

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one partially covering the green one.

# Big Mountain - Optimized Price Point

C. Perez



# The Business Dilemma?

How can Big Mountain Resort:

1. Improve its pricing strategy such that each ticket this season increases in cost by a minimum of 4.40 USD? Or,
2. Implement cost cutting measures, that do not undermine the cost of each ticket, to recover 1.5 million in new expenses at minimum, and may also support an increase in ticket cost?

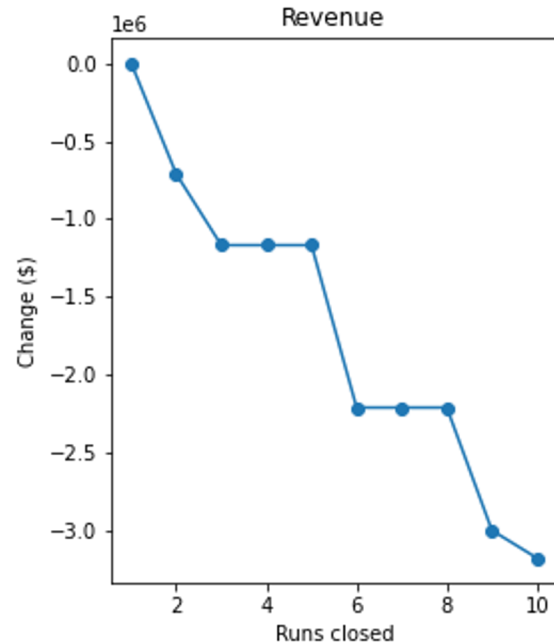
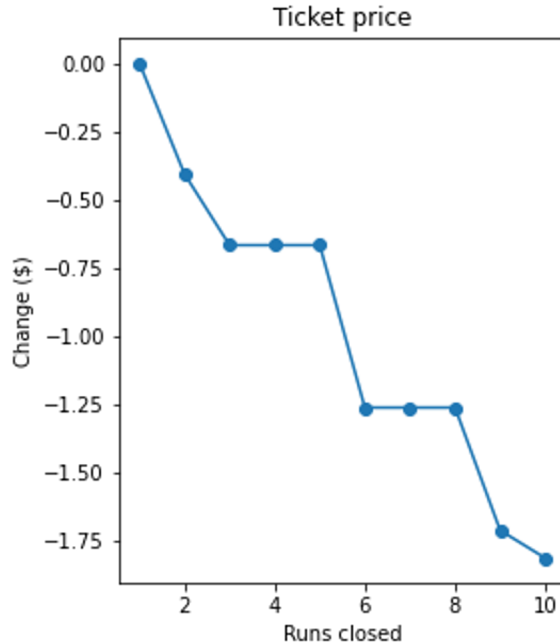
Problem Aspects to Discuss:

- Context
- Criteria of Success
- Scope of Solution Space
- Constraints Within Solution Space
- Key Data Sources

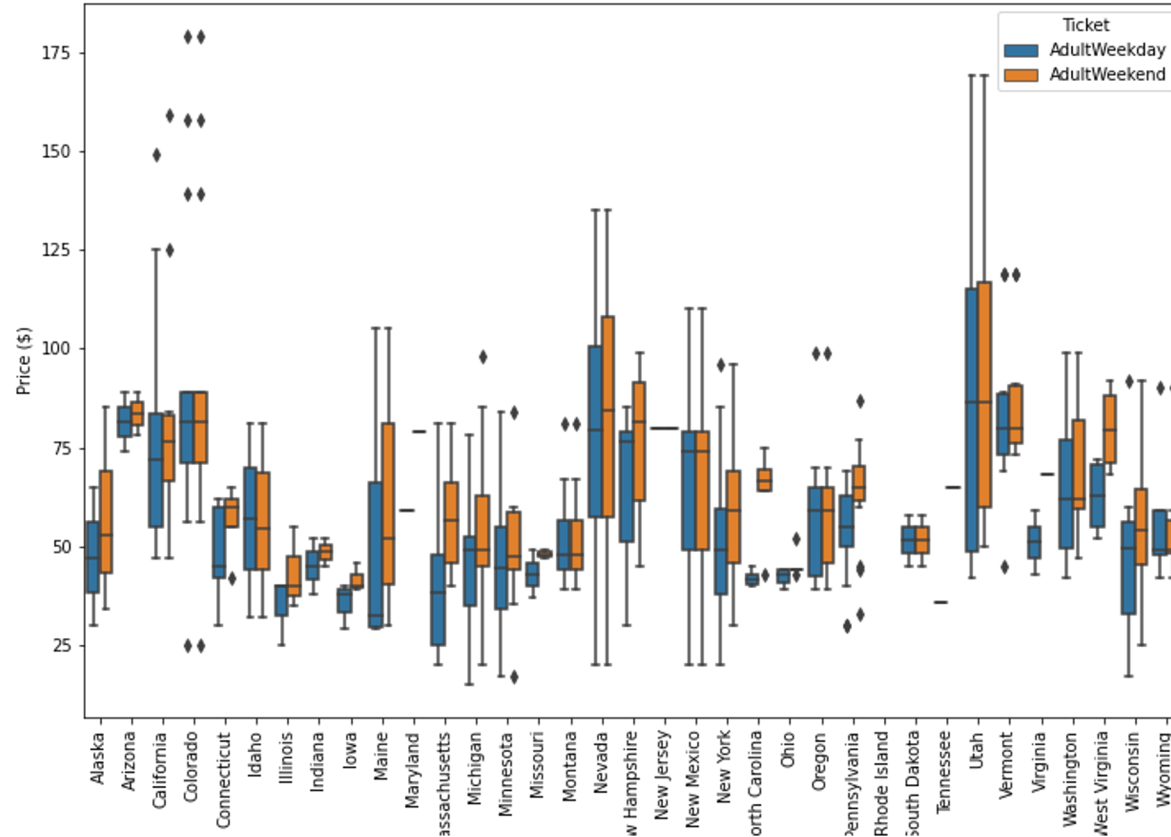
# Recommendation:

Remove 1 Run, Increase Vertical Drop by 150 ft, and Install 1 Additional Lift.

Price Increase Supported: \$1.99 + \$96 +- \$10 | Projected Revenue Increase: \$3,474,638



# Current Pricing Comparison (discussion)





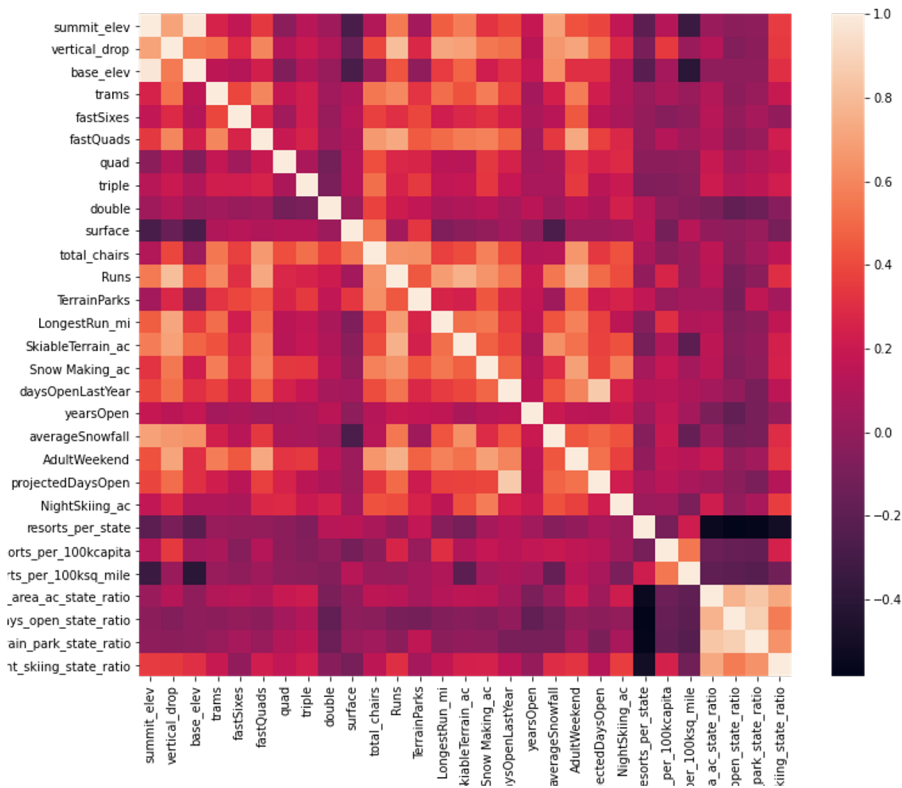
## Key Findings:

1. While Big Mountain's current pricing is on the higher end of the state distribution, it is one of few states that charge the same ticket price for weekday and weekend admission. The majority of states charge more for weekend admission and hence there seems to be flexibility in weekend pricing at minimum.
1. Big Mountain's pricing is already an outlier for the state, yet business has been consistent and profitable. This hints at the possibility that people are willing to pay more for the services that Big Mountain provides even though it's pricing is already comparatively high for the State. That being said we wouldn't want to overestimate the increase customers are willing to pay and lose business to resorts currently at a lower price point.

# Strategic Assumptions & Limitations: (discussion)

## Key Services to Change:

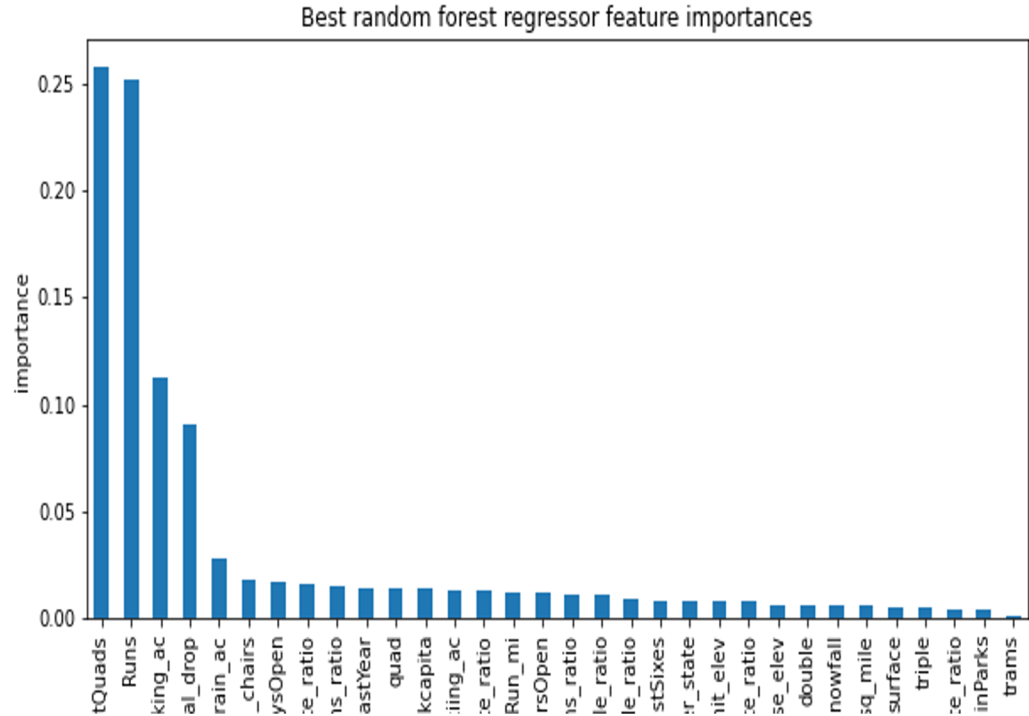
1. Vertical Drop
2. Snow Making (acres)
3. Projected Days Open
4. Fast Quads
5. Runs



# Model: Discussion & Important Features

## Model Synopsis (Random Forest):

1. Model agrees with  $\frac{4}{5}$  features initially detected.
2. Supports a weekend ticket price of \$96 with a MAE of \$10
3. Performs better than Linear Regression with a small increase in processing time.
4. Q & A





# Model Analysis: Shortlisted Business Options

## Option 2

In this scenario, Big Mountain is adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift. The results of this option support an increase in optimized ticket price of 1.99 USD and a total increase in revenue of about 3,474,638 USD.

## Option 3

In this scenario, Big Mountain is adding a run, increasing the vertical drop by 150 feet, increasing the snow making acres by 2 acres, and installing an additional chair lift. The results of this option support an increase in optimized ticket price of 1.99 USD and a total increase in revenue of about 3,474,638 USD, which is no change from the previous. This, from a business perspective, shows that adding the additional acres will serve only as an expense with no benefit in revenue.

## Option 4

This scenario calls for increasing the longest run by .2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability and the model shows no benefit in taking these measures. There is zero change in ticket price and associated revenue and hence this option will only increase costs.





## Conclusion:

This model works very well in establishing a new price point (roughly 96 USD with a 10 USD margin of error) that the data supports and although we have tried only 4 options we can build a dashboard such that any user in the organization can choose the services to change and see the predicted price point and projected revenues.

### Next Steps:

- Dashboard