**Madhav E-commerce Sales Report**

**Project Overview**

The **Madhav E-commerce Sales Dashboard** is a data visualization project designed to provide insights into the sales and profit performance of an e-commerce business. This project leverages **Excel** for data cleaning and transformation and **Power BI** for interactive dashboard creation. The dashboard includes key business metrics, sales trends, and profit analysis to aid decision-making.

**Tools & Technologies Used**

* **Excel**: Data cleaning, transformation, and preliminary analysis.
* **Power BI**: Data modeling, visualization, and dashboard development.
* **DAX (Data Analysis Expressions)**: Used for calculated measures and aggregations.

**Data Sources**

The dataset used for this project includes transactional sales data with the following attributes:

* **Order ID**
* **Product Category & Sub-Category**
* **Customer Name**
* **Order Date**
* **Quantity Sold**
* **Sales Amount**
* **Profit Earned**
* **Payment Mode**

**Steps Involved in the Project**

**1. Data Cleaning & Preparation (Excel)**

* Removed duplicates and handled missing values.
* Standardized date formats and product categories.
* Checked for inconsistencies in sales and profit values.
* Filtered relevant data for analysis.

**2. Data Import & Modeling (Power BI)**

* Imported cleaned data from Excel into Power BI.
* Created relationships between tables for accurate aggregations.
* Developed calculated columns and measures using **DAX** (e.g., Total Sales, Profit Margin, AOV).

**3. Dashboard Design & Visualization (Power BI)**

* **KPI Cards**: Displayed key metrics like total sales, quantity sold, profit, and AOV.
* **Bar Charts**:
  + Monthly profit trends.
  + Profit contribution by sub-category.
* **Pie Charts**:
  + Sales distribution by category.
  + Sales breakdown by payment mode.
* **Color Theme**: A dark-themed UI for a modern and professional look.
* **Interactivity**: Enabled slicers and filters for dynamic analysis.

**Key Insights**

* The highest profits were recorded in **December**, with lower sales in mid-year months.
* **Printers and Bookcases** contributed significantly to overall profit.
* The majority of transactions were completed using a specific payment mode (e.g., **44% from digital payments**).
* Certain customers and regions had a higher contribution to sales and profitability.

**Future Enhancements**

* Integration of **real-time data** for live dashboard updates.
* Addition of **forecasting models** to predict future sales trends.
* Implementation of **advanced Power BI features** like drill-through reports and tooltips for deeper insights.

**Conclusion**

This project successfully demonstrates how **Power BI** and **Excel** can be used to analyze e-commerce sales data and create an insightful dashboard. The visualizations provide a clear and interactive way to explore business performance, helping stakeholders make data-driven decisions.