Nusrat Islam

Guided Capstone Project Report
Big Mountain Ski Resort

Introduction

In this project we have analyzed the facilities and prices of Big Mountain Ski Resort in Montana with respect to its competitor in the market segment. The aim of the project is to come up with a pricing model for ski resort tickets in their market segment. Big Mountain suspects it may not be maximizing its returns, relative to its position in the market. It also does not have a strong sense of what facilities matter most to visitors, particularly which ones they're most likely to pay more for. This project aims to build a predictive model for ticket price based on a number of facilities, or properties, boasted by resorts (*at the resorts).* This model will be used to provide guidance for Big Mountain's pricing and future facility investment plans.

Findings and Recommendations

Big Mountain is currently charging a ticket price of $81. The suggested price from our model is $95. Although the mean absolute error of the model is ~$10, yet it seems that Big Mountain is charging lower than it should. There is definitely room for increasing the ticket price. Looking at the features that were most impactful, it was evident that Big Mountain is in the top few resorts that are providing so many facilities. Based on our assumption of 350,000 visitors over the season and each visitor buying a 5 day ticket the cost of the additional chair lift will be recovered. Big Mountain will also be able to make profits. It is thus justified to increase the ticket price.

4 different scenarios were analyzed out of which one of the scenarios does not seem to have any impact and clearly can be ruled out.

1. Since Big Mountain is already charging the highest price among the resorts in Montana an alternative approach to increasing ticket price would be to reduce the number of runs. Our study suggests that reducing the least used runs by 5. It would certainly drive the ticket price down but might be saving operating cost. Incorporating that piece of information will help understand the complete scope.

2. Adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift as well as adding 0.2 acres of snow making area suggest a ticket price increase of $9.91.

A combination of 1 and 2 with a detailed knowledge of the operating cost could help Big Mountain leverage the maximum ticket price with its facilities and also reduce operating cost.

Future Analysis

This analysis was based on only the ticket price and no consideration of operating information was used here. Although the model supported a price increase for Big Mountain, it might not be the best option considering the fact that Big Mountain is already

charging very high in Montana. The assumption of 350,000 visitors although is reasonable needs more analysis.

It would also be useful to understand the breakdown of visitors for the features that were most impactful. This would help us understand whether those features are really important to the visitors and they would still like to visit the resort even at a higher ticket price.

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