

## Big Mountain Resort Project Report

Big Mountain Resort is a resort for skiers and snowboarders that offers a variety of terrain and multiple trails. Due to demand, an additional chair was added this season, increasing operating costs by \$1,540,000. Management expressed that they wanted to maintain their goal of business profit margins at 9.2%.

Given the dataset and targeted goals, we looked to maintain 9.2% business profit margin before the next season. We saw viability in adjusting the pricing of adult weekend prices. We planned to roll out our changes onto one location to check if we could increase marginal prices before executing price changes among all branches of the resort. Constraints faced were the lack of customer satisfaction and traffic data as we could see the impact of the pricing change on customer satisfaction.

Through our team and stakeholders, we were effectively able to navigate through the data given to us – cleaning and standardizing our data as needed. The stakeholders were able to give us the background behind each value, which helped us contextualize the dataset. After running our model, we were able to create a successful model that was telling in how pricing can be adjusted and what it is correlated to. Given this model, we can also build further insights by utilizing this model and testing it on datasets to predict price for example. We saw that Adult Weekend prices were most correlated with Adult Weekday prices. Other correlations we had to account for was summit and base elevation, vertical drops, and miscellaneous variables such as quad, runs, average snowfall. Overall, our current model suggests that weekday and weekend prices are correlated and must be adjusted concurrently.

Running tests on our model, we expect to raise our adult weekend prices from an average of \$81 to \$88.77 average.