# Problem Statement: Synapse Analytics + ADLS + Power BI

Business Context:  
You are a data engineer working for RetailNova, an e-commerce platform operating across India. Your job is to generate insightful dashboards on customer orders and delivery performance for the leadership team.

Data Source:  
A data lake (ADLS Gen2) contains multiple `.csv` files under the folder:  
abfss://ecom-raw@<storageaccount>.dfs.core.windows.net/orders/2024/  
These files represent daily order transactions and are updated every 24 hours.

Each file has the following columns:  
- OrderID (string)  
- CustomerID (string)  
- OrderDate (datetime)  
- ShipDate (datetime)  
- DeliveryStatus (Delivered, Cancelled, Delayed)  
- City (string)  
- Amount (float)  
- Category (Electronics, Fashion, Grocery, etc.)

Objective:  
Perform end-to-end analysis using Synapse Analytics. Load the data from ADLS, perform required transformations, store the results, and build a Power BI dashboard.

Required:  
1. Load data from ADLS using external table.  
2. Clean the data (remove cancelled orders).  
3. Add a calculated column (DeliveryDays).  
4. Identify delayed deliveries (more than 5 days).  
5. Create aggregated insights (avg delivery time, revenue).  
6. Create a Power BI dashboard with visuals based on this data.