III E-Commerce Sales Dashboard Report

1. Introduction

In today's competitive business environment, data-driven decisions are crucial to understanding customer behavior and optimizing sales performance. This report presents a Power BI dashboard developed to visualize key performance indicators (KPIs) of an e-commerce business. The dashboard aims to uncover patterns in sales, profits, and product categories, thereby enabling strategic business decisions.

2. Abstract

The E-Commerce Sales Dashboard is a visual reporting tool that consolidates and displays comprehensive metrics such as sales amount, profit, quantity sold, and average sales figures. The dashboard breaks down these KPIs across various dimensions like state, customer, payment mode, month, and product sub-categories. It provides valuable insights that help businesses analyze high-performing regions, profitable products, and customer behavior, while also identifying trends and areas for improvement.

3. Tools Used

- Microsoft Power BI: For data visualization and dashboard creation.
- MS Excel / CSV: (Assumed) Data source for importing sales records.
- DAX: For creating calculated measures like profit, average, and filters.

4. Steps Involved in Building the Project

1. Data Collection & Cleaning

- Collected sales data with attributes like customer name, product category, sales amount, profit, state, month, and payment mode.
- o Cleaned the data for missing or inconsistent values.

2. Data Modeling

- o Established relationships between tables (if more than one).
- o Created calculated fields such as Sum of Amount, Sum of Profit, and Average.

3. Dashboard Design

- o Selected a dark-themed layout for visual appeal and contrast.
- o Used cards to show key metrics (e.g., 438K total sales amount, 37K profit).
- o Implemented slicers to filter data by quarter and state.

- o Bar and column charts show profit trends by **month** and **state**.
- o Donut charts break down payment modes and product categories.
- o Horizontal bar charts visualize **profit by sub-category** and **sales by customer**.
- Dashboard screenshort:



4. Interactive Features

- o Added slicers for **quarter-wise** and **state-wise** data filtering.
- o Enabled drill-down and hover-to-view values for detailed analysis.

5. Conclusion

This Power BI dashboard offers a comprehensive overview of e-commerce sales data, enabling businesses to identify profitable products, efficient payment methods, high-value customers, and performance trends across different states and months. Through a clear and interactive design, decision-makers can derive actionable insights, monitor KPIs in real time, and improve overall business performance. This project demonstrates the power of visualization in making data accessible and actionable.