UK Train Ride Performance Analysis Using Power BI

# Project Description:

This project presents a comprehensive analysis of train ride operations in the United Kingdom using Power BI. The goal is to support data-driven decision making within the railway sector. The analysis is based on actual data, covering trips, ticket sales, routes, customer behavior, delays, and cancellations.  
  
**Through the development of five interactive dashboards, the project highlights valuable insights in the following areas:**1. Overview Analysis – A general summary of total trips, delays, cancellations, and refund trends.  
2. Delayed & Cancelled Trips – Operational review of trip disruptions by month and route.  
3. Route Analysis – Comparison of different train routes to identify high-performing and problematic ones.  
4. Travel Behavior – Analysis of customer travel patterns, preferences, and monthly demand.  
5. Revenue Analysis – Evaluation of ticket types, revenue sources, and customer behavior impact.

# Project Objectives:

- Transform raw train journey data into actionable insights.  
- Identify performance gaps and areas for operational improvement.  
- Explore the relationship between delays, cancellations, and customer behavior.  
- Support better planning and decision making through data visualization and storytelling.

# Tools Used:

- Power BI for interactive dashboard development.  
- DAX and Power Query for data modeling and transformation.  
- Data storytelling techniques for clear and engaging insights communication.

# Expected Outcomes:

- Deeper understanding of operational challenges and customer satisfaction drivers.  
- Strategic recommendations to reduce delays, increase revenue, and optimize performance.  
- A user-friendly dashboard interface for stakeholders to explore and interact with key data insights.