amazon

Contents

01 About Amazon Dataset

02 Objective of the project

03 Sample Analysis Questions

04 Visuals

05 Project insight

06 Final conclusion to improve sales

07 Key Learnings

About Amazon Dataset

This dataset comprises comprehensive records of Amazon sales transactions, capturing details such as order dates, dispatch dates, city and state information, product ASIN codes, order statuses (Delivered, Shipped, Cancelled, Returned), and corresponding sales values. I selected this Amazon sales dataset because it contains approximately 12,90,000 records, providing a robust foundation for deriving meaningful insights into Amazon's sales performance across India. [unguided project]

Objective of the Project

The main objective of this project is to analyze Amazon's sales data to:

- **Identify sales patterns and seasonal trends**
- **Determine top-performing products and regions**
- **Understand cancellation rates**
- **Evaluate delivery performance and delays**
- **Provide actionable recommendations to improve sales and operational efficiency**

Sample Analysis Questions

Task 01: What are the total sales and number of orders over time (month wise)?

Task 02: Which weekday have the highest average orders or sales?

Task 03: What are the total sales and number of orders over time (month wise)?

Task 04: What % of orders are Cancelled vs Shipped vs Delivered?

Task 05: What is the average delivery time across all orders(month-wise)?

Task 06: Which states and cities generate the most revenue?

Task 07: What is the cancellation rate by state?

Task 08: What are the top 10 ASINs by revenue?

Sample Analysis Questions

Task 09: Which ASINs have the highest cancellation rates?

Task 10: What is the average revenue per order ?

Task 11: How long does it take from order to delivery (using order and ship dates)?

Task 12: Can we estimate lost revenue due to cancellations?

amazon

Home | Sales Overview | Delivery Insights | Geographic Insights | Revenue & Profitability | Operational Efficiency

Amazon Sales Dashboard

Total Sales
₹ 7,85,92,678

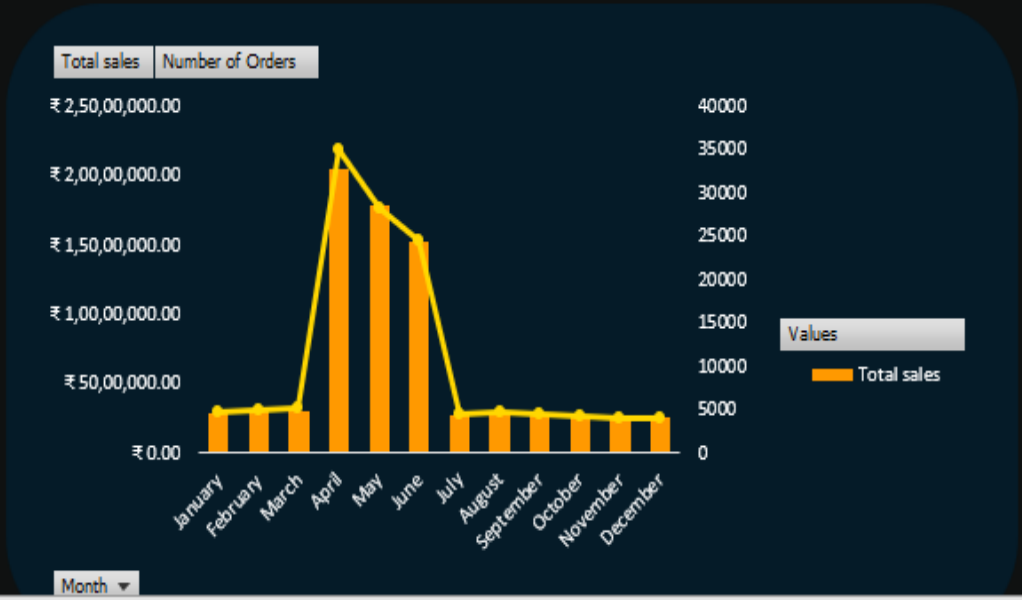
Average Order Value
₹ 631

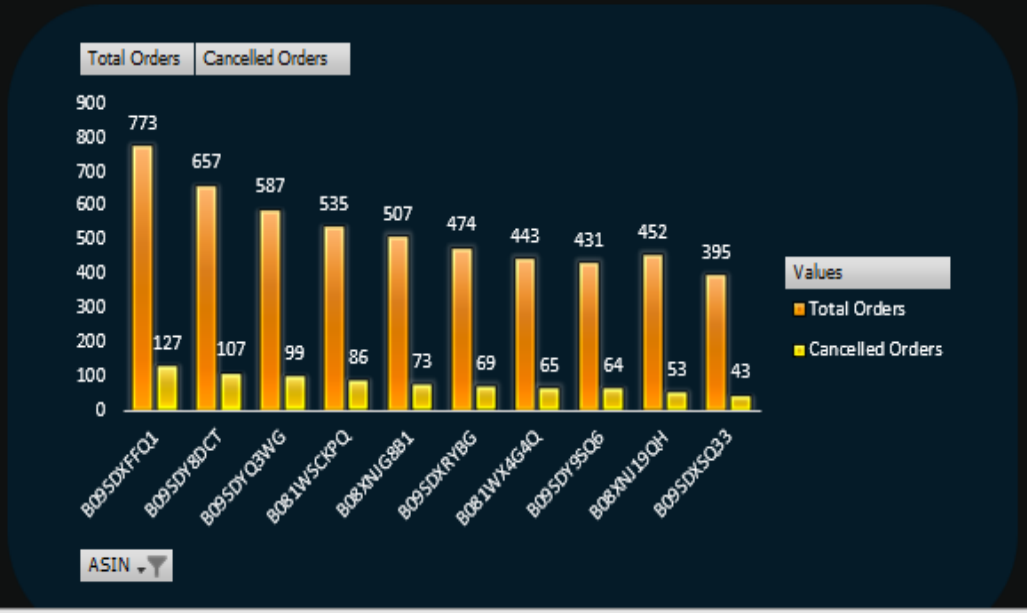
Cancelled Orders
14%

Delivery Time
3.1 Days

Total Orders
1,28,975

Highest Sale State
Maharashtra





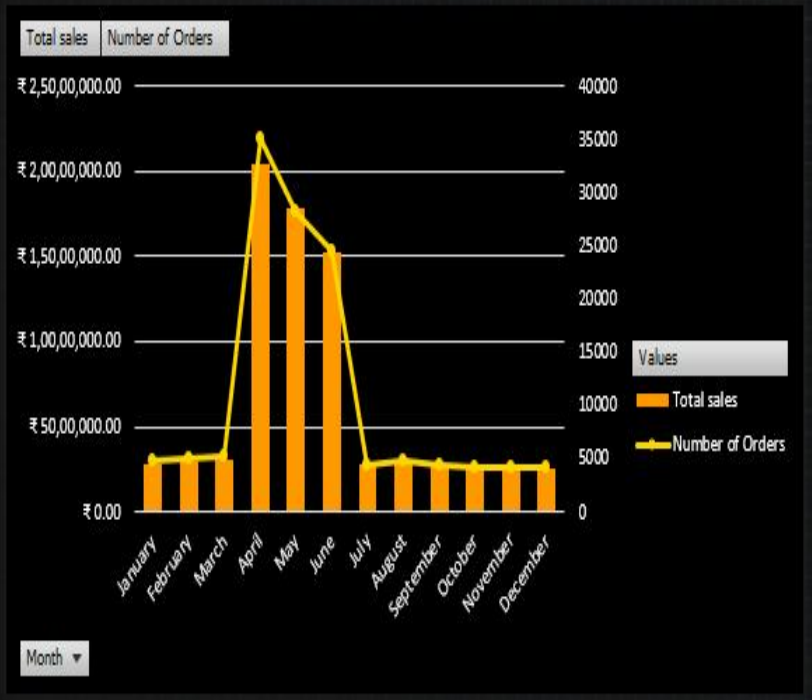
Home | Sales Overview | Delivery Insights | Geographic Insights | Revenue & Profitability | Operational Efficiency

Amazon Sales Performance Dashboard

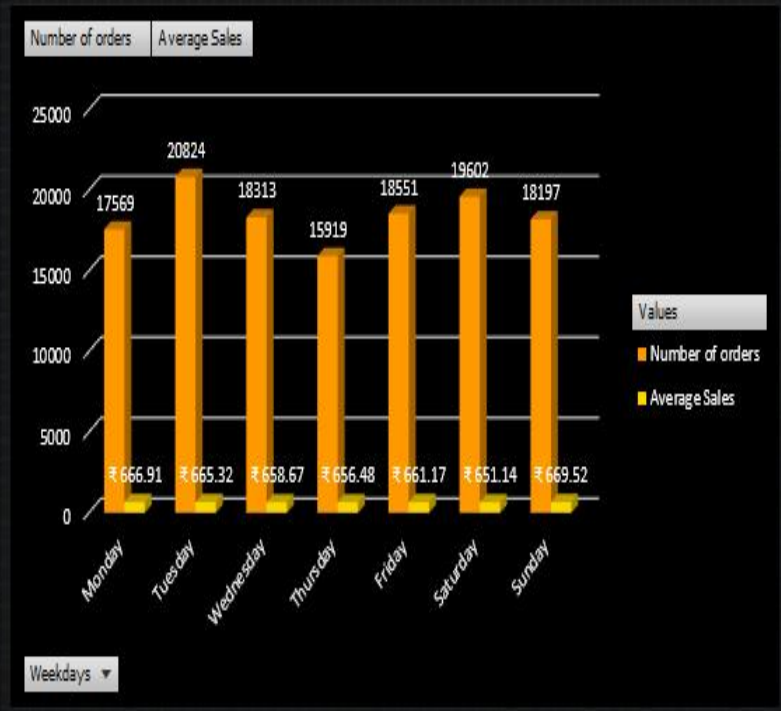
Ship-state

Chandigarh | Chhattisgarh | Dadra And Nagar | DELHI | Goa | Gujarat

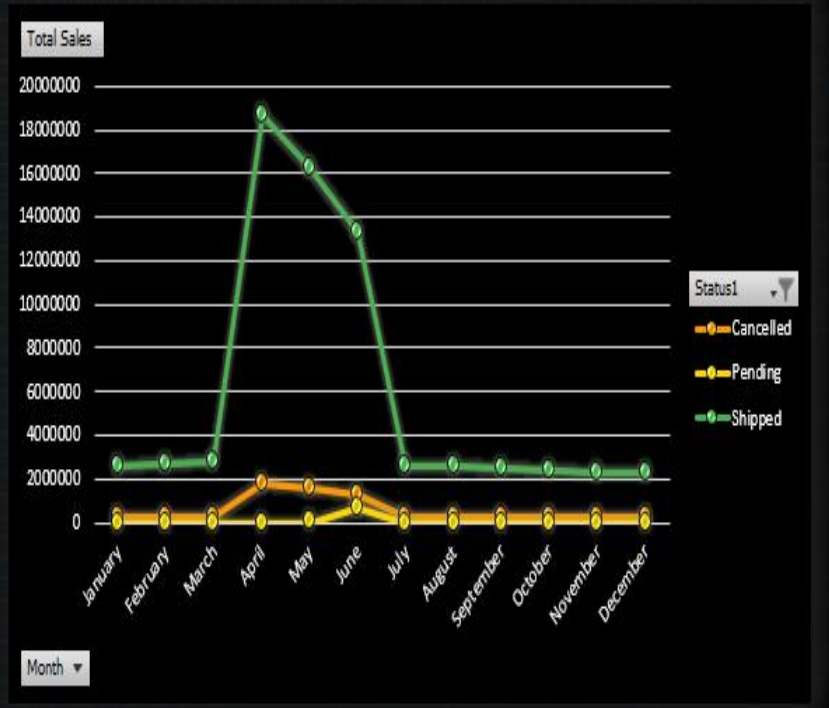
Task 01: What are the total sales and number of orders over time (month wise)?



Task 02: Which weekday have the highest average orders or sales?



Task 03: What is the sales trend by order status (Shipped, Cancelled, Delivered)?



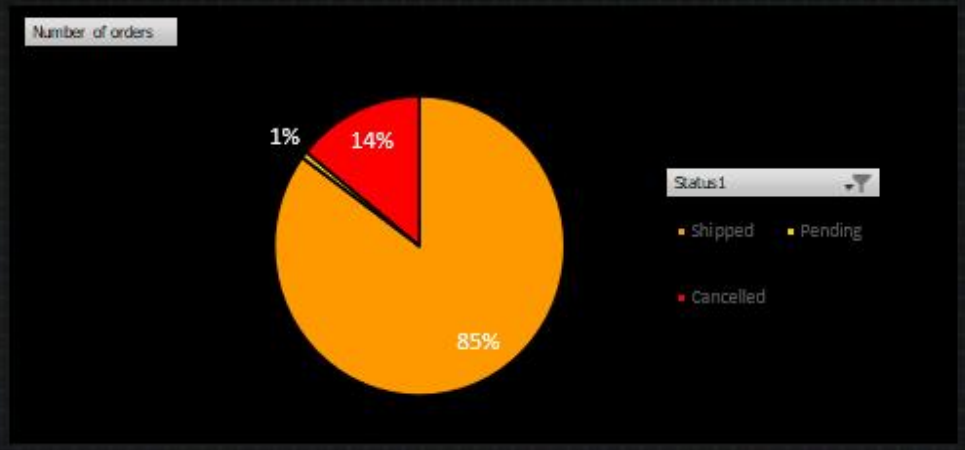
Delivery Insight Dashboard

Task 04: What % of orders are Cancelled vs Shipped vs Delivered?

Order Distribution by Status (%)

Order Status	Number of orders
Shipped	85%
Pending	1%
Cancelled	14%
Grand Total	100.00%

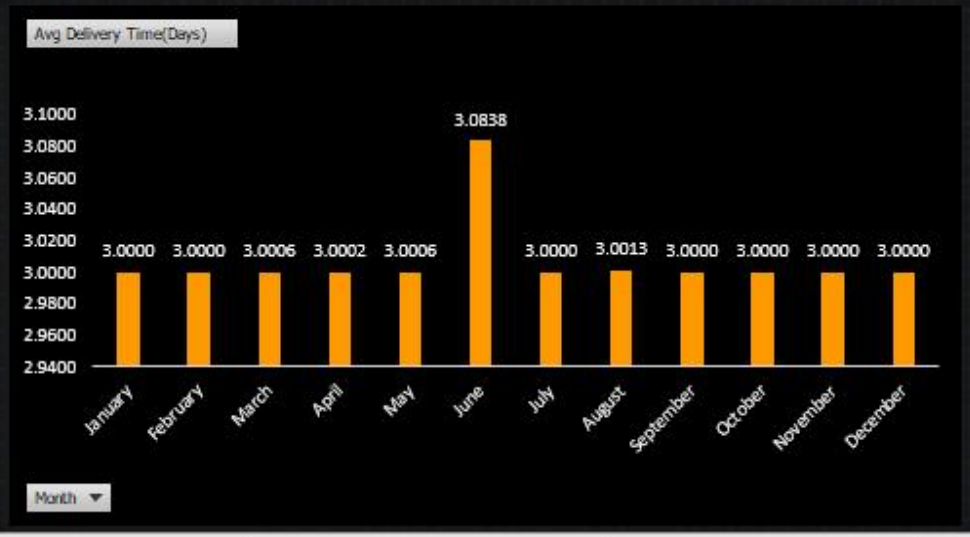
Month: April, May, June, July, August, September



Task 05: What is the average delivery time across all orders(month-wise)?

Months	Avg Delivery Time(Days)
January	3.0000
February	3.0000
March	3.0006
April	3.0002
May	3.0006
June	3.0838
July	3.0000
August	3.0013
September	3.0000
October	3.0000
November	3.0000
December	3.0000

Ship-state: ANDAMAN & NICO..., ANDHRA PRADESH, APO, ARUNACHAL PRAD..., ASSAM, Bihar, Chandigarh, Chhattisgarh



Geographic Insights

Task 06: Which states and cities generate the most revenue?

Row Labels	Sum of Amount
Maharashtra	₹ 1,33,35,534.14
Karnataka	₹ 1,04,81,114.37
TELANGANA	₹ 69,16,615.65
Uttar Pradesh	₹ 68,16,642.08
TAMIL NADU	₹ 65,15,650.11
DELHI	₹ 43,93,522.41
KERALA	₹ 38,30,227.58
WEST BENGAL	₹ 35,07,880.44
ANDHRA PRADESH	₹ 32,19,831.72
Haryana	₹ 28,82,092.99
Gujarat	₹ 27,28,651.82
Rajasthan	₹ 17,61,131.16
MADHYA PRADESH	₹ 15,92,382.98
Bihar	₹ 14,15,613.32
ODISHA	₹ 13,86,372.39
Punjab	₹ 12,11,666.84
ASSAM	₹ 10,18,136.20
Uttarakhand	₹ 9,74,143.55
Jharkhand	₹ 9,19,088.21
Goa	₹ 6,37,685.85
Chhattisgarh	₹ 5,70,485.83
HIMACHAL PRADESH	₹ 5,03,364.51

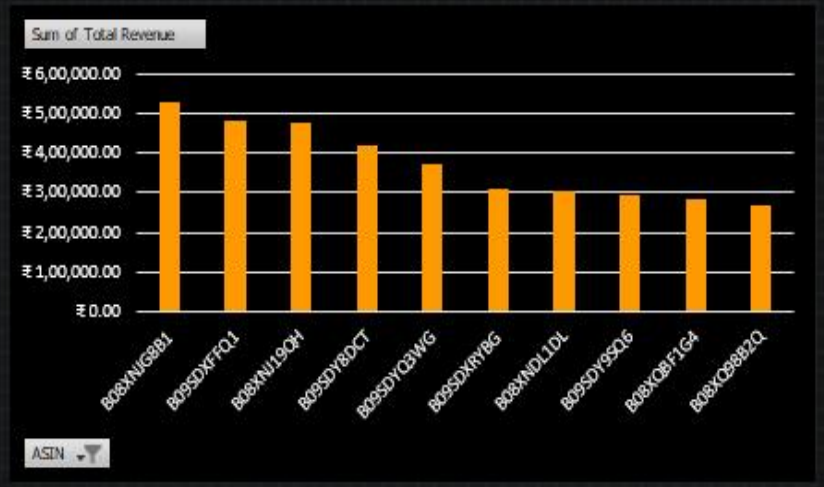
Task 07 : What is the cancellation rate by state?

States	Total Orders	Cancelled Orders	Cancellation Rate
ANDAMAN & NICOBAR	257	45	18%
ANDHRA PRADESH	5430	892	16%
APO	1	1	100%
ARUNACHAL PRADESH	147	20	14%
ASSAM	1663	248	15%
Bihar	2114	341	16%
Chandigarh	333	36	11%
Chhattisgarh	909	126	14%
Dadra And Nagar	70	12	17%
DELHI	7048	922	13%
Goa	1137	130	11%
Gujarat	4489	591	13%
Haryana	4415	563	13%
HIMACHAL PRADESH	788	146	19%
JAMMU & KASHMIR	702	119	17%
Jharkhand	1456	231	16%
Karnataka	17326	2245	13%
KERALA	6585	1175	18%
LADAKH	43	6	14%
LAKSHADWEEP	4	1	25%
MADHYA PRADESH	2529	380	15%
Maharashtra	22260	2966	13%

Revenue and Profitability Analysis

Task 08: What are the top 10 ASINs by revenue?

ASINs	Sum of Total Revenue
B08XNJG8B1	₹ 5,24,974.00
B09SDXFFQ1	₹ 4,81,885.00
B08XNJ19QH	₹ 4,75,155.00
B09SDY8DCT	₹ 4,17,032.00
B09SDYQ3WG	₹ 3,72,394.00
B09SDXRYBG	₹ 3,11,591.00
B08XNDL1DL	₹ 3,02,751.00
B09SDY9SQ6	₹ 2,95,932.00
B08XQBF1G4	₹ 2,84,134.00
B08XQ98B2Q	₹ 2,69,252.00
Grand Total	₹ 37,35,100.00

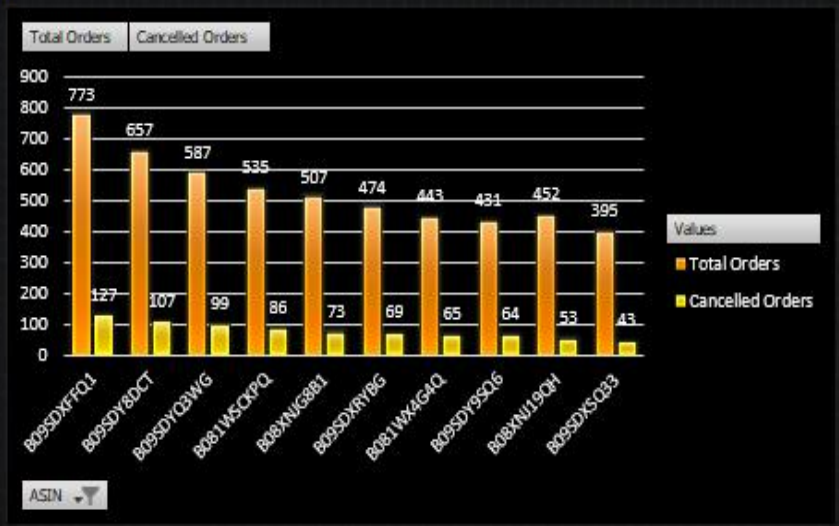


Task 10: What is the average revenue per order ?

Sum of Total Revenue	Total Orders	Total Revenue	Average Order Value
76034406	120379	76034406	631.6251672

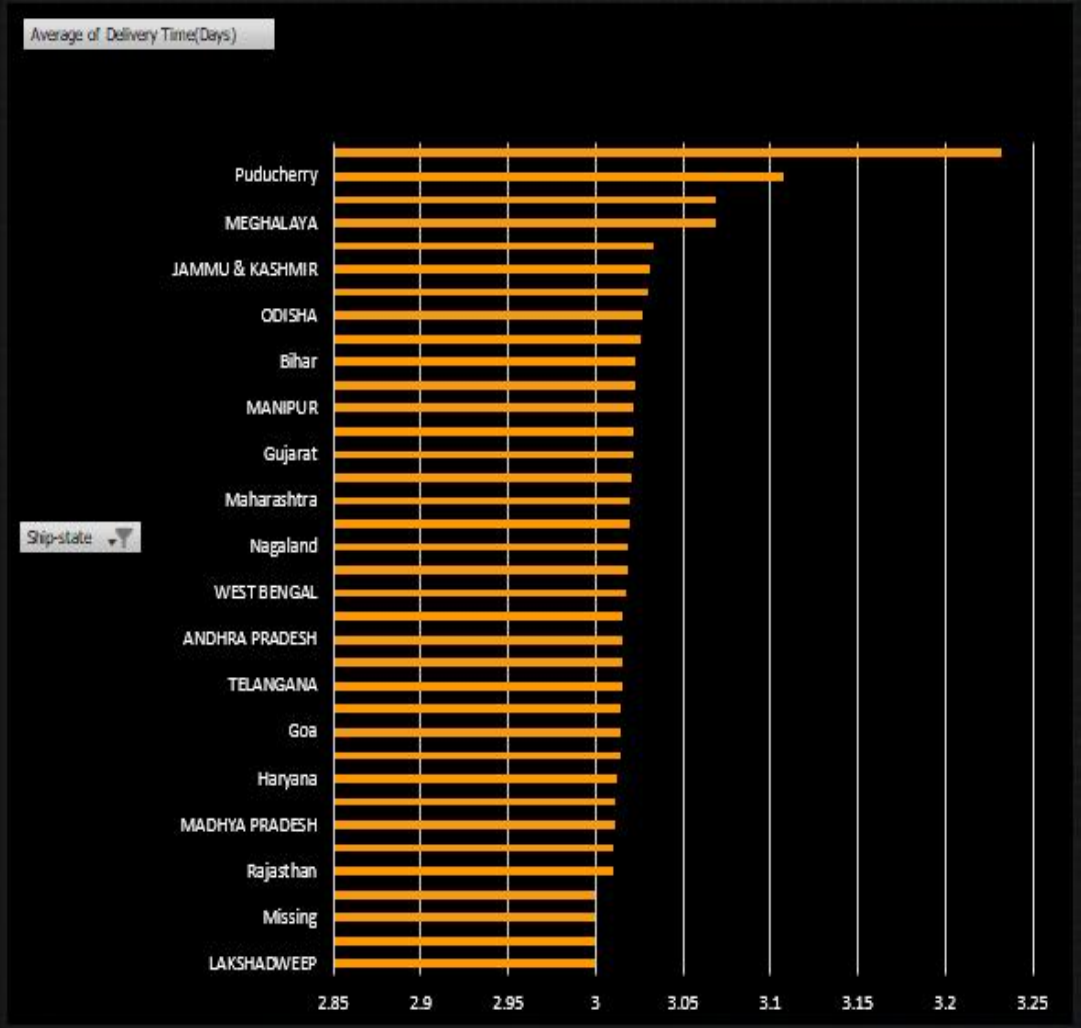
Task 09: Which ASINs have the highest cancellation rates?

ASINs	Total Orders	Cancelled Orders
B09SDXFFQ1	773	127
B09SDY8DCT	657	107
B09SDYQ3WG	587	99
B081WSCKPQ	535	86
B08XNJG8B1	507	73
B09SDXRYBG	474	69
B081WX4G4Q	443	65
B09SDY9SQ6	431	64
B08XNJ19QH	452	53
B09SDXSQ33	395	43
Grand Total	5254	786

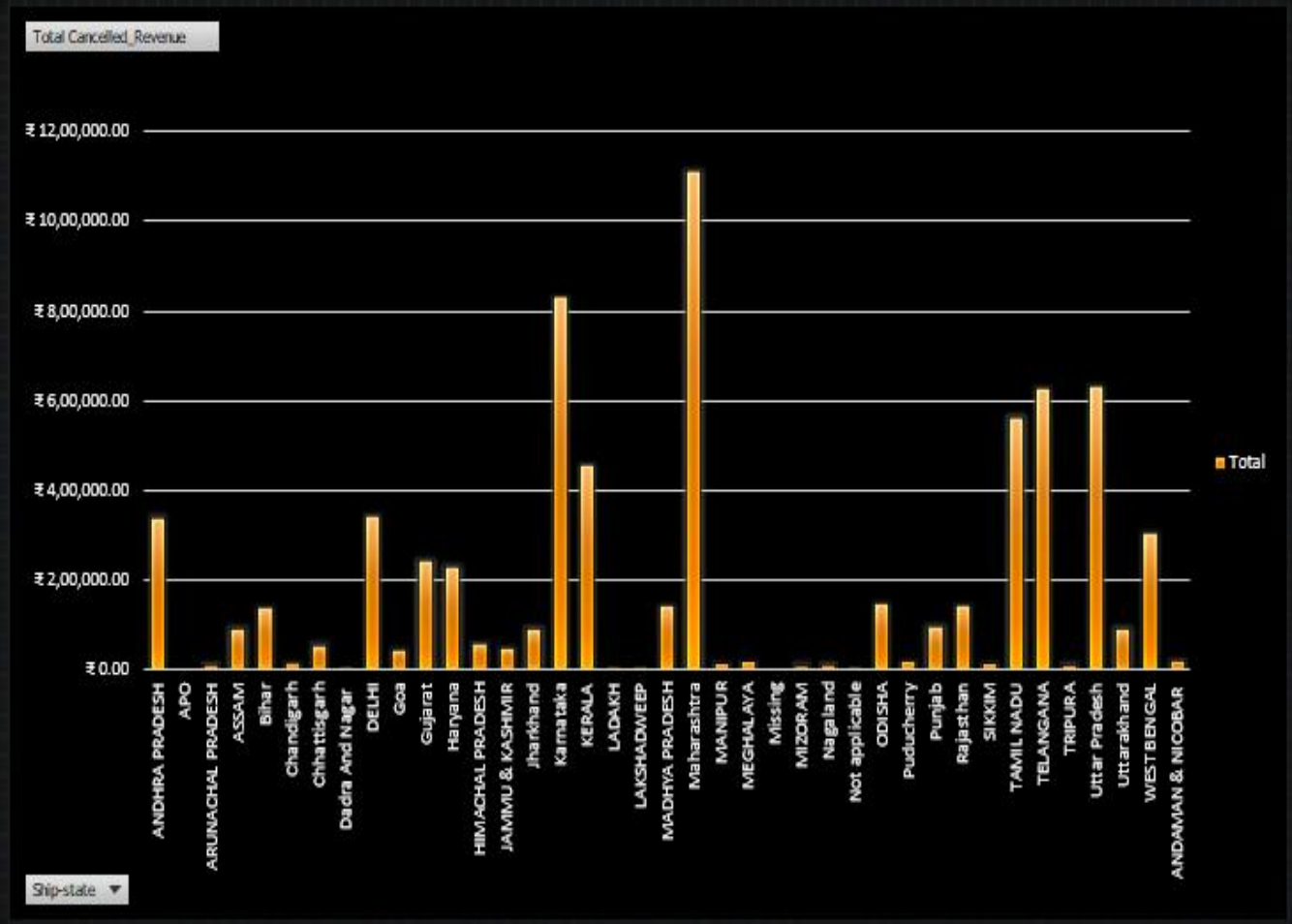


Operational Efficiency

Task 11: How long does it take from order to delivery (using order and ship dates)?



Task 12: Can we estimate lost revenue due to cancellations?



Total Revenue	Total Cancelled_Revenue	Lost Revenue Percentage
78592678.3	6919284.3	11.36%

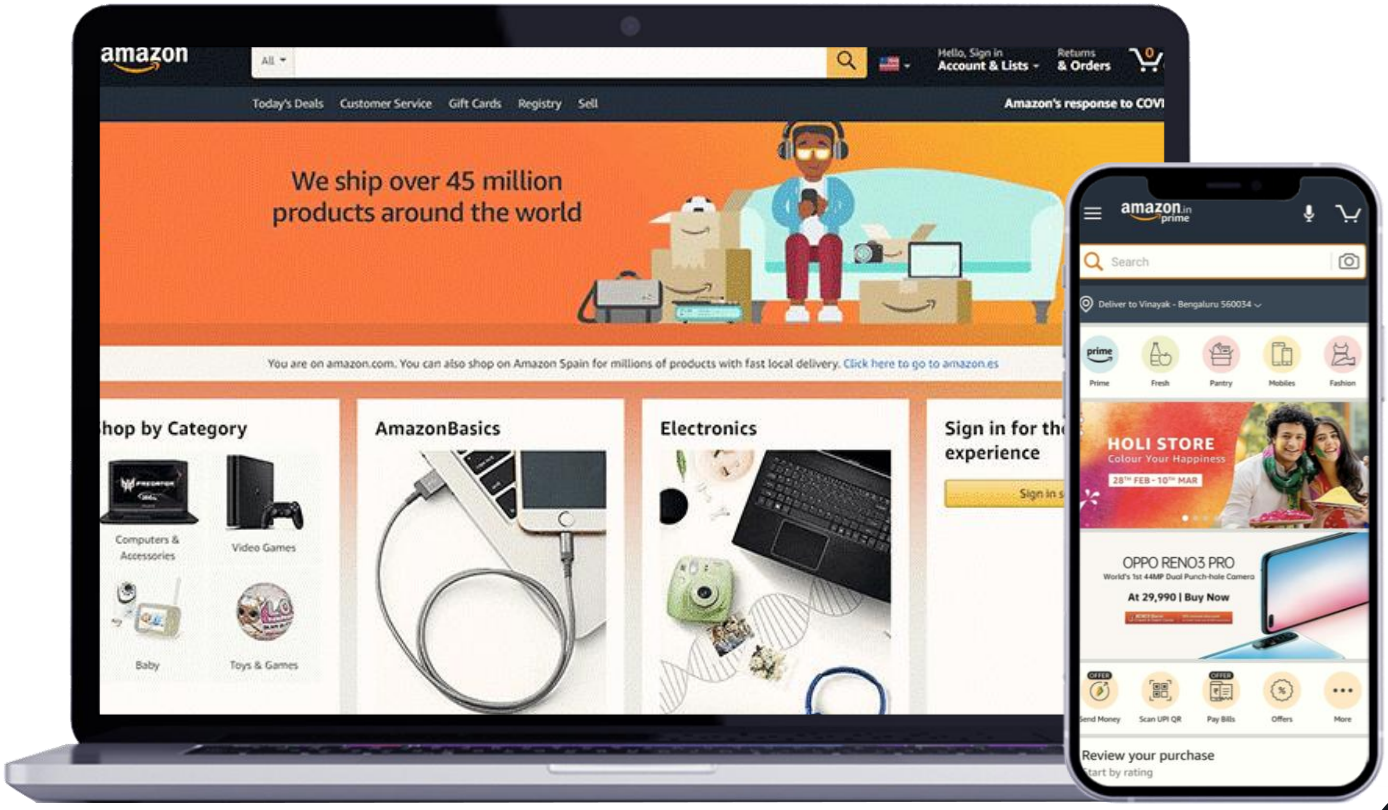
Project insights

From the analysis and interactive Excel dashboard:

- **Sales Peaks:** Highest sales were recorded during April, indicating market has recovered from covid and sales boost.
- **Top Regions:** Maharashtra and Karnataka emerged as the top revenue-generating states.
- **Order Status:** Delivered orders formed the majority, but ~8% of orders were cancelled, with higher rates in certain cities.
- **Top Products:** B08XNJG8B1 ASIN is the top seller product.
- **Delivery Performance:** Average delivery time was 3–5 days, with delays more common in remote locations.
- **Lost Revenue %:** 11.36% lost revenue percentage due to cancelled revenue

Final conclusion to improve sales

- **Focus Marketing Efforts**: Target campaigns in high-revenue states and during peak months. Need to work on festival season like November, October and March.
- **Reduce Cancellations:** Investigate causes of high cancellation rates in specific cities and improve product descriptions or payment processes.
- **Enhance Delivery Performance:** Partner with reliable courier services and improve logistics in delay-prone regions.
- **Personalized Offers:** Use customer purchase history to provide targeted promotions, increasing repeat purchases by adding extra discounts or EMI options.



Key Learnings

From the analysis and interactive Excel dashboard:

👉 Deep Understanding of Dataset & Business Context:

-> Gained familiarity with Amazon-specific terminology such as ASIN (Amazon Standard Identification Number) and learned how each field impacts sales analysis and decision-making.

-> Interpreted order statuses, delivery timelines, and regional attributes to align data insights with real business scenarios.

👉 Data Cleaning & Transformation:

-> Performed extensive data cleaning to handle missing values, inconsistent formats, and incorrect entries

-> Segmented data for more granular insights — by month, state, city, and product ASIN.

👉 Advanced Excel Techniques for Analysis:

-> Designed Pivot Tables and Pivot Charts for interactive analysis.

-> Used calculated fields and slicers to make the dashboard dynamic and user-friendly.

Key Learnings

From the analysis and interactive Excel dashboard:

👉 Dashboard Design:

-> Started with a basic pivot-based design and iteratively transformed it into a visually compelling dashboard using layout improvements, color themes, and chart enhancements.

-> Incorporated Amazon's brand color palette to make the dashboard portfolio-ready.

👉 Leveraging AI Tool :

-> Used ChatGPT for creative input on dashboard design improvements, layout suggestions, and presentation flow.

-> Combined AI-generated ideas with business logic to create a polished, professional output.

👉 End-to-End Project Execution Skills:

-> Took the project from raw data to a fully interactive dashboard, covering all stages — data understanding, cleaning, transformation, visualization, insight generation, and presentation.

thanks!

Fonts and colours used

Fira Sans

https://fonts.google.com/specimen/Fira+Sans

Roboto

https://fonts.google.com/specimen/Roboto

#FF9900

#232F3E

#131921