
Big Mountain Resort

Recommendations for increasing annual revenue

Overview

This report provides recommendations for increasing annual revenue at Big Mountain Resort. I used existing data on ski resorts in the US, including Big Mountain, to analyze resort features and their correlation to annual revenue. These features include, but are not limited to, vertical drop, days open last season, and the area available for snow-making at the resort.

Process

1. Download and examine US ski resort data
2. Assess which resort features are most positively correlated with annual revenue.
3. Model which resort feature will have the greatest impact on resort revenue
4. Provide a recommendation for Big Mountain Resort detailing areas of impact

Resort Feature Correlation & Building A Model

After analyzing resort features, I chose to ignore aspects of the resort that cannot be changed, like its location. The features that correlate most closely are the prices of lift tickets on weekdays and the weekends, and the projected days open this year and the days open last year.

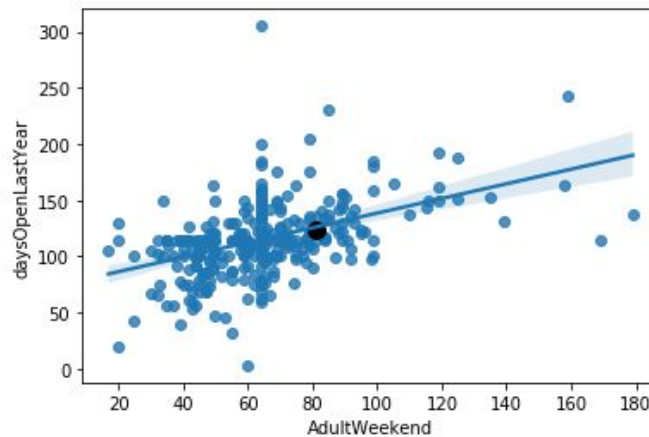
I built a model to predict weekend lift tickets using the available data. The chart below shows the features that impact lift ticket prices most closely:

	Coefficient
AdultWeekday	20.113666
averageSnowfall	1.862646
quad	1.496367
vertical_drop	1.358216
triple	1.331662
Runs	1.280110
surface	1.208159
daysOpenLastYear	1.056232

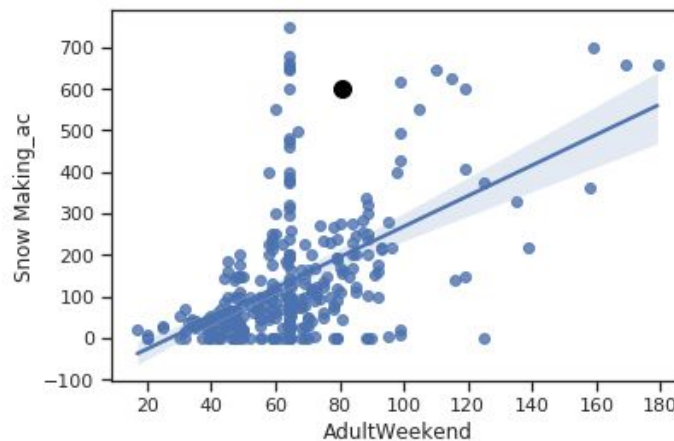
The next step is to use the model to predict the weekend price.

Predicting Weekend Ticket Price

The model predicts a weekend ticket price of \$89. Given the current ticket price of \$81, I looked for features Big Mountain could use to positively change the price of a weekend ticket. In particular, the number of days open impacts the ticket price:



The figure shows that given the days the resort was open last year, there is room to increase the lift ticket price and still be within the optimal range the model has predicted. One feature in particular that will help increase the number of days open each year is the resort's snowmaking:



This figure shows that the resorts snowmaking ability is far above the curve showing snowmaking at other resorts as it corresponds to their lift ticket prices. There is plenty of room to use snowmaking to extend the number of days open each year, and as a result, increase the ticket price from \$81 to \$89.