Problem Statement Worksheet (Hypothesis Formation)

Using facility-based pricing metrics, how should Big Mountain price tickets for the current season? Are their opportunities to cut cost and maintain this price for the season? Are their opportunities for facility investments and raising ticket price in current and future seasons?

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1 Context

Big Mountain currently sets prices based on their market-segment average, and may be undervaluing their facilities (especially considering recent investments). They seek a data-driven pricing strategy to determine a better ticket price, and also to identify:

(a) areas to cut cost while maintaining price, and

(b) facility investments to justify increasing price.

2 Criteria for success

- Use provided data to create facilities-based pricing metric(s), and determine a ticket price for the current season. Communicate findings and suggested price to Jimmy Blackburn within 1 week.
- Identify possible cost-saving areas, without reducing ticket value, for the current season. *Prioritize if suggested ticket price is lower than current price.*
- Identify facility investments to increase ticket value. Changes more likely for off-season, and to affect future season prices.

3 Scope of solution space

Use data source to evaluate how resorts price their tickets based on various facility metrics (Lifts, Runs, Snow) in isolation and combination. Compare against regional competitors, and then North American resort distributions.

4 Constraints within solution space

- Facility-based pricing distributions may not be normal and obvious to interpret, and may be subject to regional bias.
- Price (**AdultWeekday**, **AdultWeekend**) may not necessarily indicate success, i.e. *revenue / profit / total visitors*
- Source data may not cover other value-adding facilities
- Do season-pass holders contribute significant revenue?

5 Stakeholders to provide key insight

- Jimmy Blackburn - **Director of Operations**, main “customer”
- Alesha Eisen - **Database Manager**, key resource for data
- “Data science **team**” - coordinate efforts

6 Key data sources

Resort Info CSV file from Alesha + Column Descriptions

Categories: *Location, Mountain, Lifts, Trails, Snow,* ***Prices***

Ex: **Trails** normalized by **Lifts** vs **Price**

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