Amazon Sales Analytics Project – Insights & Problem Solved

This project focused on analyzing Amazon product sales to uncover actionable insights and solve real business challenges. Using Python, Julius AI, and Power BI, I built an end-to-end analytics solution to fetch, clean, analyze, and visualize large datasets from Kaggle.

■ *Problem Statement*

Amazon's sales data is vast, complex, and unstructured. Without proper analysis, it is difficult for stakeholders to identify top-performing products, seasonal sales patterns, and underperforming categories. This lack of visibility makes it challenging to make data-driven decisions for inventory planning, marketing, and pricing strategies.

■ *Solution Approach*

- Fetched Amazon sales dataset from Kaggle using Python scripts.
- Cleaned and preprocessed the raw dataset using Julius AI for better accuracy.
- Performed exploratory analysis in Python to validate and understand the dataset.
- Developed a Power BI dashboard with dynamic filters, Top N slicers, and DAX measures for ranking and KPIs.
- Enabled drill-through functionality to explore details at category and product level.

■ *Key Insights*

- Top-selling products contribute a large share of revenue, while many products underperform.
- Seasonality plays a major role, with noticeable spikes in sales during festive months.
- Dynamic ranking revealed hidden top products that static reports would miss.
- Some categories showed consistently low sales, suggesting need for review or discontinuation.
- KPIs and dynamic titles improved clarity for decision-making in management reports.

■ *Outcome*

The project delivered a clear, interactive, and visually appealing dashboard that helps stakeholders identify opportunities and risks in real time. By solving the problem of unstructured and overwhelming sales data, the solution empowered data-driven decision-making for product, marketing, and inventory strategies.