

CONTENT:

- Project objective
- Data processing
- Dashboards
- Insights
- Link to resources



PROJECT OBJECTIVE:

The objective of this project is to design an Amazon sales dashboard that provides key performance insights (KPIs) from the available dataset. The dataset includes 1717 entries with columns such as country, item type, order date, order priority, region, sales channel, ship date, total cost, total revenue, and unit sold. The project aims to:

- 1. Revenue Trend Analysis (KPI): Track whether total revenue is increasing over time by analyzing sales data by order date, region, and sales channel. This will help understand seasonal or regional fluctuations in revenue.
- 2. Item-Type Revenue Contribution (KPI): Identify which product categories contribute the most to total revenue. This KPI will assist in focusing marketing and inventory strategies toward high-revenue items.
- 3. Shipment Efficiency KPI: Analyze the shipment data by comparing order date and ship date to evaluate fulfillment efficiency. This KPI will identify any bottlenecks in the shipping process, impacting customer satisfaction.
- 4. Sales Channel Performance (KPI): Evaluate the performance of different sales channels (e.g., online, offline) in terms of unit sales and revenue. This will provide insights into which channels drive the most sales.
- 5. Geographical Revenue Distribution (KPI): Break down total revenue by country and region to identify high-performing geographical areas and adapt sales strategies accordingly.
- 6. Cost-Revenue Analysis (KPI): Compare total cost with total revenue to assess profitability and identify areas where cost reduction can boost overall profit margins.
- 7. Order Priority Impact (KPI): Evaluate whether high-priority orders generate more revenue or quicker shipments, helping refine order processing strategies.

This dashboard will serve as a tool for decision-makers to monitor these KPIs, providing actionable insights for optimizing Amazon's sales and operational performance.

Data processing:

The dataset was sufficiently clean, allowing us to directly start extracting insights. However, a few calculated fields were created, which play a vital role in driving the key performance indicators (KPIs) for our analysis.

1. Profit:

- Formula: `[Total Revenue] [Total Cost]`
- Role in KPI: This calculated field provides a clear understanding of profitability, helping track profit trends across different item types & regions.

2. Shipment Days:

- Formula: `[Ship Date] [Order Date]`
- Role in KPI: This KPI helps monitor fulfillment efficiency by calculating the number of days taken for orders to be shipped, enabling us to analyze shipment delays or process improvements.

3. Highlighting Maximum Profit:

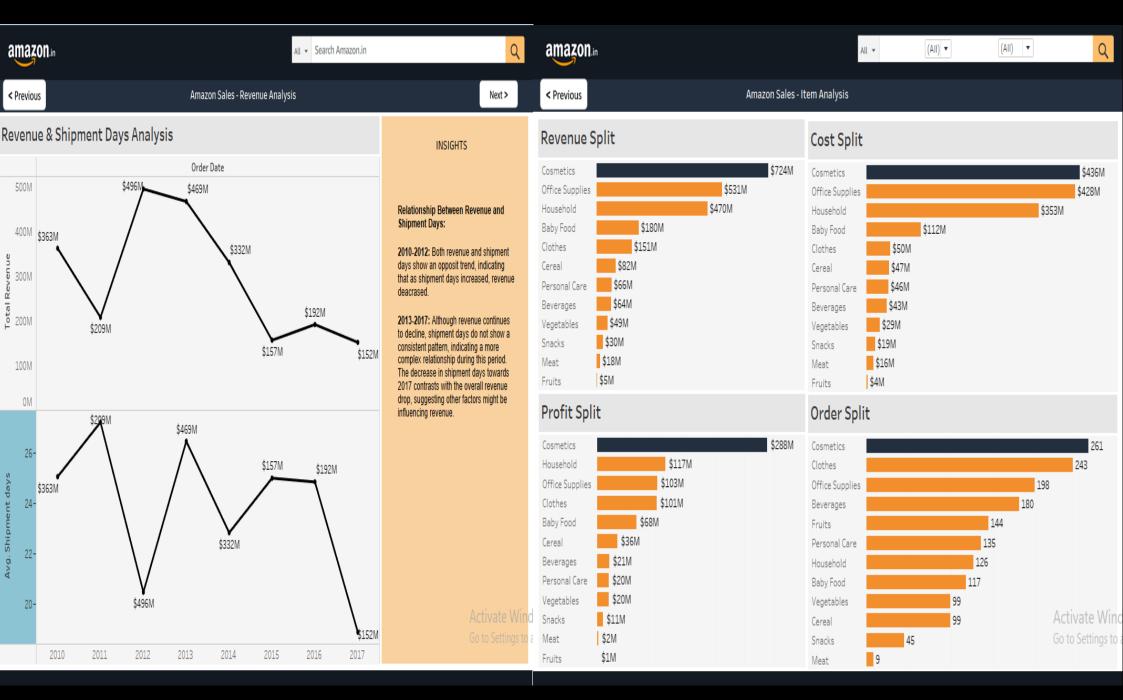
• Formula:

IF SUM([Profit]) = WINDOW_MAX(SUM([Profit]))
THEN 'color'
ELSE 'no color' END

• Role in KPI: This calculated field is used to highlight the item or region with the maximum profit, providing a visual cue to quickly identify top-performing areas.

Dashboards:





Insights:

Here are the insights from the above dashboard analysis:

- Profit by Region: Sub-Saharan Africa leads with profits exceeding \$200M, followed by Europe.
- Sales Channels: Offline sales contribute 60% of revenue (\$1,425M), with online sales at 40% (\$945M).
- Order Priority: High-priority orders dominate in count, with low-priority orders following.
- Shipment Trends: The highest volume of items was shipped in 2012. Post-2012, there's been a steep decline in shipments, with no improvement in the last three years.
- Revenue vs. Shipment Days (2010-2012): An inverse relationship is observed, where revenue drops as shipment days increase.
- Product Categories: Cosmetics generate the highest profit and revenue, followed by household items and clothes. Perishables like vegetables, meat, and dairy have the lowest sales and profits, likely due to their perishability and customer preference for buying fresh from local stores.



Link to resources:

• Dataset and dashboard: https://github.com/Chetan713205/Amazon-sales-tableau-dashboard-

Linkedin profile: https://www.linkedin.com/in/chetan-tiwari-/

• **Github profile:** https://github.com/Chetan713205





