Whitefish Resort (Big Mountain Resort): Project Pitch Worksheet

Company Overview + Context

The client is Whitefish Mountain Resort, a ski resort located in Montana, commonly referred to as “Big Mountain Resort”. 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.

These are serviced by 11 lifts, 2 T-bars, and 1 magic carpet for novice skiers. The longest run is named Hellfire and is 3.3 miles in length. The base elevation is 4,464 ft, and the summit is 6,817 ft with a vertical drop of 2,353 ft.

Big Mountain Resort has recently installed an additional chair lift to help increase the distribution of visitors across the mountain. This additional chair increases their operating costs by $1,540,000 this season.

The resort's pricing strategy has been to charge a premium above the average price of resorts in its market segment. They know there are limitations to this approach. There's a suspicion that Big Mountain is not capitalizing on its facilities as much as it could. Basing their pricing on just the market average does not provide the business with a good sense of how important some facilities are compared to others. This hampers investment strategy. You are part of a new data science team brought in to implement a more data-driven business strategy. The business wants some guidance on how to select a better value for their ticket price. They are also considering a number of changes that they hope will either cut costs without undermining the ticket price or will support an even higher ticket price.

Criteria for Success

Success for this project would be a data-driven business strategy that delivers the best ticket price with the resort’s market segment, each facility value, and current operating costs taken into consideration.

Scope of Solution Space

The data science team's focus will be applied to the comparison of operations, finances, and facilities of the Big Mountain Resort and the resorts considered part of the same market share provided by the database manager in a CSV file.

Scenarios to Explore

Scenario 1: Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.

Scenario 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.

Scenario 3: Same as number 2, but adding 2 acres of snow making cover.

Scenario 4: Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres.

Constraints

1. Lack of employees or infrastructure to implement recommendations.

2. Communication on recommendations to close down some facilities/services or to increase the cost of service for visitors at some facilities.

3. Communication on recommendations to change traditional marketing strategies to rebrand the resort and generate more customers.

4. The changes that the resort is considering or has already implemented undermines the ticket price.

Stakeholders

Jimmy Blackburn - Director of Operations and Alesha Eisen - Database Manager

Key Data Source(s)

1. CSV file containing information from 330 resorts in the US that can be considered part of the same market segment as Big Mountain Resort.

***Additional Data to Request (if possible):**

2. Other types of ticket pricing not provided (e.g. season, daily, etc.)

3. List of other revenue generating facilities and services at the resorts.

4. Employee information (number required to service each service offered, pay, benefits, etc.)

5. YoY historical data of revenue and cost for Big Mountain Resort

Variable Descriptions

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.

Data Snippet for Analysis Context

	Name	Region	state	summit_elev	vertical_drop	base_elev	trams	fastEight	fastSixes	fastQuads	quad	triple	double	surface	total_chairs	Runs
0	Alyeska Resort	Alaska	Alaska	3939	2500	250	1	0.0	0	2	2	0	0	2	7	76.0
1	Eaglecrest Ski Area	Alaska	Alaska	2600	1540	1200	0	0.0	0	0	0	0	4	0	4	36.0
2	Hilltop Ski Area	Alaska	Alaska	2090	294	1796	0	0.0	0	0	0	1	0	2	3	13.0
3	Arizona Snowbowl	Arizona	Arizona	11500	2300	9200	0	0.0	1	0	2	2	1	2	8	55.0
4	Sunrise Park Resort	Arizona	Arizona	11100	1800	9200	0	NaN	0	1	2	3	1	0	7	65.0