

Problem Statement Capstone Project 1:

How can Big Mountain Resort strategically optimize its ticket pricing and minimize operational costs of \$1.54MM for the recent installation of an additional chair lift in order to increase profitability and maintain profit margins at 9.2% while maximizing facility utilization, a premium pricing strategy, and the need for a more data-driven business approach before the next winter season?

Context:

Big Mountain Resort, located near Glacier National Park, attracts around 350,000 visitors annually with its 105 trails and diverse skiing offerings. Despite its premium pricing strategy, the resort faces challenges in optimizing ticket prices and effectively utilizing its facilities. The recent addition of a chair lift has increased operating costs by \$1,540,000 for the current season. Not only does Big Mountain Resort aim to optimize its pricing strategy, but it also seeks sustainable profits and growth. The business aims to adopt a more data-driven strategy to better understand the value of its facilities and make informed decisions regarding ticket pricing, cost-cutting measures, and potential facility enhancements.

Criteria for Success:

Success involves implementing a data-driven ticket pricing strategy that optimally reflects the value of each facility, identifying and implementing cost-cutting measures without compromising service quality, and exploring opportunities to enhance facility utilization. If additional features are incorporated to increase the ticket price, the company endeavors to minimize associated costs. The objective is to achieve a balance between cost reduction and revenue enhancement, ultimately increasing overall profitability.

Scope of Solution Space:

The solution encompasses data analysis to determine the relative importance of each facility, optimization of ticket pricing based on market trends and facility values, identification of operational cost-cutting measures, and evaluation of potential enhancements to support a higher ticket price. The goal is to align pricing with the perceived value of the resort's offerings, optimize cost structures, and explore opportunities for revenue growth.

Constraints within Solution Space:

Key constraints include the \$1,540,000 increase in operating costs due to the new chair lift, the need to maintain a premium pricing strategy while ensuring competitiveness, and the challenge of implementing changes without compromising the overall visitor experience. Also,

Market competition is another constraint as we are competing with other ski resorts to find a competitive advantage. Specifically, pricing our tickets involves incorporating additional features to enhance the value proposition of our ticket offerings. This strategy entails leveraging competitor data to inform our pricing decisions and optimize our competitive position in the market. Additionally, there may be resistance to certain changes from within the organization.

Stakeholders:

Key stakeholders include board members and any other executives within the company, each contributing expertise in data science, financial analysis, operations, and marketing. Collaborative efforts are essential for data-driven decision-making, cost optimization, and strategic pricing adjustments.

Key Data Sources:

Data sources include historical ticket sales data, customer surveys, financial records, and industry benchmarks. Analysis will be performed using statistical models, pricing simulations, and customer feedback to inform strategic decisions. Close collaboration with relevant departments and stakeholders will ensure a comprehensive and well-informed approach to addressing the challenges and opportunities faced by Big Mountain Resort.