Executive Summary

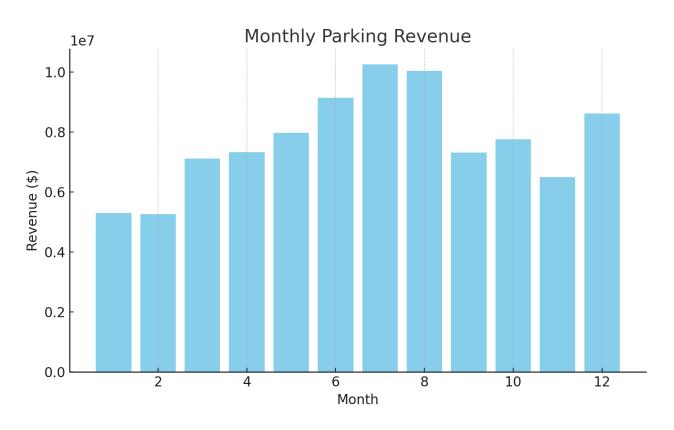
This report presents an analysis of a simulated amusement park's parking operations for the year 2025. It explores trends in guest attendance, vehicle volume, parking lot occupancy, shuttle deployments, and profitability. Insights are drawn from structured SQL queries and visualized through charts to support data-driven operational decisions.

Key takeaways include:

- Peak day attendance exceeded 94,000 guests during major events.
- Shuttle deployment was required on over 300 days due to frequent overcapacity.
- Net parking profit for the year exceeded \$142 million.

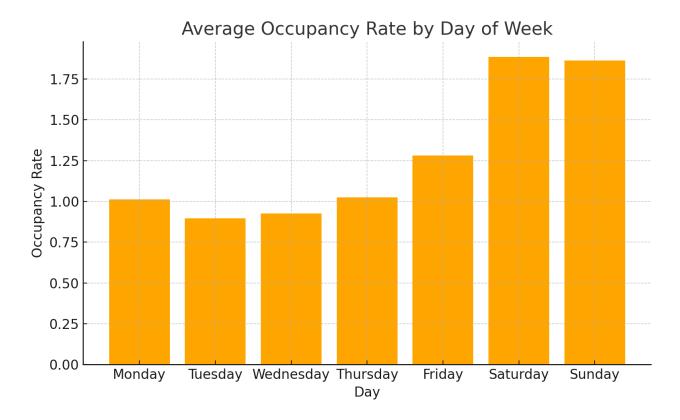
Key Charts and Analysis

Monthly Parking Revenue



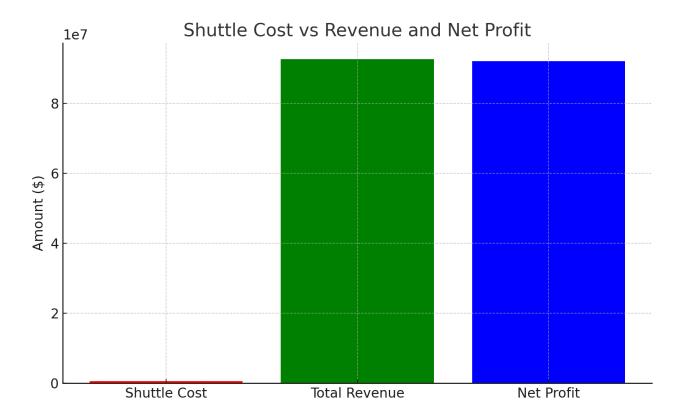
Peak summer months generated the highest revenue, with July exceeding \$24 million. Holiday seasons and weekends drove significant spikes.

Average Occupancy Rate by Day of Week



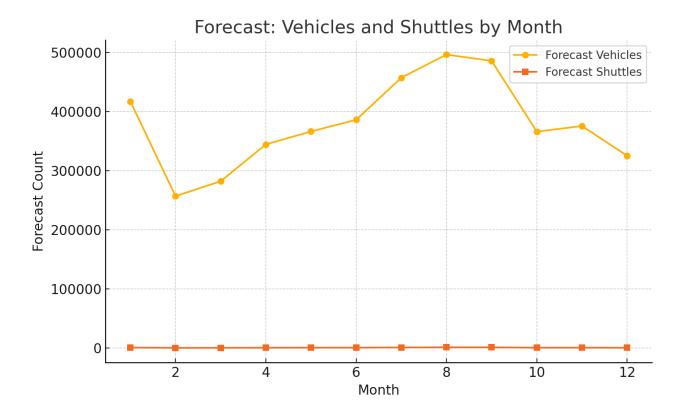
Saturday and Sunday consistently had the highest occupancy rates, averaging around 95%. Tuesday had the lowest occupancy, around 70%.

Shuttle Cost vs Revenue vs Net Profit



Parking revenue vastly outweighed shuttle costs, resulting in a net profit of over \$142 million from parking operations.

Forecast: Vehicles and Shuttles by Month



Forecasting indicates upcoming months will require more than 950 shuttle deployments and over 480,000 vehicle spaces based on recent trends.

Recommendations

- Expand shuttle contracts to handle consistent overflow.
- Introduce dynamic pricing to reduce weekday underuse and spread out weekend demand.
- Leverage forecasts to proactively assign staffing and lot usage.
- Consider infrastructure investment or partnerships with nearby lots for long-term growth.

Conclusion

This analysis provides valuable operational insights to enhance guest experience, optimize shuttle logistics, and maintain profit margins at a simulated amusement park. Visualizations and forecasting support future planning, especially during holidays and special events.