

# BIG MOUNTAIN RESORT

Big Mountain Resort's ("BMR") current pricing strategy has been to charge a premium above the average price of resorts in its market segment. Although this strategy acknowledges that BMR houses above-average qualities and facilities, it does not pinpoint what those specific strengths are, unable to capitalize on them as much as it should. This report will highlight the drivers of a ticket price, how BMR fares on those features compared to other resorts, and how it can adjust its ticket price accordingly. It will also explore a number of proposed changes regarding cost cuts or new facilities, including the recent addition of a chair lift, to assess their viability.

## Recommendation

The analysis done supports a price increase from the current \$81.00 to \$95.87. Taking into account the model's potential error of \$10.39, the conservative estimate of \$85.87 still advocates a higher ticket price. This is backed by BMR's better facilities in four integral features pinpointed to be large drivers of adult ticket prices.

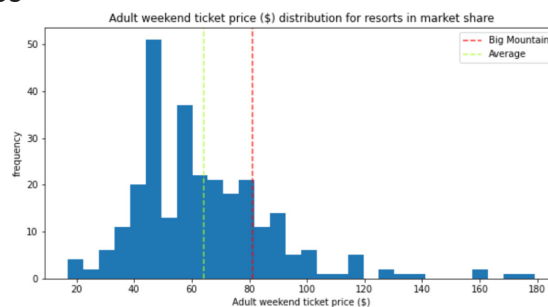
In decreasing order of importance, these features are: the number of fast four person chairs, the number of runs on the resort, total area covered by snow making machines, and the vertical change in elevation from highest lift-served point to the base.

## Analysis

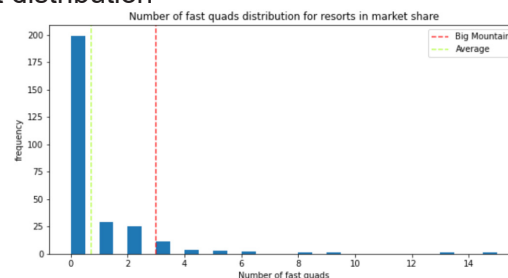
Although BMR's current ticket price is already one of the higher ones among all resorts, charging more is well justified when BMR's features are examined in the context of other resorts'. The distribution of ski resort ticket prices illustrates BMR on the higher end of the spectrum (see Figure 1.1).

BMR consistently places on the higher end of the distribution for resorts in four features: the number of fast four person chairs, the number of runs on the resort, total area covered by snow making machines, and the vertical change in elevation from highest lift-served point to the base — all of which are important features in predicting ticket prices (see Figures 1.2, 1.3, 1.4, 1.5).

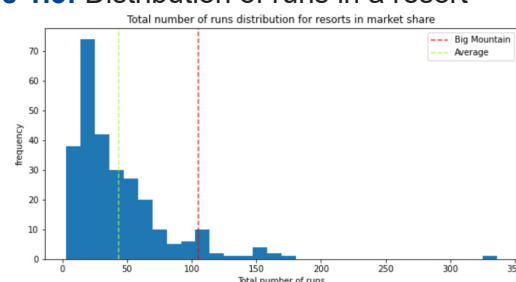
**Figure 1.1:** Distribution of adult weekend ticket prices



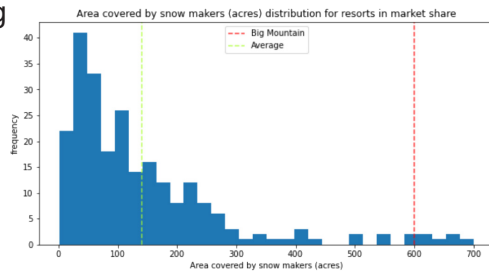
**Figure 1.2:** Number of fast four person chairs in a resort distribution



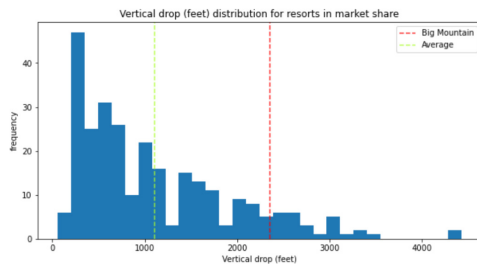
**Figure 1.3:** Distribution of runs in a resort



**Figure 1.4:** Distribution of area covered by snow making



**Figure 1.5:** Number of fast four person chairs in a resort distribution



## Proposals

Our model is useful to not just predict a ticket price, but also assess changes in resort features, evaluating its impact on the resort's revenues.

First, we took a look at the latest change this season: the addition of a new chair lift at a \$1.54M operating cost. Unfortunately, one sole chair does not yield enough of a ticket price increase to offset its cost. The model predicted a +\$0.29 change in prices; with 350,000 expected visitors during the season, each skiing for an average of five days, this modification would generate only a +\$500,000 change in revenues.

In order to balance this loss, a run could be closed since the model shows that closing one run will have no apparent downsides in ticket prices. As such, operating costs would decrease without undermining its gross revenue.

Another option would be to add another run, increasing the resort's vertical drop by 150 feet. This transformation would support raising the ticket prices by \$8.61, ultimately leading to a \$15,065,471 growth in revenue, comfortably offsetting the cost of the already installed additional lift. It should be noted that this scenario would only make sense if there was already a lift that could accommodate this new run. Otherwise, another lift would also need to be added.

The model can also gauge areas to cut costs. For example, it demonstrates that closing two runs

would result in a ticket price drop by \$0.41 (and a decrease in revenue accordingly). Closing three runs leads to an additional fall in ticket prices; however, closing one or two further runs (total 4 or 5) has no further impact. As such, if the resort had to close three runs, it may as well close five runs to minimize its operational costs without any further loss on its ticket price. Closing six runs, however, leads to a sharp decrease in ticket prices.

## Limitations

It's worth noting that the model relies on the large assumption that other resorts' prices are market prices. Because the model is trained on other resorts' data to accurately predict the market price of BMR, the other resorts' prices are assumed to also be a reflection of a market price, rather than an undervalued or overvalued ticket price.

Furthermore, the model predicted only weekend prices for adults, although there are both weekend and weekday prices, and potentially children ticket prices. This is especially relevant considering that BMR's average skier buys tickets for five days, inevitably including some weekdays.

## Conclusions

Given the above limitations, the model well predicted that BMR should increase its ticket price as it would be justified by its advantage in the number of fast four person chairs, number of runs, area covered by snow making, and its vertical drop. As such, rather than using its current pricing strategy, the resort should increase its ticket price as a reflection of its strengths. Customers, who notice the difference in this quality, will understand the change in ticket price given BMR's better facilities.

If this model is implemented, it can be applied to estimate the effect of future developments in the resort, how much a potential change in a facility (positive or negative) would impact the ticket prices and the revenue.

In the future, it would be exciting to see the model shared with BMR's analysts for further exploration, including improving it with information on the number of visitors or details about BMR's operating costs. A user interface can also be created for business executives, wherein they easily input their proposed changes to see how ticket prices would be affected.