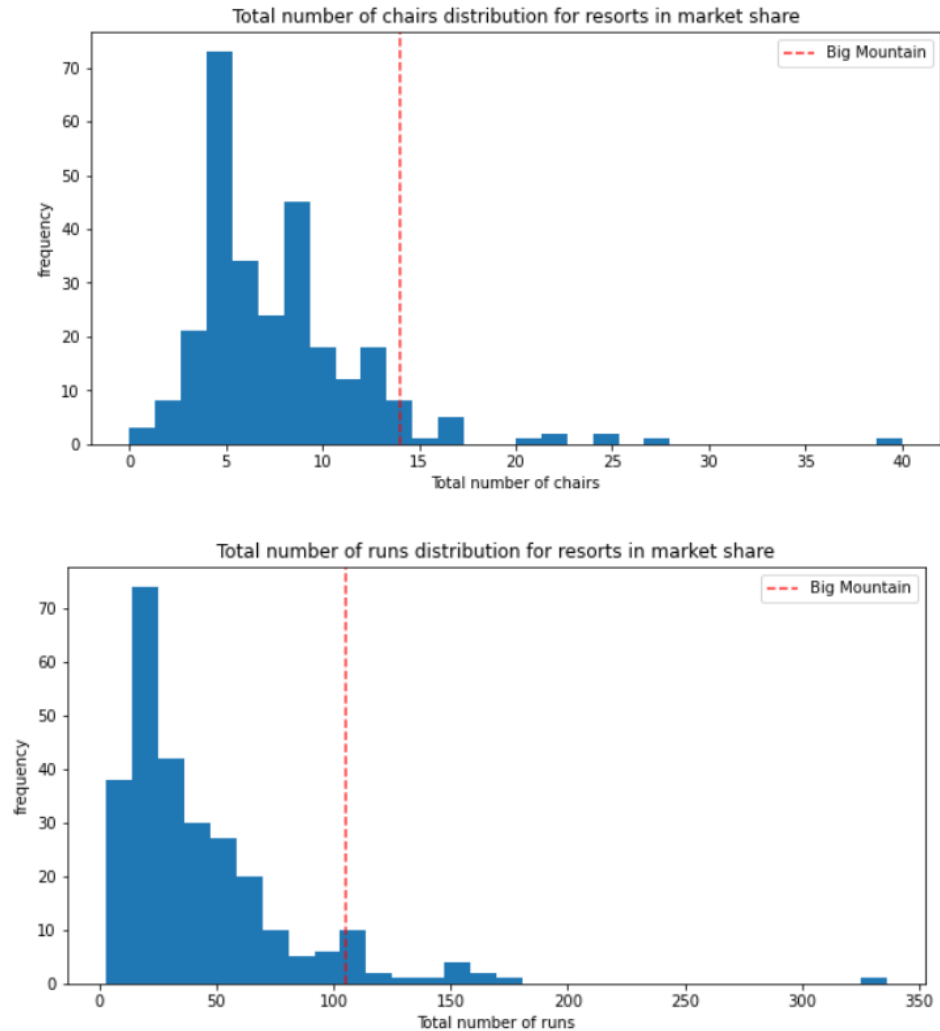


Figure 1

The final model that excluded Big Mountain Resort data concluded that the Big Mountain resort modeled price was \$100.24 when the current price is \$81.00. The mean absolute error was \$10.05, so even accounting for that there is room for increase in ticket prices. Considering the results of running the different scenarios, I would suggest scenario 2 which would be adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift. These changes would support an additional \$8.48 to the ticket price adding up to \$14,848,485 for the season.

As seen below, Big Mountain Ski Resort compares well for the vertical drop, number of runs and number of chairs. By favoring these features that were considered important to ski resort guests, the ticket price value should increase.





According to the data from ski resorts throughout the United States, the conclusion can be made that the best action items would be adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift. By executing these action items the value of the adult weekend ticket price at Big Mountain Ski Resort will increase by \$8.48. The other scenarios suggested would either produce no change or an increase of less than a dollar with additional work in enlarging the snow area covered.