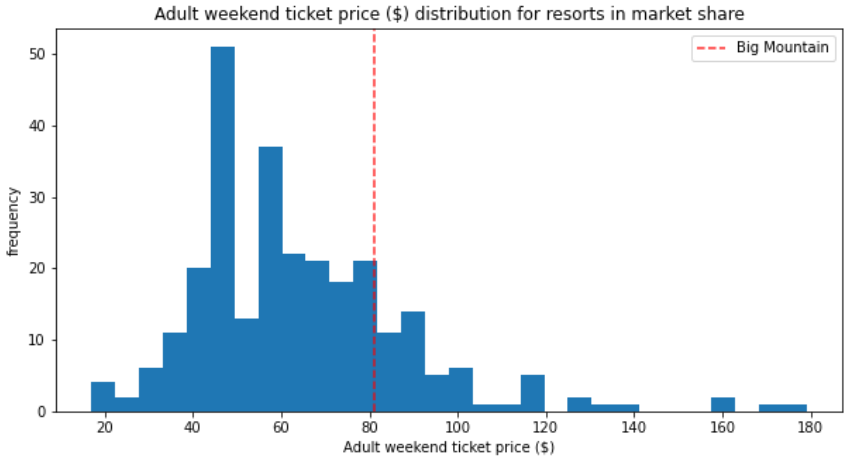
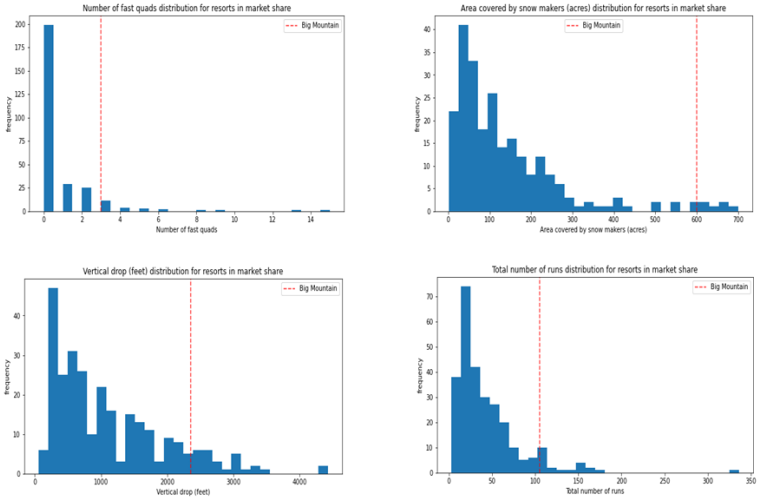
Guided Capstone Project Report

Big Mountain Resort, a ski resort in Montana provides about 350,000 skiers, snowboarders, and visitors with spectacular views of Glacier National Park and Flathead National Forest. BMR has installed a new chair lift to complement its existing navigation system and increase visitor distribution across the mountain. The new chair lift will increase operational costs by $1.54 million this season. Considering the additional costs, an in-depth analysis of the available data has been made in order to identify a value-based strategy for competitive ticket pricing. Currently, BMR has priced their tickets at $81 per day, which can be seen in the figure below in relation to other resorts through the US. After analyzing data from resorts throughout the United States, we have concluded that Big Mountain Resort has the necessary facilities to justify raising the price of each ticket by $10-$15.



We have verified that BMR ticket price should be analyzed with respect to the entirety of the United States market considering there was no indication of a relationship between state and ticket price. Additionally, the principal features which contribute to ticket pricing were identified and used in order to predict the appropriate ticket price for Big Mountain Resort: total number of fast quads, total number of runs, snowmaking acreage, and vertical drop. The importance of the remaining features dropped significantly with respect to the referenced four. The plots below display Big Mountain Resort performs well in each of the four target features.



The predicted price for Big Mountain Resort using data from other resorts across America is $95.87. We are confident the recommended price is within $9 of the true value-based price of a ticket for BMR. Due to the variance of the results, we would suggest increasing the ticket price by at least $10 for a trial period to determine consumer reaction to the new price. Confidence in the recommended price could be increased by gathering further data such as the proximity to major airports, number of skiers visiting other resorts, length of stay for each visitor at other resorts, and types of tickets sold (daily, weekly, season). As further data is acquired, we would suggest automating the prediction process in order to allow the business analysts to efficiently monitor the status of our ticket pricing. Among the options submitted for review, we would suggest Scenario 2 in which Big Mountain is adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift. This scenario will support a ticket price increase of $1.99, which we expect would generate an increase in revenue of $3,474,638.