



A New Pricing Model for Big Mountain Resort

Mark Cohen

The Problem



- Context
 - New chairlift expected to increase costs \$1.54 million this season
 - Suspicion that Big Mount Resort is not capitalizing on its facilities and amenities to the maximum possible extent
 - Current price of \$81 set based on premium above the average among ski resorts
- The goals
 - Provide a pricing model that allows Big Mountain Resort to locate itself more precisely among its competition
 - Based on this model, identify the resort facilities that are most and least associated with competitive pricing, to guide further investments or cost-cutting initiatives
 - Both of these goals will help Big Mountain increase revenue to cover the new chair lift's costs and more

Key Findings and Recommendations



1. The suspicions were right: Big Mountain Resort's ticket prices are below market
2. Closing some of the least-used runs would not significantly impact the expected market-level ticket price
3. Adding a new run and chairlift to increase the resort's total vertical drop would be associated with a significant increase in market-level ticket prices

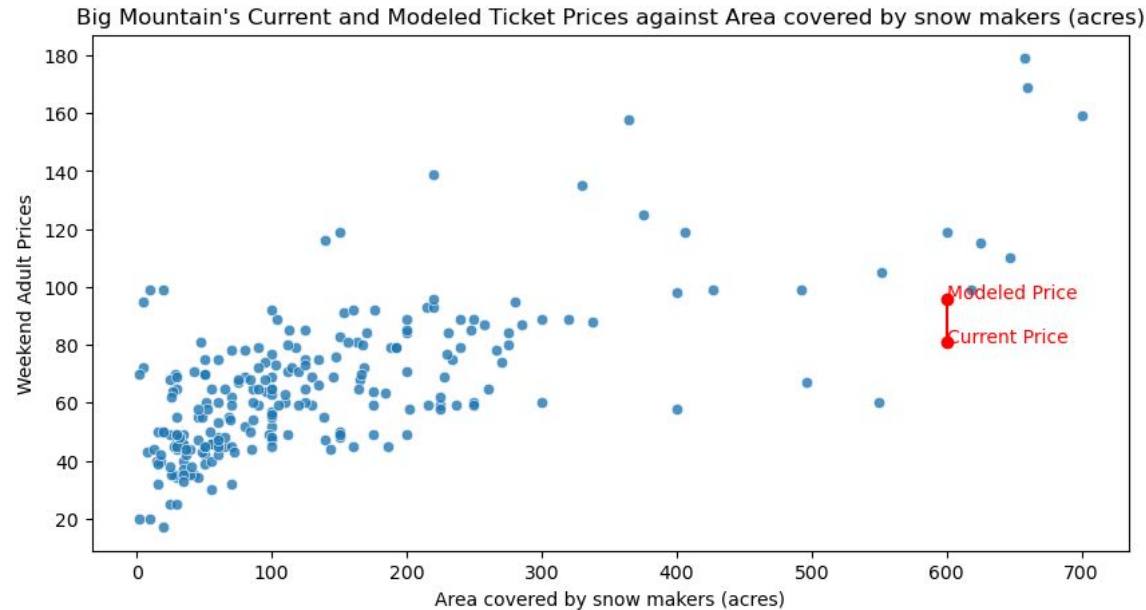
The Pricing Model — Introduction



- Data
 - 36 characteristics of 277 resorts in the U.S., including Big Mountain itself
 - Target value to be predicted: adult weekend prices
 - Most significant features included: number and types of chair lifts, number of runs, vertical drop, and snowmaking area
 - Also considered were some state-level measures, but these did not prove significant in the analysis
- Random Forest
 - Model's prediction were less than \$9.65 away, on average, from the actual prices charged
 - Compare to: \$10.50 or more for a linear model or over \$19 for the simple mean

The Pricing Model — Big Mountain Resort's Position

- Big Mountain Resort is exceptional on many measures
 - Chair lifts
 - Vertical drop
 - **Snowmaking**
- The model predicts the market price would be \$95
 - Market could easily bear increase to cover costs of new chair lift



The Pricing Model — Future Strategies



- Closing runs
 - 1 fewer run would have no impact on the model's predicted price
 - Closing 3 to 5 runs would lower predicted price by less than \$1 (just over \$1 million lost revenue)
- Increasing vertical drop
 - Proposal: add new run and chair lift that would increase resort's total vertical drop by 150 feet
 - Pricing impact: \$1.99 higher market-level ticket price, or nearly \$3.5 million higher revenue for a season
 - Combining the expansion with closing 5 least-used runs would still increase predicted price by about \$1.32

Summary



- New pricing model strongly suggests substantial space to increase prices
- The model can also be used to guide investment and cost-cutting strategies
- With additional data on attendance and costs, the model's recommendations could be further refined