Guided Capstone Project Report

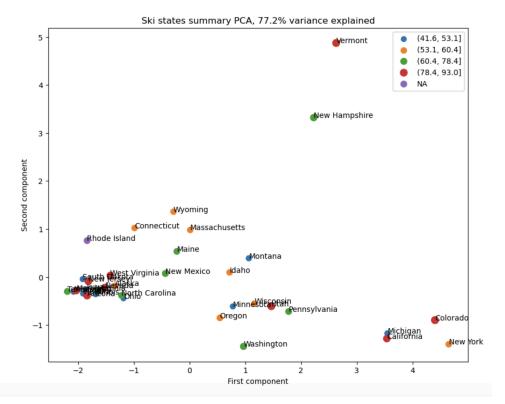


Figure 1

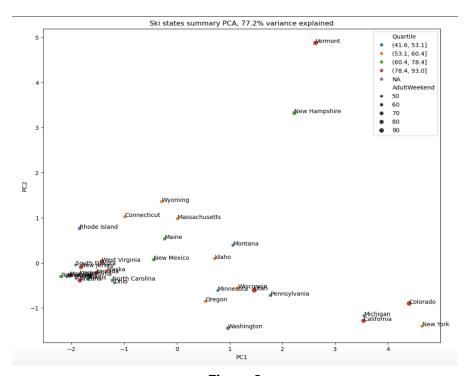


Figure 2

A Principal Component Analysis (PCA) summarizing data for ski resorts by state, with a variance explanation of 77.2%. PCA is a statistical technique used to emphasize variation and bring out strong patterns in a dataset. The plots show the positioning of states along the first two principal components (PC1 and PC2), which can be thought of as synthetic variables that capture the most variability in the data. The states are color-coded by quartile ranges of a variable, which seems to be the AdultWeekend ticket price, and the size of the dots represents the ticket price itself.

Recommendations for Big Mountain Resort:

- Positioning: If Big Mountain Resort is located in a state like Montana, which
 appears in the middle of the plot, it might be positioned competitively in terms of
 the features represented by PC1 and PC2. If it aims to be positioned like resorts
 in Vermont, Colorado, or New York, it may need to consider what unique features
 those states offer that could be emulated or adapted.
- Pricing: States with higher AdultWeekend prices are typically to the right on PC1.
 If Big Mountain Resort is considering increasing its prices, it should ensure that the features and quality of the resort justify this, in line with the higher-priced states.
- Differentiation: Vermont's distinct position on PC2 indicates it offers something unique. If Big Mountain Resort wants to differentiate itself, it might look into what Vermont offers that others don't and see if it can incorporate or highlight differentiating features or services.
- Market Analysis: The clustering of states suggests a competitive market with many similar offerings. Big Mountain Resort should conduct a detailed market analysis to understand the factors leading to this clustering and identify opportunities to stand out.



Figure 3

Shows the distribution of mean state adult weekend ticket prices for ski resorts. The x-axis represents the ticket price, and the y-axis represents the count of states within each price range.

Recommendations for Big Mountain Resort might include:

- Pricing Strategy: If Big Mountain's current pricing is below \$80, it might be
 positioned well in a less crowded segment of the market, which could allow for a
 potential price increase if the resort's offerings justify it. If the pricing is already
 around \$80, Big Mountain should ensure its amenities and services are
 competitive with other resorts in this most common price range.
- **Market Positioning:** If Big Mountain Resort is in a state with a higher average price (like those at \$80), it should ensure that its offerings match or exceed those of competitors to justify its pricing.

- Value Proposition: Given the crowded market at the \$80 price point, Big Mountain Resort should emphasize its unique value proposition to stand out. This could be unique terrain, better snow conditions, longer seasons, or additional amenities and services.
- Consumer Expectations: With most states averaging between \$60 and \$80, this
 is likely where consumer price expectations are set. Big Mountain Resort should
 consider what additional value it can provide if it plans to price above this range.
- Market Analysis: Conducting further market analysis could help understand the factors that contribute to states falling into different price brackets. This would include examining the features and amenities that resorts offer in the higher price brackets and understanding customer demographics.