Ski Resort Modeling

Big Mountain Resort's Needs

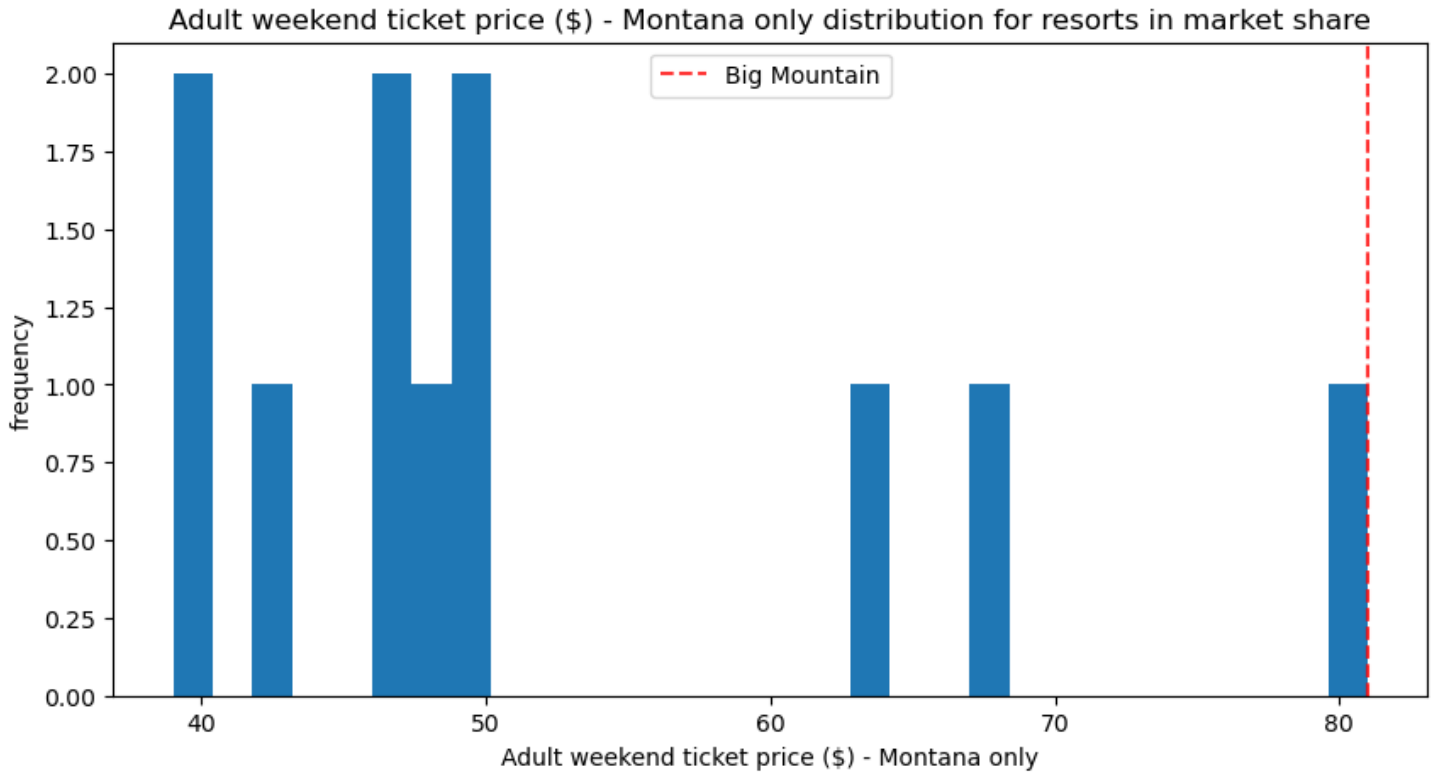
- Big Mountain Resort, as the biggest resort in Montana, averages 350,000 visitors every year.
- The resort's current pricing strategy is based on charging a premium above the average price based on its facilities and overall quality relating to the rest of the market.
- Big Mountain Resort needs to create a new pricing strategy centered around more data and metrics that will be more accurate and allow for greater guidance on how to make change to the business to support higher and more efficient pricing.

Findings and Recommendations

- What has been discovered so far is that the resort could justifier higher prices based on the model developed so far
- Some of our findings included that our model doesn’t put much weight on only changing the number of runs available. It takes a multiple run change to have a noticeable impact in pricing support.
- Among the scenarios presented our recommendation is to add a run but to also increase the vertical drop and commission a new chair to service the run.
- Adding additional snow making as proposed in scenario three will add to pricing support but no much. That increase needs to be weighed with the additional cost of the snow making.

Modeling Results and Analysis

- As Big Mountain Resort currently is our model predicts that it could support a price of $95.87 compared to its current price of $81.
- The current margin for error on that estimate is $10.39 suggesting there is room for increase in prices, even if no changes were made.
- Despite Big Mountain already having the highest prices in the state, we should not assume that the other resorts are priced efficiently.



Modeling Results and Analysis

- The final model is a Random Forest that came up with the following features as the most impactful to supporting ticket pricing:
- Vertical Drop
- Snow Making in Acres
- Total Chair Lifts
- Number of Fast Quads
- Number of Runs
- Longest Run
- Number of Trams
- Skiable Terrain in Acres

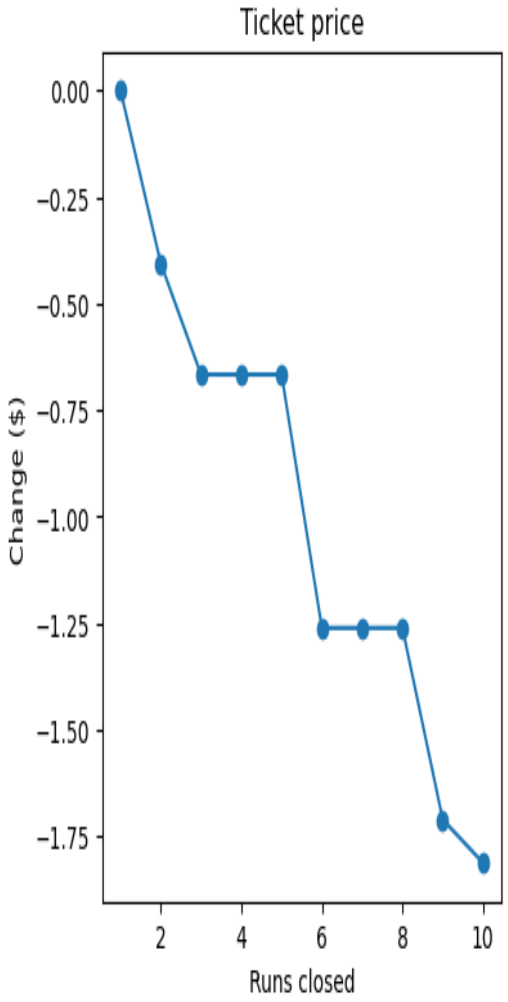
Modeling Results and Analysis

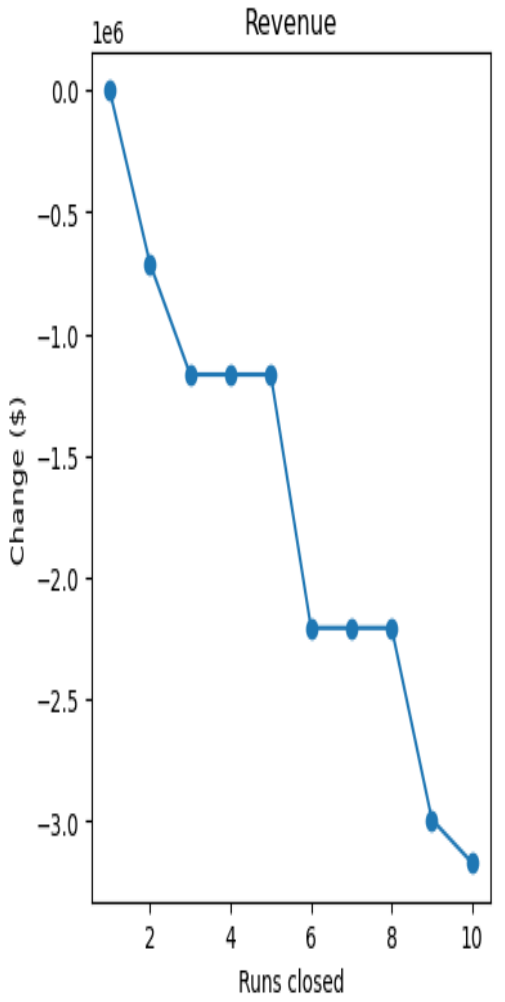
We were presented four scenarios for the model to analyze.

1. How would closing up to 10 of the least used runs affect pricing
2. Add a run, increasing the vertical drop by 150 feet, and installing an additional chair lift.
3. Add a run, increasing the vertical drop by 150 feet, and installing an additional chair lift. Same as two, but add an additional 2 acres of snow making capability.
4. Increase the longest run by .2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability.

Results of Analysis

- The model shows that closing runs does not have a significant impact on pricing until you get to closing six or greater.
- For the second and third scenarios, the model shows an increase in support for ticket prices by $8.61 and $9.90, respectively. Decision makers will have to decide if it makes sense to make the jump from scenario two to three.
- The final scenario is predicted to have no impact on pricing support.





Summary and conclusion

- Without more knowledge of the business the second scenario seems the most efficient way to move forward.
- The model as it is now can be used as a tool to assist in making decisions that can lead to more efficient pricing.
- The model will need to continue to be trained as more data is gathered and the business landscape changes.
- The continued growth of the model will continue to help guide pricing. If it is not continuously updated and trained with new data it will become obsolete and should not considered the final authority on pricing, but as a tool for decision leaders to use.