

Anthony Szabo

## Guided Capstone Project Report

I would like to recommend that the Adult Weekend Ticket Price be changed from \$81 to \$85 immediately. Compared to the most popular ski resorts across the country, Big Mountain is offering way more than they are charging. Big Mountain Resort offers more runs, chairs, total skiable area, fast quads, total vertical drop, and total snow making acreage than nearly all of the resorts in the country, while still charging a very moderate rate. The significance in this lies in the random forest regression model that relays fast quads, runs, snow making, and vertical drop being the 4 most important categories with respect to the median Adult Weekend Ticket Price. I would also suggest the addition of one run that would increase the total vertical drop by 150 feet and add another chair lift. Using the predict function, we can confirm that this would support another ticket price increase of \$1.99, increasing the year's revenue by over \$3.4 million. After the first ticket price increase, it should be monitored how that affects total ticket sales over the course of the year. Big Mountain Resort still offers way more than it's ticket value, and should seek to increase the price again to \$90 in the next calendar year, as long as the number of tickets sold hasn't decreased by more than 5%.