**Guided Capstone Project Report**

The ski resort market, including Big Mountain Resort, spreads across 35 states with several hundred competing resorts boasting amenities that draw thousands of skiers every year. After locating ski resort data that was composed of the names, regions, and states of every ski resort in the United States, there were several variables that emerged as key indicators in discerning the amenities most valued by those thousands of skiers. The vertical drop from the highest skiable point to the lowest skiable point, number of fast quads, number of ski runs in the resort, the snow making acreage and total number of chairs to carry skiers from run to run became key variables in comparing the ticket value for an Adult on the Weekend at Big Mountain Resort to its competitor resorts across the nations.

With the current ticket price for a Weekend Adult Ticket being $81.00, Big Mountain Resort was actually several dollars below the projected value for the same ticket our model indicated when factoring in the aforementioned variables and comparing them with the value of other ski resorts, with that price being ranged from $85.48-$95.87 per ticket at Big Mountain Resort. Currently, Big Mountain Resort lies relatively close to the mean Adult Weekend ticket price for ski resorts nationally, but in Montana it is the most expensive resort.

When modeling which areas warranted cuts or additions, we observed the following: The effect on ticket price when the number of runs is decreased, adding an additional run along with 150 feet to the vertical drop and one to the total number of chairs, and increasing the snow making acreage by 2. Increasing the snow making acreage by 2 acres in our model had no effect on the projected ticket price based on increased value and thus would be an insufficient use of resources. Similarly, in our model, cutting one run saw no reduction in projected value per ticket. However, cutting up to five runs would take $0.75 off of the projected value while taking up to ten runs off would take nearly $2.00 off the projected value per ticket. If removing a run is the path forward, keeping the number under 5 would be the best way to mitigate negative effects on the ticket price. Perhaps the best option available is to add a run, extending the vertical drop by 150 feet and adding an additional chair lift. This would justify an increase in ticket value of $1.99 with an annual boost in revenue at approximately $3,474,638. Perhaps removing a lesser used run, that does not affect the vertical drop, and replacing it with a longer run that increases the vertical drop and adds a chair lift is an acceptable path forward, as well as contemplating a moderate ticket price increase based on our model and how the Big Mountain Resort compares to its national competition.