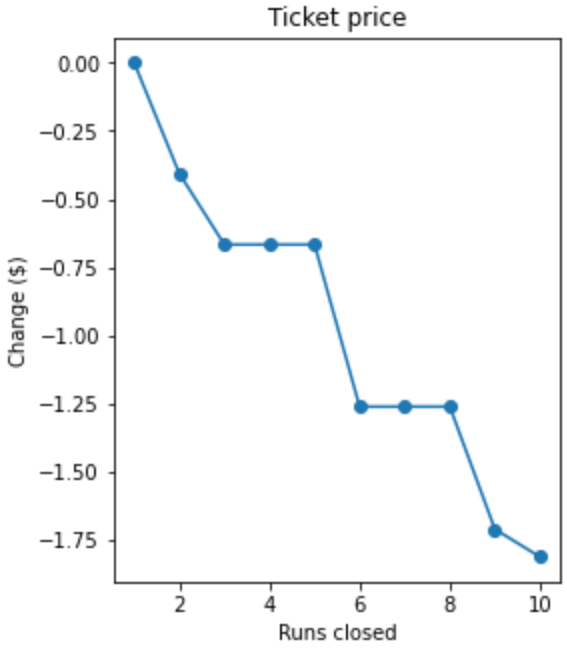
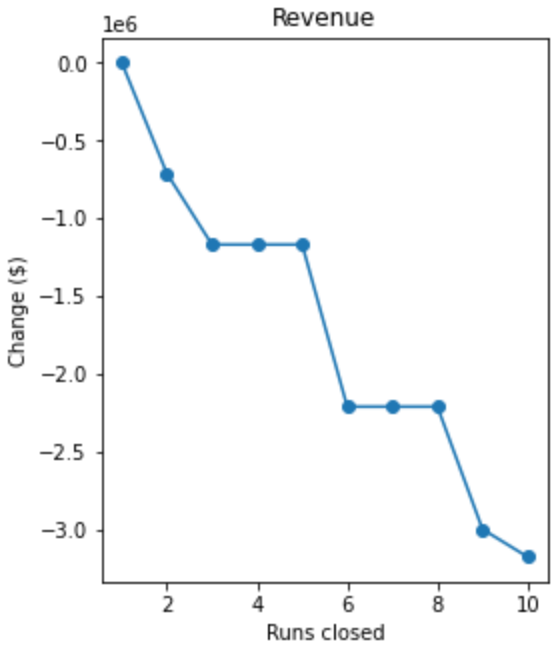
Guided Capstone Project Report

The data explored in this plan began by comparing weekend ticket prices to the multiple features that the resorts available provided. It was discovered that an increase in ticket price correlated with multiple features, with some notable being fast quads, number of runs, and amount of snow making. It is important to note here that visitors seemed to value more snow available. Other important factors that held a positive correlation included amount of night time skiing provided, which makes sense since this provides more skiing time. Vertical drop showed a positive correlation with ticket price as well.

Data of features provided by different resorts and their corresponding ticket prices was then collected and compared to the features provided by Big Mountain and its ticket price. In the state, Big Mountain proved to be well above average in key features, including vertical drop, area covered by snow, total number of chairs, fast quads, number of runs, and skiable terrain. This data along with average ticket prices of similar resorts supported the idea that Big Mountain could support a ticket price increase of almost $15, and even with an error of $10, this strongly supports a ticket price increase.

The business then focused on a few key options, including permanently closing down up to 10 of the least used runs, increasing the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage, increasing the vertical drop with an additional chair, but also adding 2 acres of snow making cover, and finally increasing the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres. When data was collected comparing the drop in ticket price needed per dropping run, it was discovered that closing one run would make no drop. Dropping one or two would cause a drop in price by less than a dollar, while dropping 3 would make no difference than dropping 5. Dropping more runs beyond that showed a greater drop in price and revenue.





Using the model created, the next test was increasing the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage, This showed the most promise, supporting a potential increase of ticket price to be $8.61, and a seasonal increase of $15,065,471. If this process is repeated, but also adds an additional 2 acres of snow, the ticket price could be increased by $9.90, with a seasonal increase of $17,322,717. Finally, increasing the longest run by .2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability shows no support in increasing ticket revenue.

Based on these findings, it is recommended that increasing the vertical drop with another chair would be the optimal choice. Also, dropping one run would not have any negative effect on ticket pricing. However, other options can be considered using the model that was produced, including another combination of factors that was not originally considered. Night skiing increase might be a good feature to include in modeling, and it could be combined in different ways with the options above to see what option could maximize revenue.