Power BI E-Commerce Sales Dashboard Report

1. Project Title

E-Commerce Financial and Operational Performance Dashboard

A dynamic business intelligence dashboard designed to track Year-to-Date (YTD) financial performance and operational efficiency across key customer segments, product categories, and logistical channels.

2. Purpose / Short Description

This Power BI report provides executive leadership with a consolidated, real-time view of core performance metrics—**Sales, Profit, Margin, and Quantity**. Its primary purpose is to enable swift monitoring of business performance and support data-driven strategic decisions across the organization.

3. Technology Stack

The dashboard leverages Microsoft's BI ecosystem for end-to-end analytics:

- Power BI Desktop: Platform for visualization and report design.
- Power Query: Handles data cleaning and preparation.
- DAX (Data Analysis Expressions): Calculates YTD measures, YoY trends, and custom KPIs.
- **Data Modeling:** Ensures accurate relationships and cross-filtering for precise aggregations.
- **Visuals:** Includes Card, Table, Filled Map, Donut/Pie Charts, and Bar Charts for clear insights.

4. Data Source

- Source: Sample Data (Public Domain/Open Source)
- The dataset simulates the sales, profitability, and logistics operations of a typical ecommerce company, providing a realistic environment for analytical demonstration.

5. Features & Highlights

Business Problem

The dashboard addresses the need for immediate access to actionable intelligence by: - Quantifying performance variance using Year-over-Year (YoY) trends. - Highlighting key drivers of profit margin. - Identifying top and bottom-performing products for management focus.

Goal of the Dashboard

- Create an intuitive, interactive environment for executives.
- Optimize product portfolios and category management.
- Strategically segment customer outreach across Consumer, Corporate, and Home Office groups.

Key Metrics & Visuals

KPI	YTD Value	Insight
Sales	\$11.53M	Monitors total revenue performance.
Profit	\$1.34M	Tracks profitability across segments.
Quantity	107.2K units	Evaluates sales volume trends.
Profit Margin	11.58%	Indicates overall operational efficiency; +5.37% YoY growth.

Additional Visuals: - Category Table: Office Supplies is the largest segment. - Top/Bottom 5 Products: Enables direct product-level management action. - Region & Shipping Type Visuals: West region leads revenue; Standard Class is the primary shipping method.

Business Impact & Insights

- YTD Profit Margin growth (+5.37%) suggests effective cost control and optimized pricing strategies.
- Highlights top-performing products for increased investment and bottom five products for corrective action.
- Supports executive decision-making for resource allocation and portfolio optimization.

6. Dashboard Screenshots / Demo

