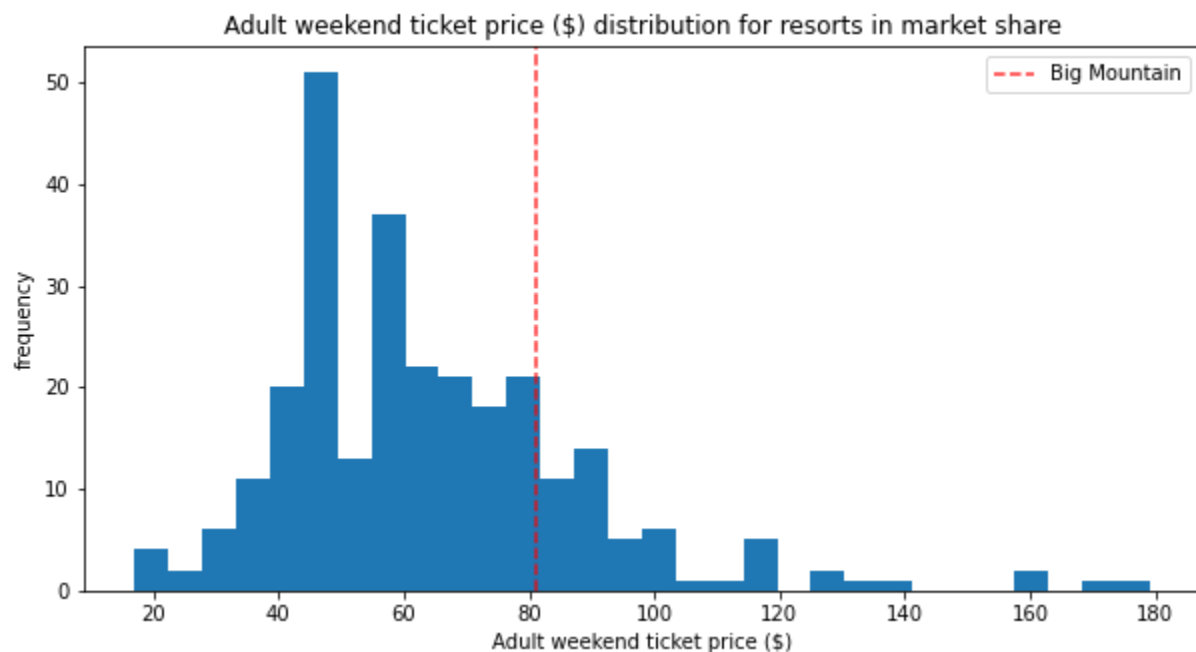


Big Mountain Resort Ticket Pricing Report

Big Mountain Resort has tasked us with the objective of finding an appropriate model of ticket pricing so that they can better charge customers for their facilities. Currently they are charging adult customers \$81 for a day pass, which was arrived at by taking the average price of all resorts in their market share. Figure 1 below shows where Big Mountain's price falls among all resorts. Although higher than most other resorts, it is our belief that, given Big Mountain's facilities, a significantly higher price is warranted. Using data on the facilities of all resorts in the same market segment, we were able to develop and train a model to get some usable results.

Figure 1:

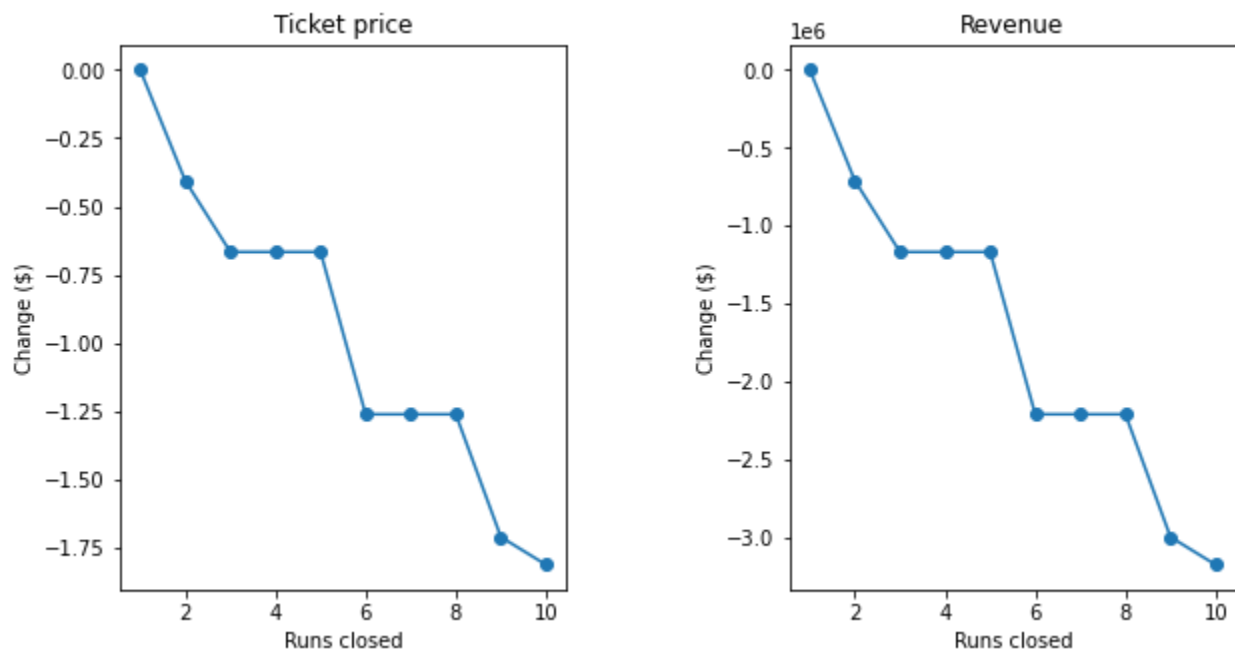


The resort data included ticket prices along with the numbers of various features contained within the resort. It is worth noting that some features were dropped from the data, such as the number of fast 8 person chair lifts, due to a large proportion of missing data values. With the remaining useful data, we were able to identify 8 features that were most associated with ticket prices. The following features were identified: vertical drop, snow making area, total chairlifts, number of fast quad chairs, number of runs, longest run, trams, total area of skiable terrain. When looking at Big Mountain's features

in relation to all other resorts, it is evident that it contains more features than most other resorts. Using the model designed using some of these more predictive features, we were able to price Big Mountain at \$95.87 plus or minus \$10.39. So even at the lowest end of our modeling, Big Mountain could realistically charge more than \$85 per ticket. It is our recommendation that Big Mountain increase their price by \$0.88 at the very least to cover the operating costs of their newest chair lift.

We were also asked to use our model to see how various strategies would influence ticket price. First we looked at closing up to 10 ski runs to reduce operating costs. Considering that the total number of runs was an important factor in ticket pricing, it was reasonable to assume that reducing total runs would require a lower ticket price. Figure 2 shows how revenue and ticket price changes with the number of runs closed. From the figure we can see that closing 1 run has no effect on price or revenue. Removing 2 runs has a small negative effect on price and removing 3 runs results in a further negative impact but no change is seen between removal of 3 and 5 runs. With these insights, it is our recommendation that Big Mountain only close 1 run at a time and to not exceed 5 closures in total.

Figure 2:



Of the other scenarios we were asked to model, the only one that showed a significant effect on ticket price was to add 150ft of vertical drop by the addition of a chairlift. As vertical drop and total number of chairs are positively correlated with ticket price, it is safe to assume that this change would justify a higher ticket price but we wanted to quantify this price change. Using our model we were able to determine that

this change could justify a ticket price increase of \$1.99. It is worth noting that the addition of snow making capabilities to the new run is of little value as it is too small to significantly impact ticket price.

In conclusion, without further data on operating costs of all resorts, it is our recommendation that Big Mountain Resort increase their ticket prices and make a few small changes to warrant further price increases. Without further changes to the mountain, Big Mountain Resort should charge at least \$0.88 more per ticket to cover their recent chair addition. They could likely increase the price by \$10 per ticket if needed to cover further expenses. If any of the proposed changes should be made to the mountain, we believe that increasing the vertical drop by adding a chair would be the most appropriate.