# **Project Title:** Hotel Booking Dashboard by Power BI.

**Project Description:**

In the dynamic and highly competitive hospitality industry, it is crucial for hotel management to make informed decisions based on data-driven insights. The "Hotel Booking Dashboard by Power BI" project aims to provide a comprehensive solution for hotel revenue analysis, cancellation trends, lead time insights, and country-wise performance. This Power BI dashboard leverages the power of data visualization to empower hotel owners and managers with actionable insights to optimize operations and enhance profitability.

**Problem Statement:**

1. **Monthly Revenue Visualization:** How does the total hotel revenue vary on a monthly basis, allowing hotel management to identify peak revenue months and off-peak periods?
2. **Monthly Revenue Loss:** What are the monthly trends in hotel revenue loss, enabling management to take proactive measures to reduce losses?
3. **Cancellation Ratio by Weekdays:** What is the cancellation ratio for each day of the week? Understanding this can help in optimizing booking policies and resource allocation.
4. **Average Daily Rate by Lead Time:** How does the average daily rate (ADR) change concerning lead time? This insight assists in pricing strategies and resource planning.
5. **Top 10 Countries Cancellation Ratio:** Which countries have the highest cancellation ratios? Identifying these countries helps tailor marketing and customer engagement efforts.
6. **Monthly Average Daily Rate and Cancellation:** How does ADR correlate with cancellation rates on a monthly basis? This information guides marketing campaigns and pricing adjustments.

**Dashboard Components:**

1. **Monthly Revenue Trends:** A visually appealing line chart depicting monthly hotel revenue.

2. **Monthly Revenue Loss Trends:** A line chart displaying monthly revenue losses over time.

3. **Cancellation Ratio by Weekdays:** A bar chart showcasing the cancellation ratios for each day of the week.

4. **Average Daily Rate by Lead Time Transition:** A scatter plot illustrating ADR based on lead time transition.

5. **Top 10 Countries Cancellation Ratio:** A bar chart highlighting the top 10 countries with the highest cancellation ratios.

6. **Monthly Average Daily Rate and Cancellation Analysis:** A combined line chart depicting the relationship between monthly ADR and cancellation rates.

**Benefits:**

1. **Enhanced Revenue Management:** Insights into monthly revenue trends and losses allow for proactive revenue management strategies.
2. **Improved Resource Allocation:** Understanding cancellation ratios by weekday’s aids in resource allocation and staff scheduling.
3. **Data-Driven Pricing Strategies:** ADR analysis by lead time enables data-driven pricing adjustments.
4. **Targeted Marketing:** Identifying countries with high cancellation ratios facilitates targeted marketing efforts.

**Conclusion:**

The "Hotel Booking Dashboard by Power BI" is a powerful tool for the hospitality industry, providing valuable insights into revenue trends, cancellation patterns, pricing strategies, and country-specific performance. With this dashboard, hotel management can make informed decisions, optimize operations, and ultimately enhance guest satisfaction and profitability.

**Thank You**