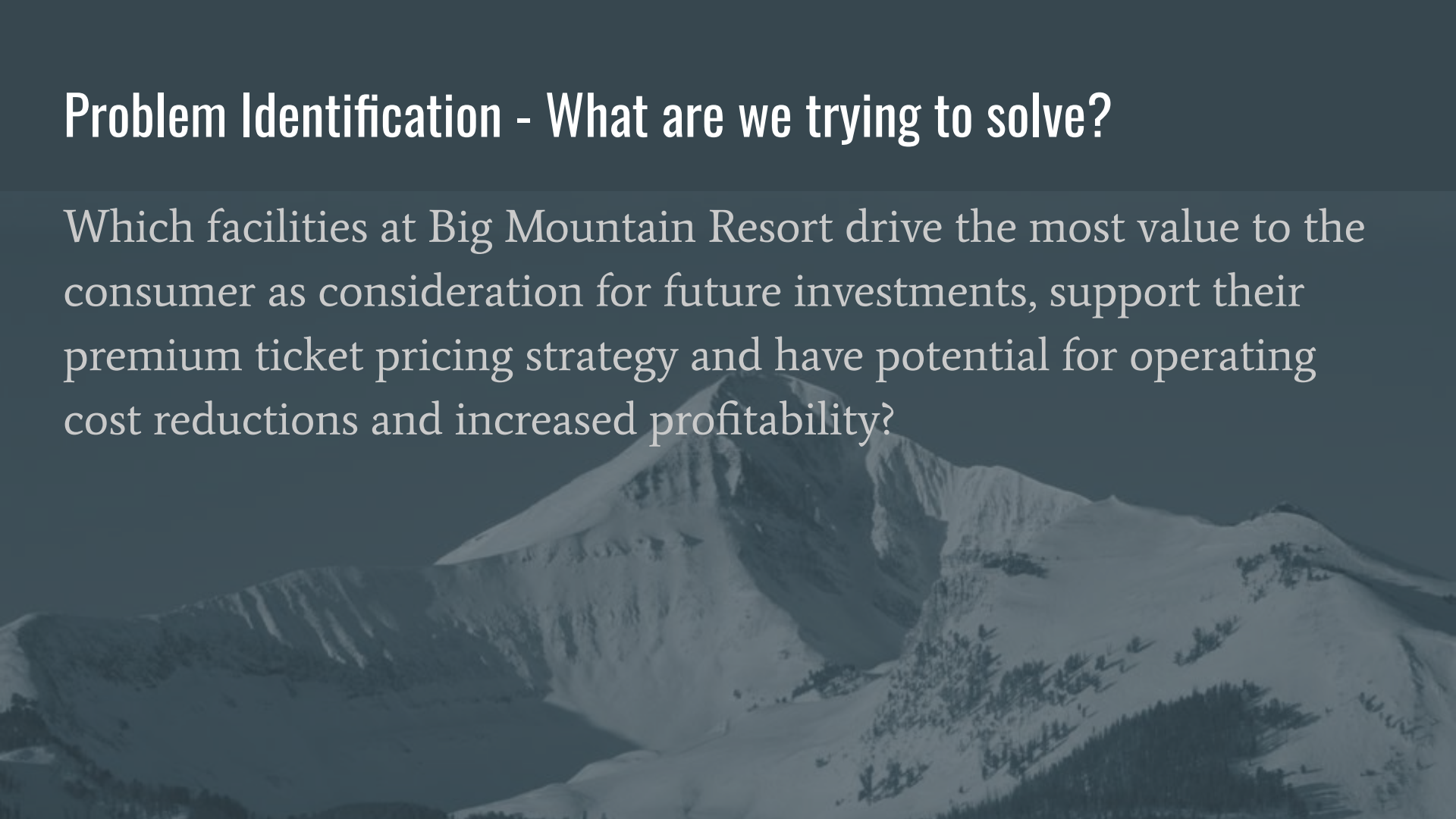
Ticket Pricing at Big Mountain Resort

Jelica Bornath
Aug-2021

Problem Identification - What are we trying to solve?

Which facilities at Big Mountain Resort drive the most value to the consumer as consideration for future investments, support their premium ticket pricing strategy and have potential for operating cost reductions and increased profitability?



Problem Identification - What does success look like?

- Recommendation for a ticket pricing structure that delivers great value to the customer, justified through analysis of market segment data on ski resorts in the US
- Recommendation for how Big Mountain Resort can make the best use of their resort features to support that pricing strategy and offset operational expenses

Recommendation & Key Outcomes

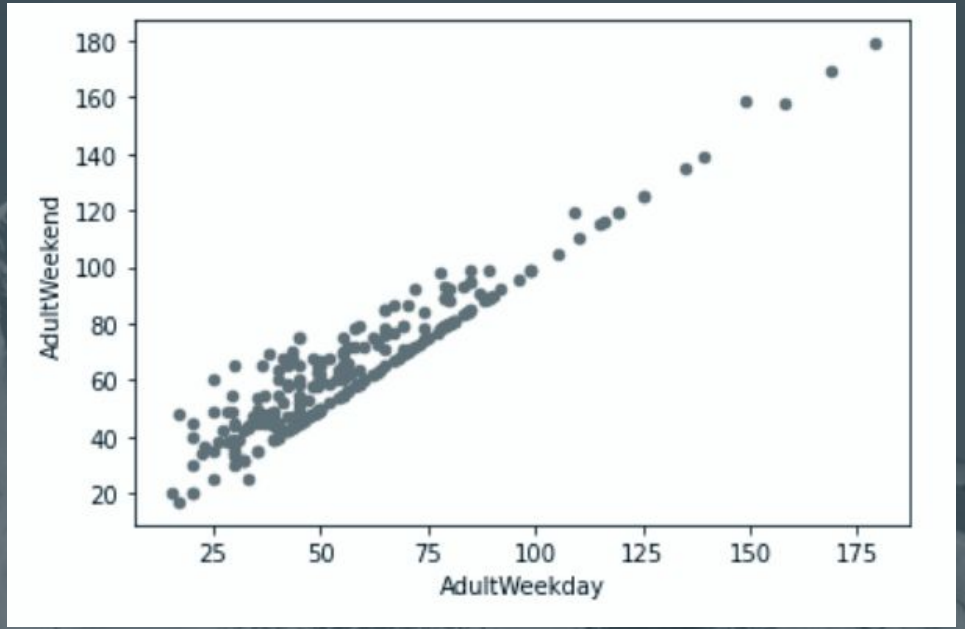
Current Price	NEW Price Proposal	Additional Revenue Estimate, Annual
$81.00	$82.99	*+$3.47 M*

- To support ticket price proposal, increase the vertical drop by 150 feet and add another chair lift
- Annual revenue increase offsets the operational expenses of the new chair lifts

Target Feature - Adult Weekend Ticket Price

Why was Adult Weekend Ticket Price chosen as the target feature for modelling?

- Weekend ticket prices were more consistently available in the US Ski Resort data vs. Weekday
- In many cases, including Big Mountain, Weekend and Weekday ticket prices were the same (shown by diagonal in graph)

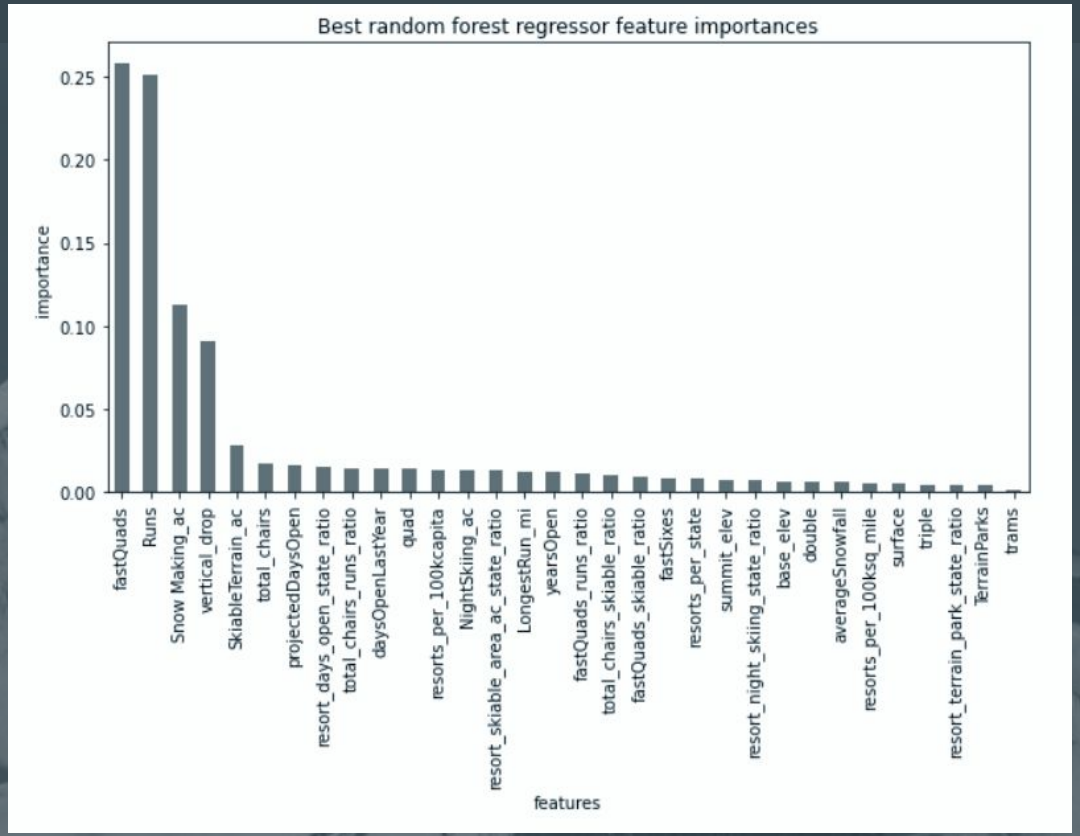


Selecting a Model - Random Forest Regression Model*

Features with Highest Impact on Adult Weekend Ticket Price:

1) Fast Quads
2) Number of Runs
3) Acres of Snow Making
4) Vertical Drop

**chosen over a linear model due to lower error and variability*



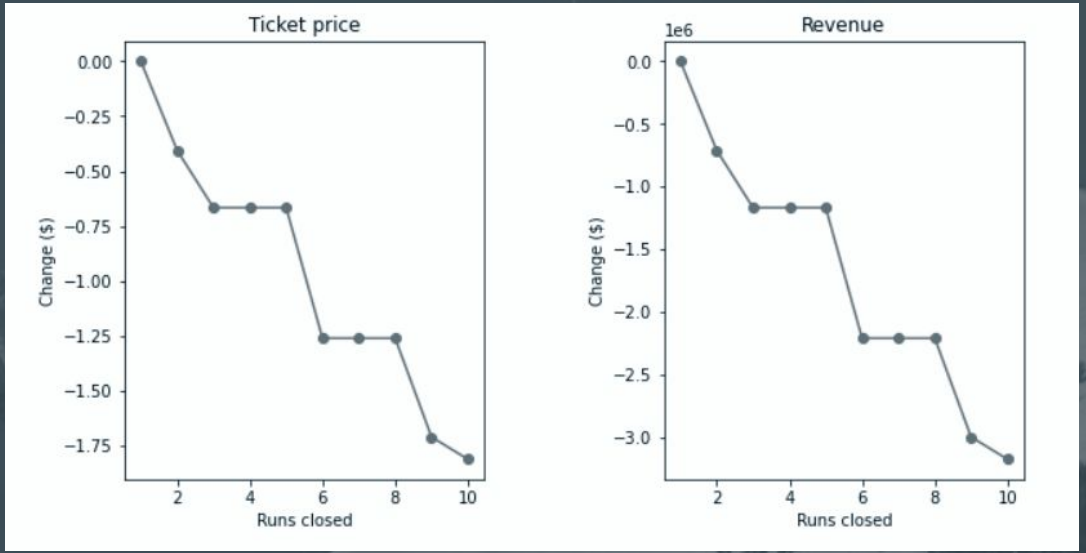
Recommendation: Proceed with Scenario 2

Short-list of strategies from the business team, tested through modelling:

1. Permanently close down up to 10 of the least used runs
    - *Requires additional exploration (next slide)*
2. Increase the vertical drop by adding a run to a point 150 feet lower down, requires the installation of an additional chair
    - *Supports ticket price increase of $1.99*
3. Same as #2, but 2 added acres of snow making cover
    - *No additional impact to ticket price value over #2*
4. Increase the longest run to 3.5 miles, requires 4 added acres of snow making cover
    - *No impact to original ticket price value*

Additional Insight - Scenario 1

- Negative impact to ticket price value plateaus between 3-5 run closures.
- Identifying and closing least used runs could result in operational expense reduction with minimal impact to revenue



Summary & Conclusion

- Increasing the ticket price from $81.00 to $82.99 garners an additional $3.47M in annual revenue, covering the expenses for the new chair lifts
- Increasing the vertical drop by 150 feet and adding a chair lift justifies this ticket price increase to ensure visitors are getting value for their money
- Future operating cost efficiencies could be found in closing lightly used runs and adjusting the ticket price accordingly