Business Problem Statement

A travel booking platform, wants to improve revenue growth, customer retention, and booking conversion. The company currently collects large volumes of user, booking, and transaction data but lacks clear insights into customer behavior, high-value users, pricing effectiveness, and churn patterns.

This project analyzes customer demographics, booking history, discounts, subscriptions, trip categories, and revenue data to uncover actionable insights and provide data-driven recommendations for business and product strategy.

Core Business Question

How can the travel booking platform leverage customer and transaction data to identify high-value users, optimize pricing and discount strategies, improve subscription adoption, and drive long-term revenue growth and customer retention?

Project Scope & Deliverables

1. Data Preparation & Feature Engineering (Python)

• Clean and validate raw booking and transaction data
• Engineer behavioral features such as trip intensity, discount dependency, premium adoption, and
loyalty indicators

2. Business Analysis & Insights (PostgreSQL)

• Analyze revenue drivers, customer segmentation, subscription behavior, discount impact, and
destination performance
• Use industry-grade SQL techniques including CTEs, aggregations, and window functions

3. Visualization & Decision Support (Power BI)

• Build interactive dashboards highlighting revenue trends, high-value customer segments,
subscription performance, and travel category insights

4. Business Recommendations & Reporting

• Translate analytical insights into clear, actionable recommendations for product, pricing, and
growth teams
• Prepare a concise report and presentation for stakeholders

5. Project Repository & Documentation

• Maintain a structured GitHub repository containing Python notebooks, SQL scripts, dashboard