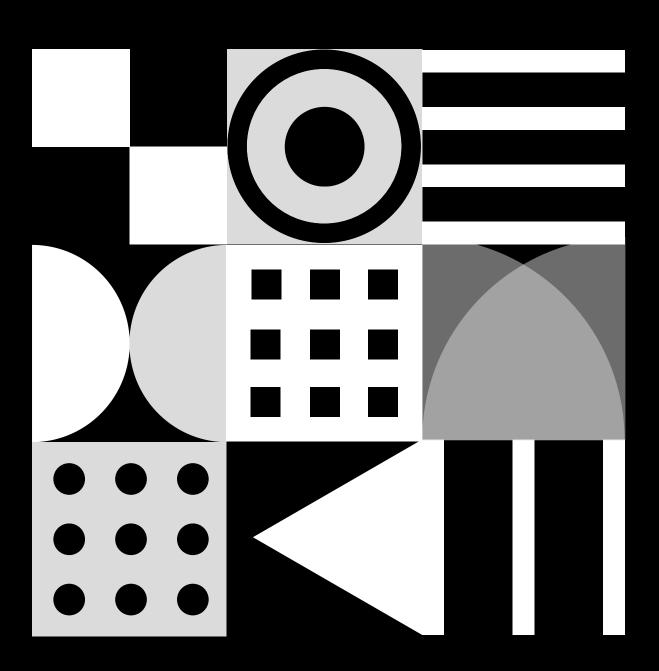
Guided Capstone Project Report

2023



The Market

After modeling, the price for an Adult Weekend ticket is \$95.87. Even with the expected mean absolute error of \$10.39, this suggests there is room for an increase from the current actual price of \$81.00.

Comparing where this falls within the Montana market, Big Mountain's current actual price is the highest ticket price for the state with two distant price competitors.

Looking at the greater US market, increasing the ticket price is supported in comparison as well. Big Mountain is very high up on the league table of snow making area and has amongst the highest number of total chairs. Those Resorts with more appear to be outliers.

Additionally, most resorts have no fast quads. Big Mountain has 3, which puts it high up on the league table. There are some values much higher, but they are rare.

Big Mountain also compares well for the number of runs. There are some resorts with more, but not many.

Big Mountain also has one of the longest runs. Although it is just over half the length of the longest; the longer ones are rare.

Finally, Big Mountain is among the resorts with the largest amount of skiable terrain.

Scenario Results

01 | Close up to 10 runs

The model says closing one run makes no difference. Closing 2 reduces support for ticket price and revenue. If Big Mountain closes down 3 runs, it seems they may as well close down 4 or 5 as there's no further loss in ticket price. Increasing the closures down to 6 or more leads to a large drop.

02 | Increase vertical drop without snow

This scenario increases support for ticket price by \$1.99. Over the season, this could be expected to amount to \$3,474,638.

03 | Increase vertical drop with snow

Such a small increase in the snow making area makes no difference from Scenario 2. This scenario also increases support for ticket price by \$1.99. Over the season, this could be expected to amount to \$3,474,638.

Scenario Results

04 | Increase longest run to 3.5 miles.

Modeling showed no impact to ticket price valuation.

Looking at the market, Big Mountain is doing well for vertical drop, but there are still quite a few resorts with a greater drop. As Big Mountain is performing well for other features, Scenarios 2 or 3 would lead to increased support for a higher ticket price, creating additional revenue to cover the new operating costs, it also represents an opportunity to increase competitive advantage.

If business strategy is more focused on cutting expenses to meet the new break-even point, I would seriously reconsider closing anything more than 1 run. The impact to the ticket price even at only 2 closures is significant. With number of runs identified as a high value feature, I would suggest further analysis before making any decisions to continue with this scenario.

Executives already suspected that Big Mountain Resort was undervaluing its ticket price so while the size of the difference might be surprising, overall modeling results are in line with expectations. It is possible that because of the density ratios first explore in EDA that to the regional market, we might be valued correctly but when looking at the market as a whole, Big Mountain Resort is quite competitive in the features it provides.