The Big Mountain Resort Pricing Strategy

1. Problem Statement

What opportunities exist for the Big Mountain Resort to get better value for their ticket price by the next skiing season through assessing impact of resort facilities on ticket price?

2. Introduction

The Big Mountain Resort is a ski resort located in Montana. Big Mountain Resort offers spectacular views of Glacier National Park and Flathead National Forest, with access to 105 trails. Every year about 350,000 people ski or snowboard at Big Mountain. This mountain can accommodate skiers and riders of all levels and abilities.

Current prices at the resort are based on market average. However ticket prices can assumingly be higher if resort facilities are better capitalized. Therefore the goal of the project was to determine relationship between available facilities at ski resorts across the United States and ticket price as well as check how this relationship can help to establish new higher ticket price for the Big Mountain resort. A dataset with various features of ski resorts was used. The features included, among others, were number of lifts, chairs and trams available at the resorts, number of runs, total skiable area, area covered by snow etc.

Column	Description
Name	The name of the ski resort.
Region	The region within the United States where the resort is located.
state	The state name where the resort is located.
summit_elev	Elevation in feet of the summit mountain at the resort.
vertical_drop	Vertical change in elevation from the summit to the base in feet.
base_elev	Elevation in feet at the base of the resort.
trams	The number of trams.
fastEight	The number of fast eight person chairs.
fastSixes	The number of fast six person chairs.
fastQuads	The number of fast four person chairs.
quad	Count of regular speed four person chairlifts.
triple	Count of regular speed three person chairlifts.
double	Count of regular speed two person chairlifts.
surface	Count of regular speed single person chairlifts.
total_chairs	Sum of all the chairlifts at the resort.
Runs	Count of the number of runs on the resort.
TerrainParks	Count of the number of terrain parks at the resort.
LongestRun_mi	Length of the longest run in the resort in miles.
SkiableTerrain_ac	Total skiable area in square acres.
Snow Making_ac	Total area covered by snow making machines in acres.
daysOpenLastYear	Total number of days open last year.
yearsOpen	Total number of years the resort has been open.
averageSnowfall	Average annual snowfall at the resort in inches.
AdultWeekday	Cost of an adult weekday chairlift ticket.
AdultWeekend	Cost of an adult weekend chairlift ticket.
projectedDaysOpen	Projected days open in the upcoming season.
NightSkiing_ac	Total skiable area covered in lights for night skiing.

Figure 1 Features available in the dataset

Out of all features, 4 showed the strongest correlation with the price:

- Runs – number of runs on the resort.
- Vertical drop – vertical change in elevation from the summit to the base.
- Snow Making_ac – total area covered by snow making machines.
- FastQuads – the number of fast four person chairs.

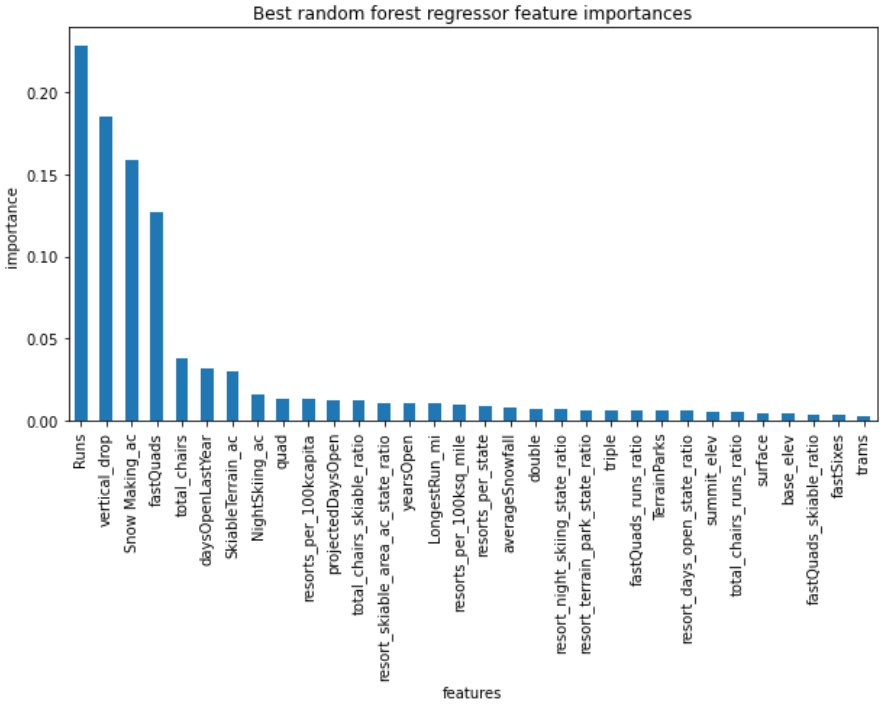

Figure 2 Features showing the strongest relationship with Weekend Price

The business has shortlisted some options, which were tested using created model:

1. Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.
2. Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage.
3. Same as number 2, but adding 2 acres of snow making cover.
4. Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres.

3. Summary and recommendations

- Created model suggested ticket price of $97.79 which is much higher than current $81, therefore there is definitely a room for price increase.
- Modelled scenario 1 suggested that closing 1 run won't have any effect on the price. Closing 2-3 runs will successively reduce the price by total of $2. However closing 4-5 runs doesn't cause further price drop.

- Scenario 2 increased support for ticket price by $9.60. Over the season, this could be expected to increase total revenue by $16791667 taking into consideration a number of visitors per season.
- Scenario 3 increased support for ticket price by $13.86. Over the season, this could be ex pected to increase total revenue by $24250000.
- Implementing scenario 4 wouldn't make any difference.
- Even though scenarios 2 and 3 show price increase, data on operating costs are necessary to establish whether operating costs will not exceed predicted revenue increase.

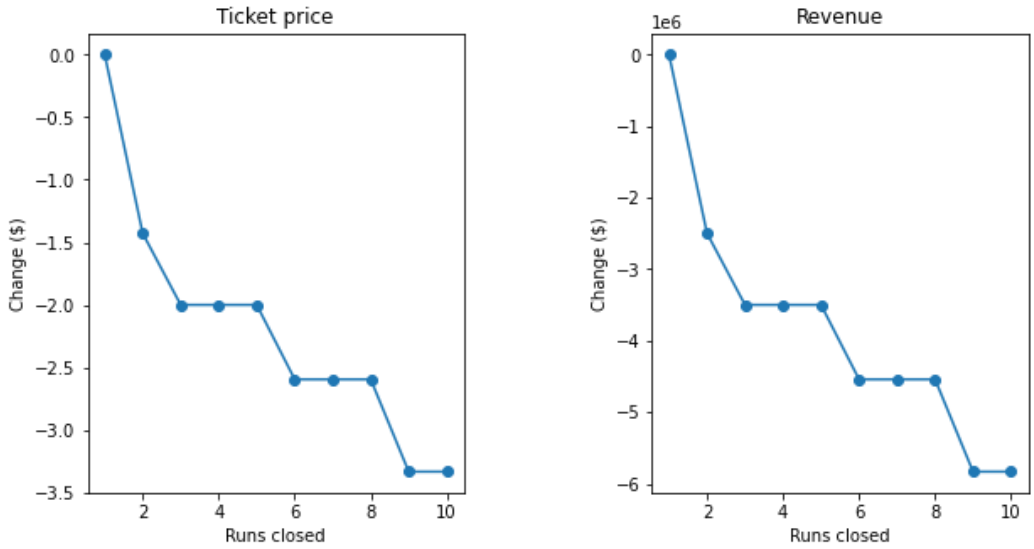

Figure 3 Change of ticket price and revenue depending on number of closed runs