

‘Big Mountain Resort’ price modeling

Mar 26, 2024

Problem statement

- Installing an additional chair lift increased company's operating costs by \$1,540,000 for the season, which had a negative impact on profitability.
- The company is considering ways to improve profitability by increasing the ticket price and / or cutting the costs.
- Data science team created the model:
 - To predict ticket price that reflects the value of Resort's facilities.
 - To check which scenarios would have further positive impact on profitability.

Data used for the analysis

- Tickets prices and facilities data of the 330 skiing resorts in the same market segment as “Big Mountain” resort, combined with state area and population data.

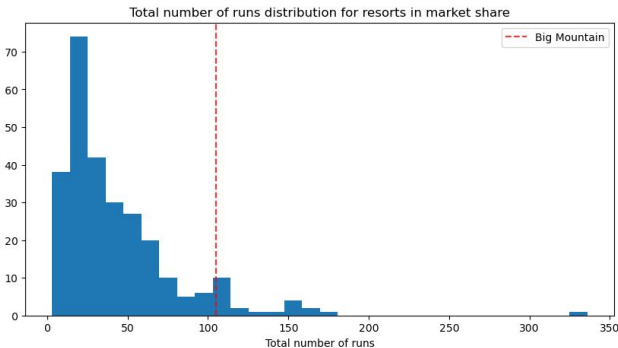
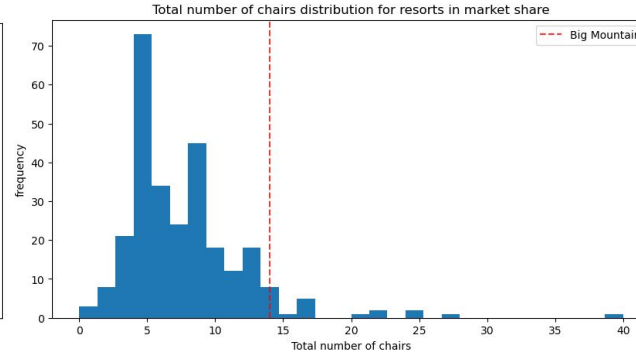
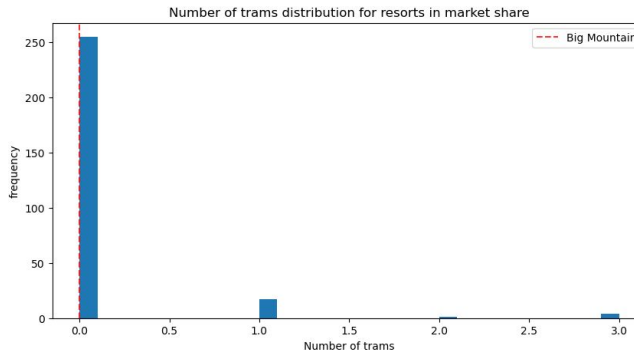
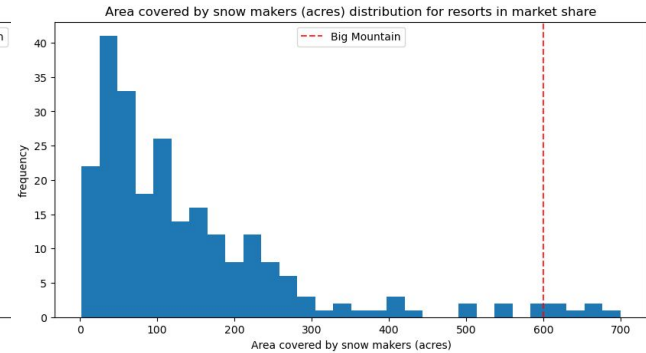
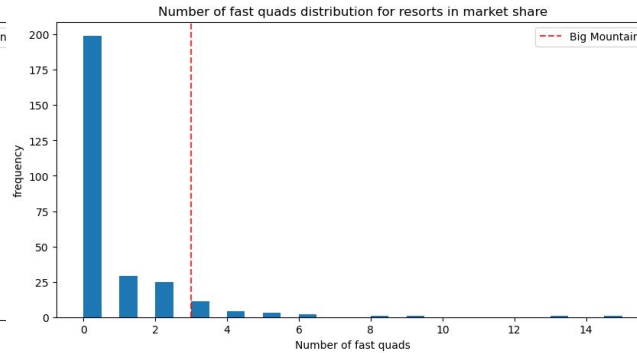
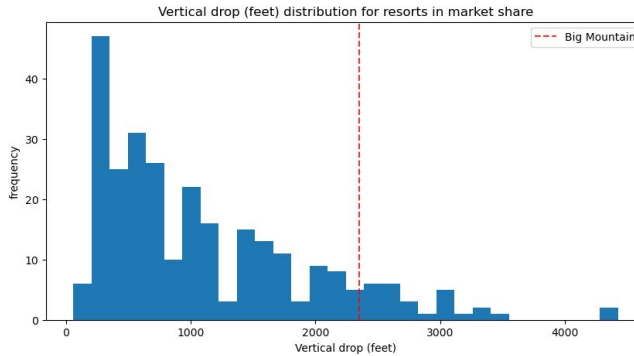
Key findings

Based on the data of 330 resorts in the market, the biggest impact on the price have the following facilities:

- vertical drop,
- number of fast quads,
- number of trams,
- total chairs,
- number of runs,
- area covered by snowmaking.

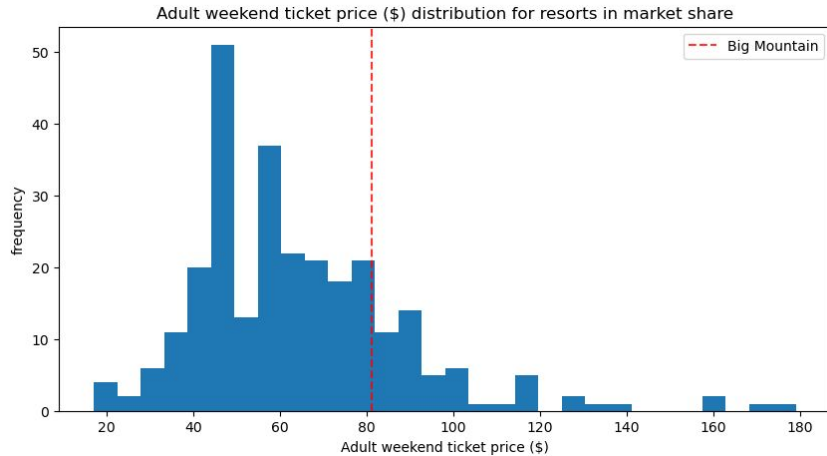
Most important facilities: Big Mountain vs Other resorts

➤ Big Mountain Resort compares well for all the facilities with high impact on price.



Weekend ticket price: Big Mountain vs Other resorts

- Big Mountain's current price is on the higher end, and the highest in Montana, but given the facilities there is still room for increase.



Price recommendations

The model predicted price for a resort with Big Mountain's facilities is \$95.87 with an average error of \$10.79.

- Given the current price of \$81, my recommendation is to **increase the price by \$4** (*predicted price - error*).

The price increase of \$1 will be enough to cover the operating cost of the newly installed lift.

Further improvements recommendations

- **Increasing a vertical drop by 150 by adding 1 more run and 1 more chair lift.**

*This would support the further price increase of **\$1.99**, which would result in a projected additional revenue of \$3,474,638.*

- **Closing 1 of the least used runs.**

This would result in cutting costs for operating 1 run (perhaps, offset the cost of operating the 1 new run above) with no impact on the price.