Stakeholder Report: Hotel Booking Analysis

# 1. Executive Summary

This report presents key findings and strategic insights from a comprehensive analysis of hotel booking data. Using Power BI, advanced metrics and visualizations were developed to guide decision-making around customer behavior, revenue optimization, and cancellation patterns.

# 2. Project Goals

- Analyze revenue, ADR, occupancy, and RevPAR across hotel types and time.  
- Understand booking behavior, lead times, and guest types.  
- Identify high cancellation segments and optimize marketing efforts.  
- Provide data-driven insights for operations and planning.

# 3. Key Insights

- \*\*City Hotels\*\* dominate booking volume but face higher cancellation rates.  
- \*\*Revenue is highly seasonal\*\*, peaking in Q3 (Jul–Sep).  
- \*\*Lead time distribution\*\* shows many guests book last-minute (≤7 days).  
- \*\*Families generate the most revenue\*\*, followed by couples.  
- \*\*Repeated guests have a significantly higher lifetime value\*\*.  
- \*\*Room upgrades\*\* and \*\*special requests\*\* impact cancellations positively.  
- \*\*Bookings with parking requirements\*\* are more prevalent at Resort Hotels.

# 4. Strategic Recommendations

- Implement targeted promotions to reduce cancellations in high-risk countries.  
- Develop loyalty programs to maximize value from repeated guests.  
- Offer incentives for early bookings to improve revenue forecasting.  
- Prioritize peak season readiness and optimize pricing dynamically.  
- Monitor booking channels for performance-based budget allocation.

# 5. Visual Summary

The Power BI dashboard includes visuals such as:  
- Line charts of revenue and ADR over time.  
- Pie charts of cancellations by hotel and guest type.  
- Matrix showing revenue by market segment and channel.  
- KPI indicators for ADR, RevPAR, and Occupancy Rate.  
- Interactive slicers by date, hotel, and country.

# Appendix: KPI Definitions

- \*\*Total Revenue\*\* = ADR × Total Stay Nights  
- \*\*Cancellation Rate\*\* = Canceled Bookings / Total Bookings  
- \*\*RevPAR\*\* = Total Revenue / Number of Available Days  
- \*\*Occupancy Rate\*\* = Total Stay Nights / Total Days  
- \*\*Lead Time Bucket\*\*: Last Minute (≤7), Short (8–30), Medium (31–90), Long (>90)