Amazon Sales Analysis

Core Python (DAP) – Data Analysis using Python

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Topic: Amazon Sales Data Analysis

Abstract

This project involves analyzing Amazon sales trends using a dataset provided in the project guidelines. The analysis provides insights into monthly and yearly sales trends, key performance indicators, and regional sales performance. The study applies **Exploratory Data Analysis (EDA)** techniques and visualization tools like **Tableau, Power BI, and Python** to uncover key findings.

Dataset

This project utilizes Amazon Sales Data, which includes order details, revenue, profit, and sales channel information.

Columns:

1. **Order Date** – The date when the order was placed.
2. **Region** – The geographical location of the sale.
3. **Item Type** – The category of the product sold.
4. **Sales Channel** – Online or offline sales.
5. **Units Sold** – The number of units sold per order.
6. **Unit Price** – Price per unit.
7. **Unit Cost** – Cost per unit.
8. **Total Revenue** – Total income generated from sales.
9. **Total Cost** – Total expenditure on the sold products.
10. **Total Profit** – Revenue minus cost.

Use Cases:

- Analyzing **monthly and yearly sales trends**.
- Identifying **high-profit and low-profit product categories**.

- Understanding **regional sales performance**.
- Comparing **online vs. offline sales**.
- Finding **the most profitable product types**.

System Requirements:

Hardware:

- **Processor:** Intel(R) Core i5 or higher
- **RAM:** 8GB or more
- **Storage:** 100GB free space

Software:

- **Operating System:** Windows 10 / macOS / Linux
- **Tools:** Python, Tableau, Power BI, Jupyter Notebook
- **Additional Libraries:** Pandas, NumPy, Matplotlib, Seaborn

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How to Use:

1. Download the dataset from the provided **Google Drive link**.
2. Extract and clean the data using **Python (Pandas, NumPy)**.
3. Perform **Exploratory Data Analysis (EDA)** to identify key trends.
4. Create **visualizations** using **Power BI or Tableau**.
5. Generate insights and document findings in the final report.

Conclusion:

This project provides a **comprehensive sales analysis of Amazon's dataset**. The findings offer valuable insights into **sales trends, revenue generation, and regional performance**. The analysis helps businesses optimize their sales strategies, enhance **profit margins**, and make **data-driven decisions**.