**Guided Capstone Project Report**

Currently Big Mountain Resort is one of the finest in Montana, with more skiing area and features than most of the resorts in the state. Our team examined strategies to cover the costs of the new chair lift, increase profits, and retain customers for next season, and through our analysis of statewide resorts and trends in pricing we recommend that Big Mountain resort consider adding a run with a higher vertical drop and increasing its ticket price by $1.99.

A large indicator of prices for adult tickets is skiable area and accessibility to it, such as trams and chair lifts. Customers are willing to pay more for a resort that offers higher vertical drops and longer runs, which is often correlated with large resorts such as Big Mountain. By training our models on resort data from around the country, we were able to distinguish the features that customers value the most and predict ticket prices based on demand for those types of resorts. While Big Mountain Resort already has a higher ticket price than average in Montana at $81, it also has more skiable terrain, longer runs and more transportation features than the vast majority of resorts in the state. Our models predicted that the new chair lift costs could be covered, and revenue increased in the new season, by also increasing the vertical drop and adding a run, as these are high value features in a resort of Big Mountain’s size. With the new chair lift, increased vertical drop and longer run, Big Mountain Resort could increase its ticket value by $1.99, leading to an increase of almost $350,000 in profits over the next season.