Lift Ticket Price Modeling

Big Mountain Resort

Problem Statement

Big Mountain has historically charged a premium over the average price of tickets for resorts in its market segment and had made recent lift upgrades to support this premium price - though this has also increased operating costs.

Determine opportunities to increase profits generated from ticket sales by 5% over the next season, either by identifying drivers to support even higher ticket prices or areas to cut costs without undermining the current ticket price customers are willing to pay.

Solution Scope and Constraints

SCOPE OF SOLUTION SPACE

- This effort focused specifically on the drivers for ticket price. This meant working to identify the amenities that support a higher ticket price relative to other resorts, or identifying opportunities for cost savings by eliminating/reducing amenities or infrastructure that are not relevant to customers when determining the price they are willing to pay for tickets.

CONSTRAINTS WITHIN SOLUTION SPACE

- We focused on ticket pricing, and the factors which contribute to this value, to drive additional profit. It was possible that tickets are already priced at their ideal value.
- It could be that there are characteristics and factors that are relevant to pricing which are not contained in our data set – for example ease of accessing the resort from an airport, or related convenience factors.

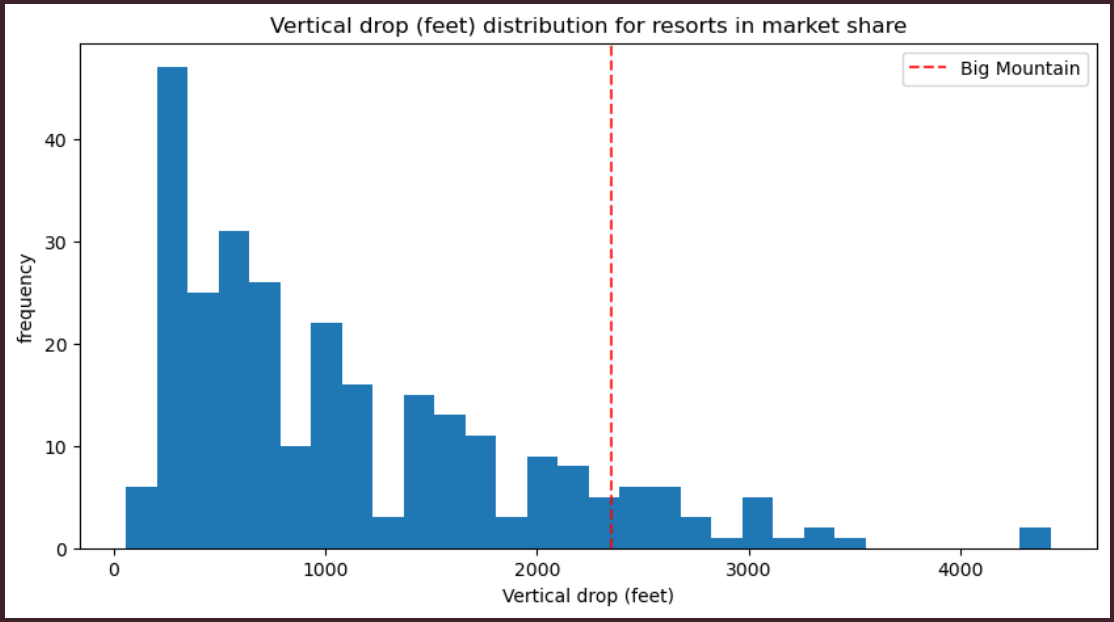
Key Findings, Recommendations

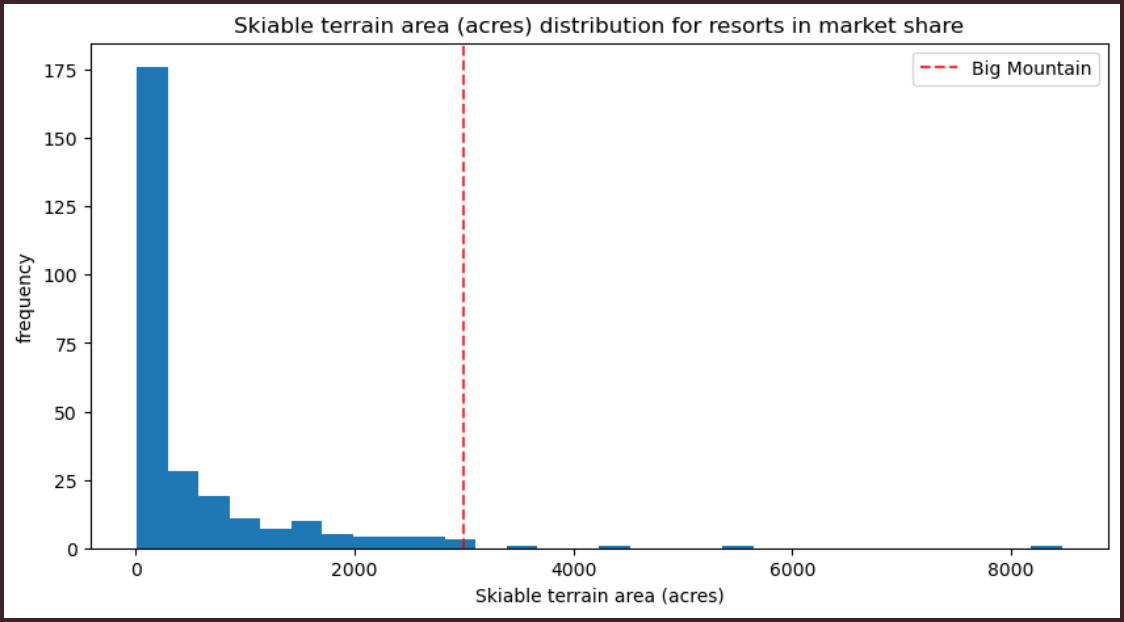
- Our initial prediction for Big Mountain's ideal ticket price based on modeling suggested that Big Mountain could be undercharging between $5.00 and $15.00 - this initially suggests that Big Mountain has some room to increase prices. One important caveat is that this determination depends on the other resorts in our market segment being appropriately priced.
- Based on the model, increasing vertical drop by 150 feet, which would also require the addition of another chair lift, could increase the predicted ticket price by $1.99 - this would amount to roughly $3,474,638 in additional revenue each year.
- Closing less used runs could also be an area for exploration, but its utility will be highly dependent on the expected savings in operational costs that would be achieved by closing the runs, and how this would interact with the decrease in predicted ticket price.

Big Mountain Pricing Relative to Market Segment Peers

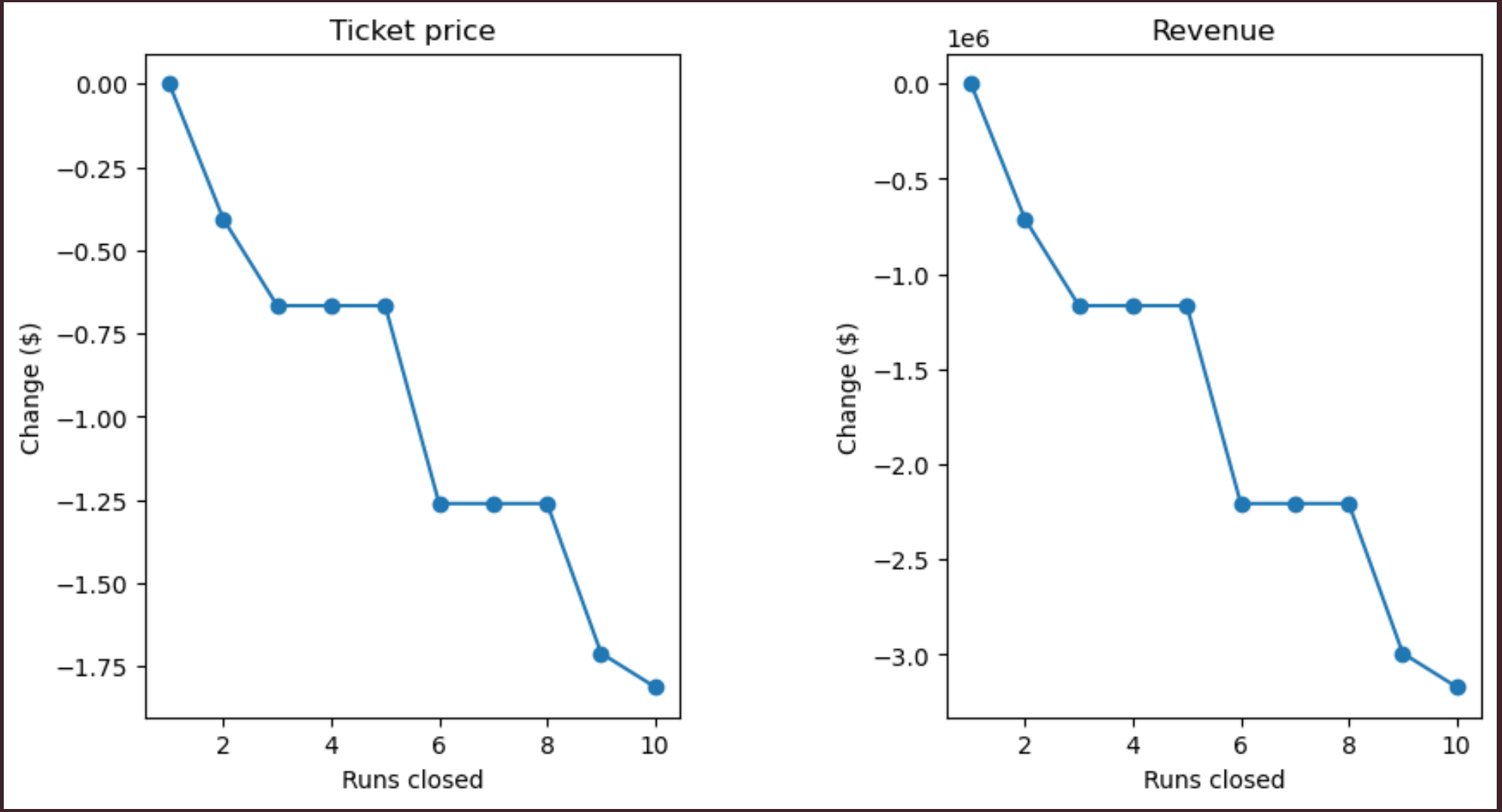
Factors Impacting Pricing Relative to Peers

- As noted previously, Big Mountain's ticket price was slightly elevated when compared to market segment peers. Big Mountain's ticket price was at the top end for Montana.
- So how can there potentially be room to increase ticket prices further? When we look at Big Mountain's positioning on amenities and features that customers want, Big Mountain remains on the high end, and in many cases the extreme high end of the distribution relative to peers.
- As shown below, increasing vertical drop (requiring the addition of a new chairlift) would move Big Mountain further up the distribution of this key feature.





Impact of Closing Less Used Runs



Modeling Details on Closing Less Used Runs

- Based on our modeling, closing one run would make no difference to ticket pricing. Closing 2 and 3 runs decreased predicted ticket price by roughly $0.40 cents and $0.70 cents, respectively.
- Decreases leveled off between 3 and 5 runs, which suggests if the resort decided to close 3 of the least used runs, they should go ahead and close 5 for additional savings with no impact on pricing.
- Prices dropped considerably again between 5 and 6 runs closed.

Conclusions

1. The addition of 150 feet of vertical drop, requiring the installation of a new chairlift, appears promising in terms of potential for profit generation. The addition of another chairlift this year increased operating costs by $1,540,000 - but if another chairlift could increase ticket revenues by $3,474,638, that is a considerable profit margin. A factor that would need to be explored is the cost of the lift itself, and how that may factor into Return on Investment (ROI) longer term.

2. The utility of closing less used runs will be highly dependent on the expected savings in operational costs that would be achieved by closing the runs, and how this interacts with the decrease in predicted ticket price.

3. In terms of areas for further exploration/expansion, we could benefit from additional datapoints/information. One item we homed in on here is the interaction between operating costs and ticket pricing. The number of visitors per year for each resort would also be a helpful metric to better predict ticket pricing. In this vein, it would also be helpful to know the breakdown of in state vs. out of state visitors, given that Big Mountain was at the top-end of pricing within Montana.