Big Mountain Resort

Big Mountain Resort has recently approved the construction of a new chair lift, which will cost $1,500,000. The resort is already charging a high ticket price, compared with other resorts. The executive team would like to increase revenue without a large increase in ticket prices in order to pay for the new lift. In this report I will demonstrate how Big Mountain Resort can take advantage of their facilities to increase revenue. In addition, I will discuss how ticket prices could be reduced by making a few facility changes.

Currently, Big Mountain Resort is charging $81.00 for an Adult ticket. After performing analytics to compare Big Mountain with other resorts in the US market, it was determined that Big Mountain could charge up to $95.87 per ticket. Charging the higher ticket price would increase revenue by $25,917,500.00. This assumes on average 350,000 skiers visit annually and stay for five days.

This dramatic difference in ticket prices is due to the large number of facilities this resort has compared to other resorts in the market (see Figure 1). Compared to other resorts in the US market, Big Mountain is high up on the list for vertical drop, snow making area, number of chairs, number of runs, and longest run. It also has three fast quads, which is more than most resorts. For these reasons, the model predicted a high ticket price.

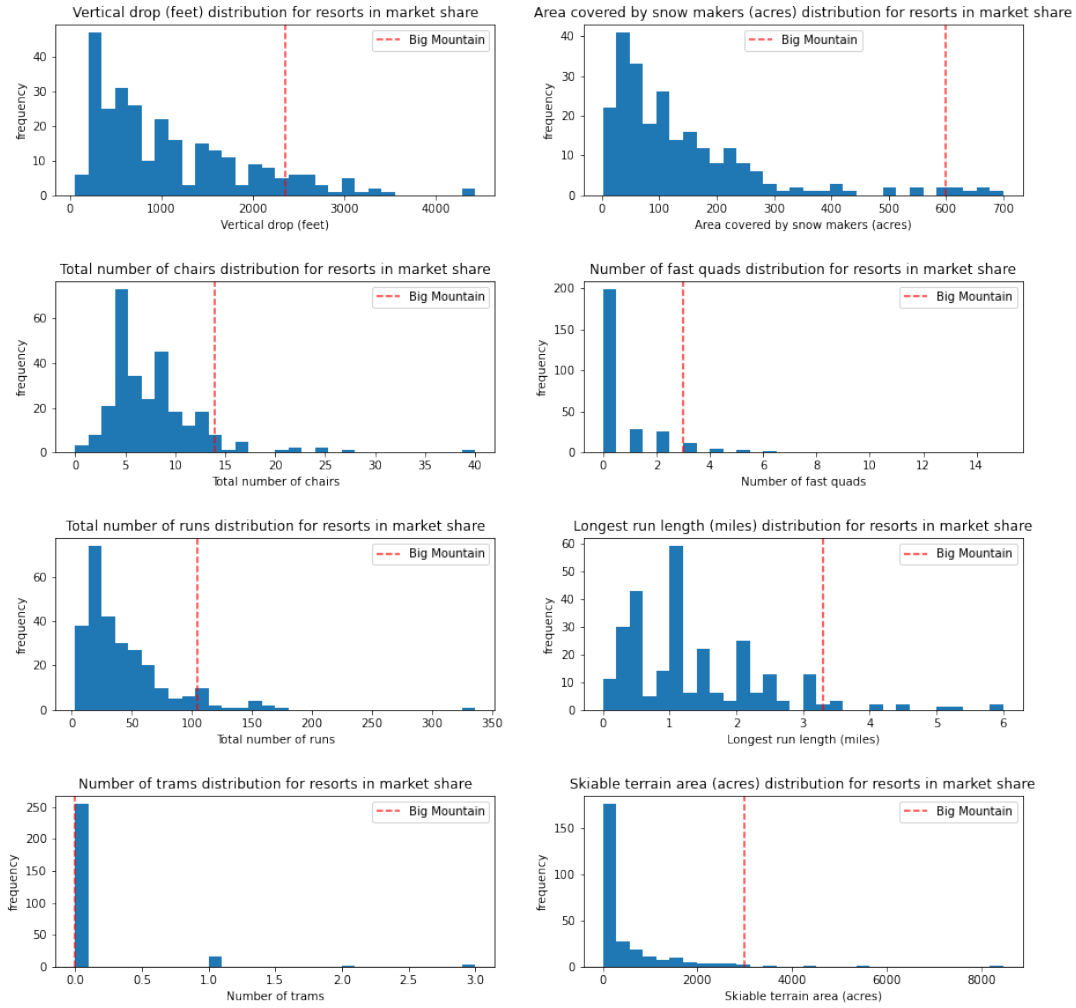

Figure 1: Comparing Big Mountain with other resorts in the US market.

Vertical drop is a large driver of ticket prices at resorts. The executive team proposed increasing the vertical drop by adding a run to 150 feet below the resort and building an additional lift which would carry skiers back up. Given this scenario, the analysis supports an increase of $3,474,638 in revenue, while only increasing ticket prices by $1.99.

The resort could charge less on ticket prices if they closed runs, but this would also lead to a reduction in revenue (See Figure 2). If 3 - 5 runs are closed, the ticket price can be reduced by $0.70, while decreasing revenue by $1,200,000. If 6 - 8 runs are closed, the ticket price can be reduced by $1.25, while the revenue would decrease by $2,200,000. Dropping up to 10 runs would mean a reduction in revenue of a little over $3 million and drop in ticket prices by $1.80. Therefore, it might be worth closing runs in phases to test this scenario: Phase 1: close 3 runs, Phase 2: close 6 runs, Phase 3: close 10 runs.

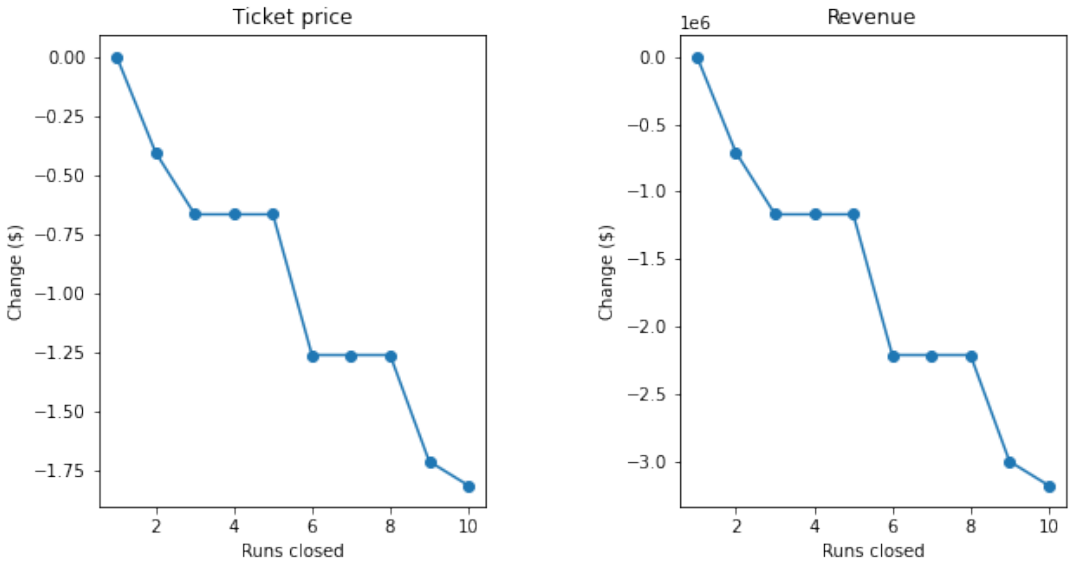

Figure 2: Model predictions on the change in ticket price and revenue when closing runs.

In conclusion, I would strongly suggest increasing the vertical drop at Big Mountain to increase revenue by ~$3 million, while only raising ticket prices by $1.99. I would also recommend exploring closing runs to reduce costs and ticket prices.

If the executives approve of this model, I could make it available to them to experiment with through a web interface. The model could be deployed on a company server. The software team could create a webpage that interacts with the model. The layout would include each feature used by the model and allow the user to input different values for each feature. A button would run the model and output predicted changes in ticket price and revenue for the executive team to review.