Internship Details

- **Internship**: Future Interns – Data Science & Analytics
- **Track Code**: DS
- **Task Number**: 01
- **Task Name**: Business Sales Dashboard from E-commerce Data

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Problem Statement

The objective of this task is to analyze e-commerce sales data to identify sales trends, best-selling products, high-revenue categories, and customer contribution to revenue. The insights are presented using an interactive Power BI dashboard to support data-driven business decisions.

Dataset Description

The dataset contains transactional e-commerce data with the following attributes:

- Order ID
- Order Date
- Product Name
- Product Category
- Quantity Sold
- Sales Amount
- Profit
- Customer Name / Customer ID

The dataset was cleaned and transformed to ensure consistency and accuracy before analysis.

Tools & Technologies Used

- **Power BI** – Data modeling, DAX calculations, and dashboard creation

- **MS Excel** – Data cleaning and preprocessing
- **DAX** – KPI calculations (Total Sales, Profit, AOV, etc.)
- **GitHub** – Version control and task documentation

Data Cleaning & Preparation

- Removed duplicate records
- Handled missing values
- Converted date fields into proper date format
- Created calculated columns and measures using DAX
- Ensured numeric consistency for sales and profit fields

Key Metrics (KPIs)

- **Total Sales** – Overall revenue generated
- **Total Profit** – Net profit from sales
- **Total Orders** – Number of orders placed
- **Average Order Value (AOV)** – Average revenue per order
- **Profit Margin** – Percentage profit from sales

Dashboard Visualizations

The Power BI dashboard includes:

- KPI cards for Sales, Profit, Orders, and AOV
- Monthly sales trend line chart
- Top-selling products bar chart
- Category-wise revenue distribution
- Customer contribution analysis
- Interactive slicers for date and category filtering

Key Insights

- Identified top-selling products contributing maximum revenue
- Observed monthly sales trends and seasonal patterns
- Found high-performing product categories
- Analyzed customer contribution to overall sales
- Provided insights for inventory and marketing optimization

Business Impact

- Helps stakeholders track sales performance in real time
- Supports strategic decisions for product and category focus
- Improves understanding of customer purchasing behavior
- Assists in revenue and profit optimization

Conclusion

This project demonstrates the use of data analytics and visualization to transform raw e-commerce data into meaningful business insights. The interactive dashboard enables easy monitoring of key performance indicators and supports informed decision-making.

Author

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