**PropVivo Power BI Assessment Project 1 – Sales Performance Dashboard**

### Project Overview

You are hired as a Data Analyst by a retail company to create a complete Power BI solution that analyzes and visualizes sales performance. The dataset provided is uncleaned and contains over 1800 records across Sales, Product, and Customer tables.

### Objective

To build a Power BI dashboard that: - Cleans raw data using Power Query - Establishes a strong data model - Uses DAX to calculate key metrics - Visualizes insights with filters and KPIs

### Problem Context

The company struggles to monitor regional sales performance, customer behavior, and product profitability. They want a centralized dashboard that allows leadership to view trends, spot opportunities, and make data-driven decisions.

### What You Need to Build

**Data Cleaning:** - Handle missing values (e.g., FeedbackScore, PaymentMode) - Fix inconsistent formats (dates, product names) - Remove duplicates and invalid data

**Data Modeling:** - Link 3 tables: Sales (fact), Products (dim), Customers (dim) - Use correct relationships and cardinality

**DAX Calculations:** - Total Revenue, Total Profit, Avg Order Value - Customer Lifetime Value - Product Rank by Revenue - Category-Wise Performance

**Visuals to Include:** - KPIs for Revenue, Orders, and Profit - Line chart for Monthly Revenue Trends - Bar chart: Top 10 Products - Matrix: Region vs Category Performance - Slicers: Product, Region, Month

### DAX Challenge Levels

**Easy:** Total Revenue, Profit, Quantity **Medium:** Product Ranking, Avg Feedback by Category **Hard:** Repeat Purchase Rate, Customer Segmentation **Very Hard:** - Create a measure that shows revenue contribution of top 10% of customers. - Build dynamic RFM (Recency, Frequency, Monetary) logic using DAX.

### Success Criteria

* Clean and structured Power BI model
* Proper relationships and calculated columns
* Clear visuals answering key business questions
* Slicers and filters are dynamic and useful
* Performance is optimized and error-free

### Deliverables

* Power BI (.pbix) file
* DAX formulas (Word or PDF)