

GUIDED CAPSTONE PROJECT REPORT

Problem Statement- The Big Mountain resort is facing problems in maintaining profits due to the increase in the operating costs by \$1.54 million this season which needs to be checked either by increasing the ticketing cost at about a premium price or implementing a few cost cuts to make it still a profitable business.

Recommendation- After careful analysis and data modelling the business shortlisted few scenarios which can be implemented:

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.

Though the machine learning model predicted them to be viable options but I would suggest the best option to be : Closing down upto 10 least used runs makes no difference in the ticketing price, hence this should be implemented as there would be less operating cost for the same and ticketing price can be kept constant as any additional operating cost would increase if new chairs are added but it would result in non increment of ticketing price which is not viable for the business.