a Amazon Sales 2025

DATA ANALYSIS REPORT

Insights from SQL-based Sales Data Exploration



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PROJECT OVERVIEW

Analyze Amazon's 2025 sales data using SQL to uncover performance patterns and derive actionable business insights.

Dataset Link | Github Link

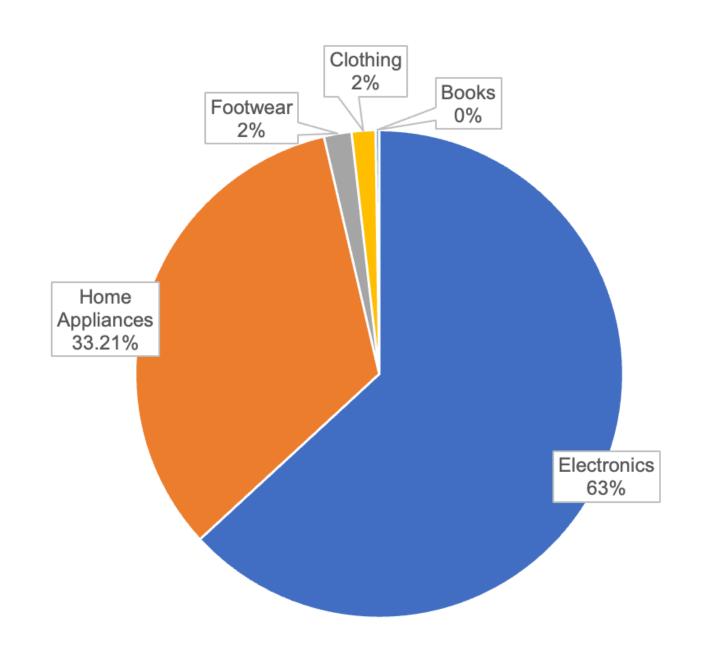
Objectives

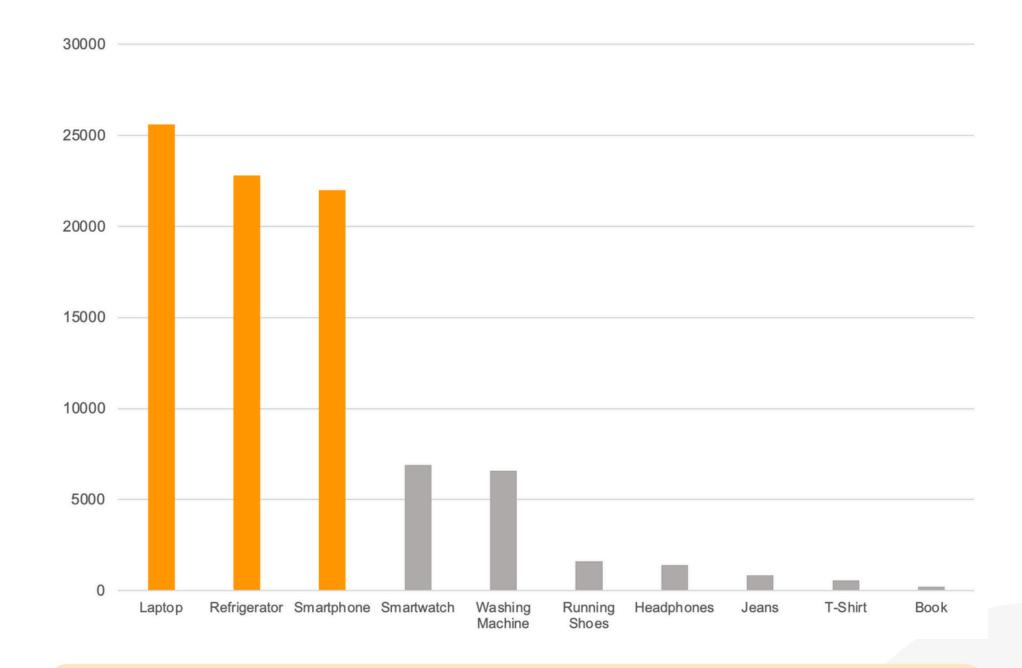
- Understand **sales performance** across products, categories, regions.
- Explore customer behavior, order status, and payment effectiveness.
- Provide actionable
 recommendations based on
 findings.

Skills & Tools Used

- **SQL:** Data querying, aggregation, filtering, window functions
- **Data analysis:** Pattern recognition, metrics calculation, business KPIs
- Visualization tools: Excel
- Problem-solving & Insight generation

TOP PRODUCTS & CATEGORIES





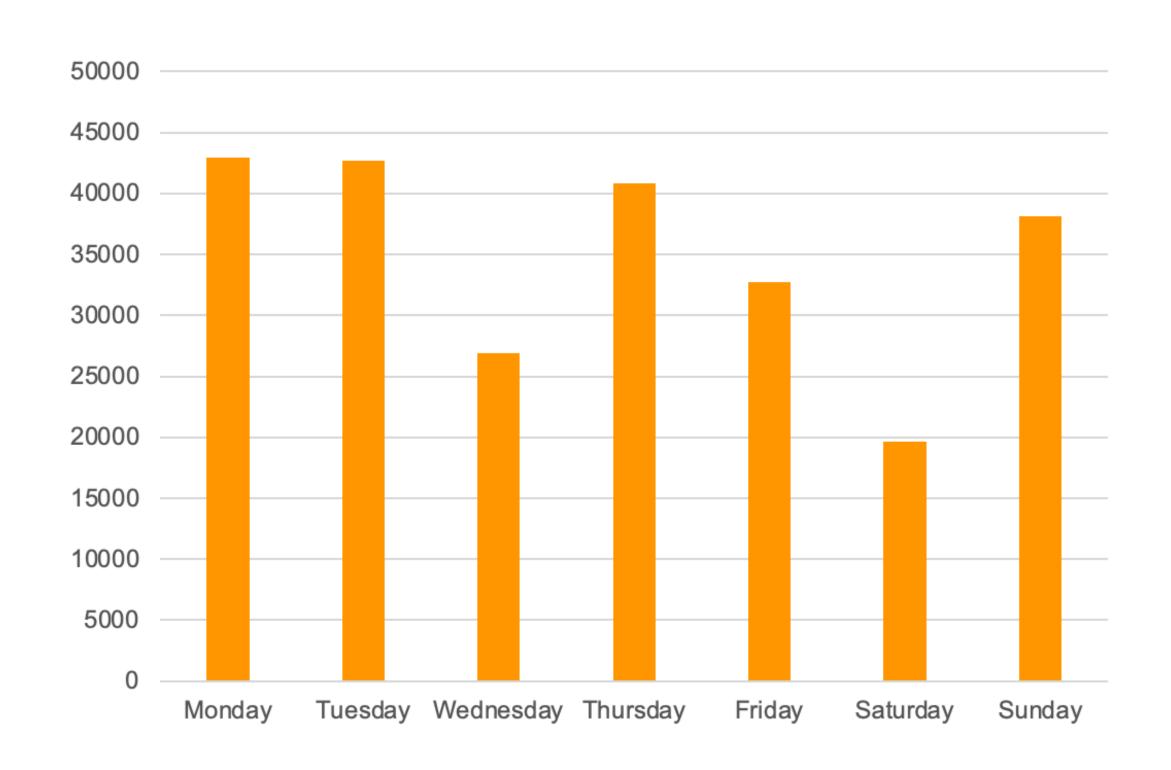
Category Share

Electronics (63.14%) and **Home Appliances** (33.2%) dominate sales.

Total Sales by Product

Laptops, **Refrigerators**, and **Smartphones** account for ~80% of completed sales.

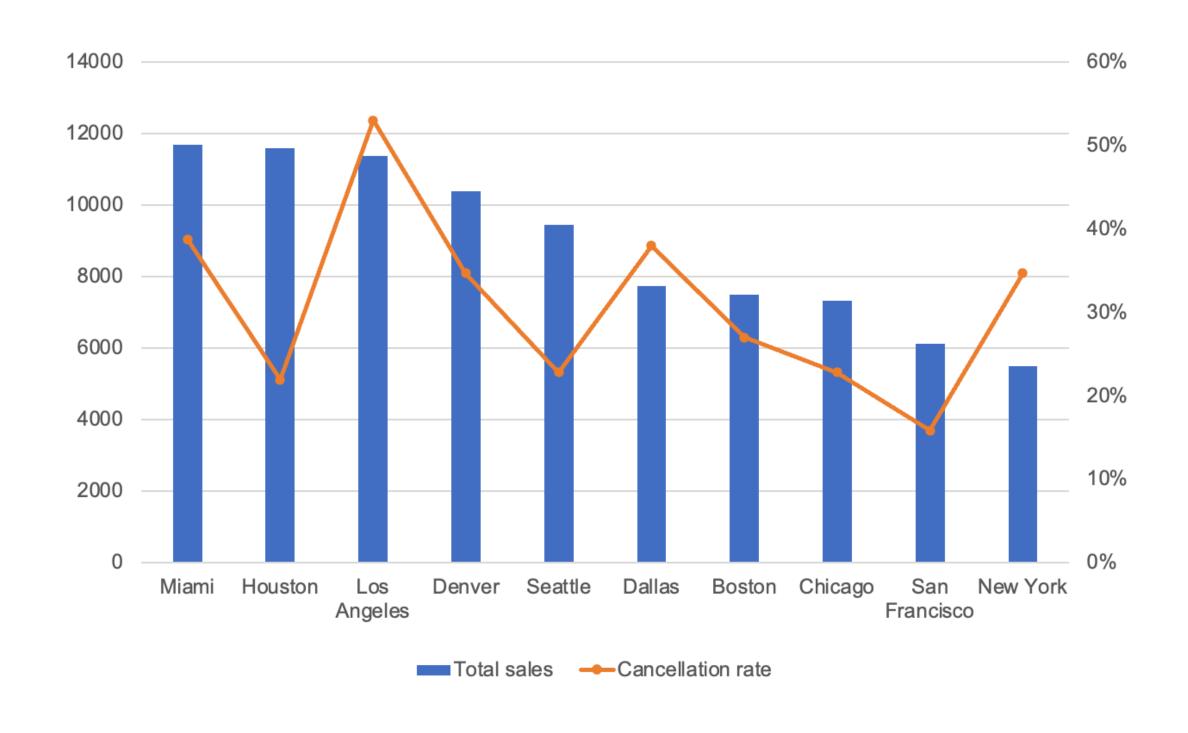
SALES BY DAY OF THE WEEK



Total Sales by Day of the Week

- Monday and Tuesday contribute over 35% of weekly sales.
- **Saturday**, with only 8% of total sales a potential opportunity for weekend promotions.

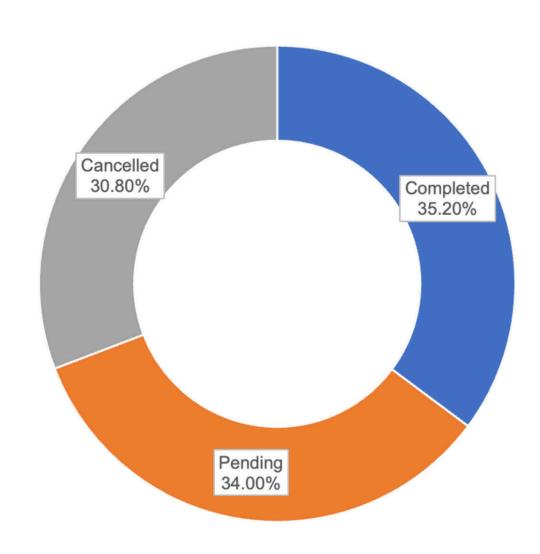
LOCATION INSIGHTS



Total Sales and Cancellation Rates by Location

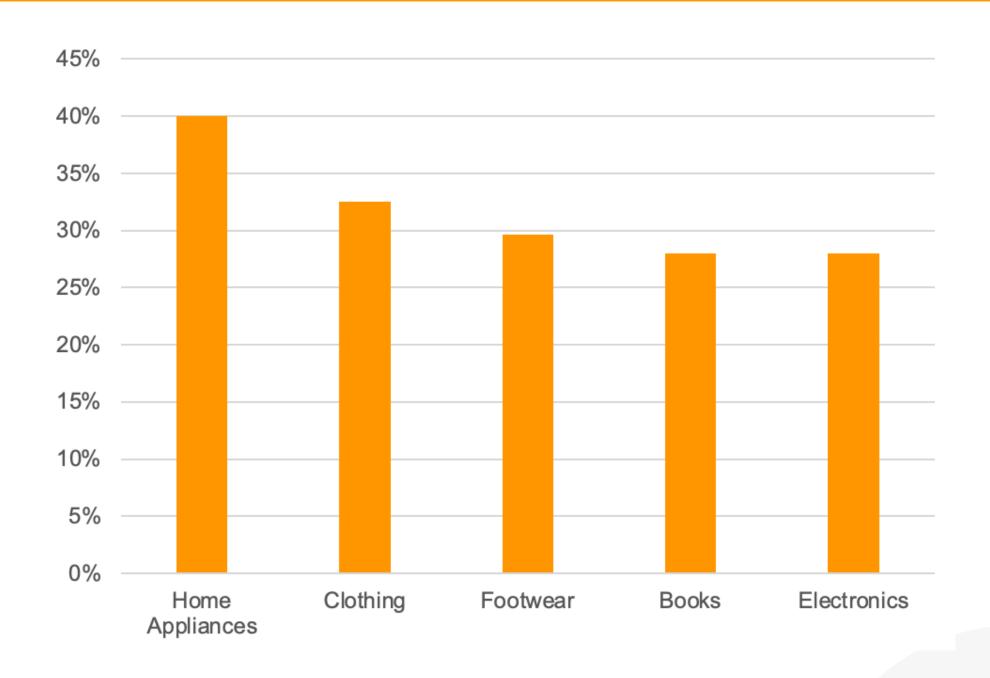
- Miami, Houston, and LA lead in sales volume.
- However, LA, Miami, and Dallas also show notably high cancellation rates — indicating possible delivery, service, or customer experience issues.

ORDER STATUS INSIGHTS



Order Status Distribution

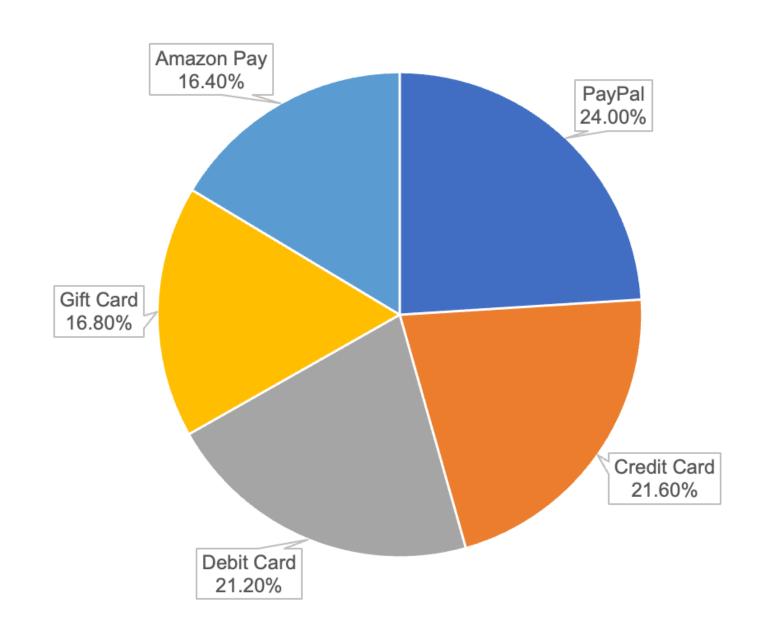
- Only 35.2% of orders were completed.
- Pending orders represent 34% may point to logistical or payment processing inefficiencies.

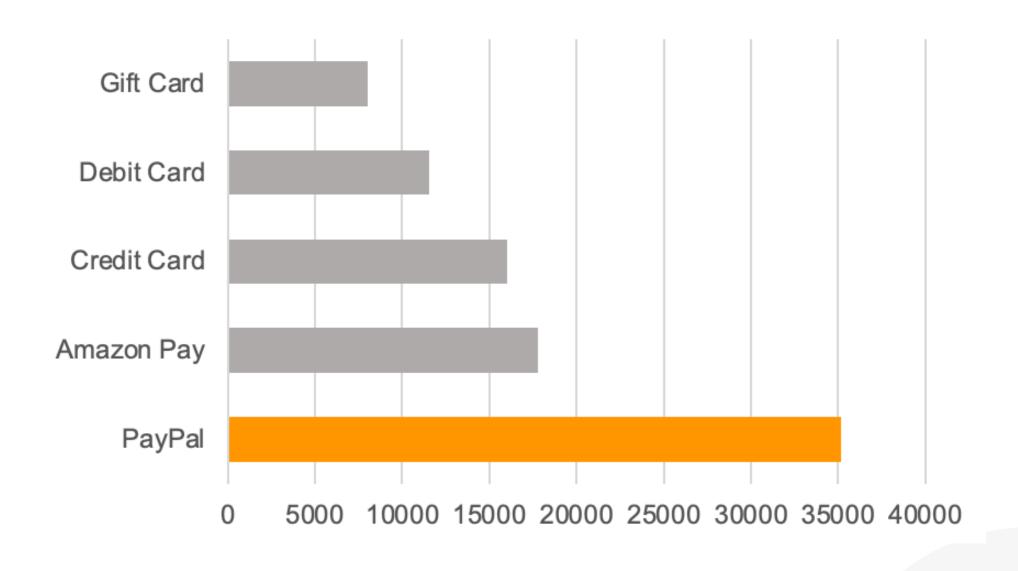


Cancellation Rate by Category

Cancellation rate is **30.8%**, with **Home Appliances** and **Clothing** leading in failed transactions.

PAYMENT METHOD INSIGHTS





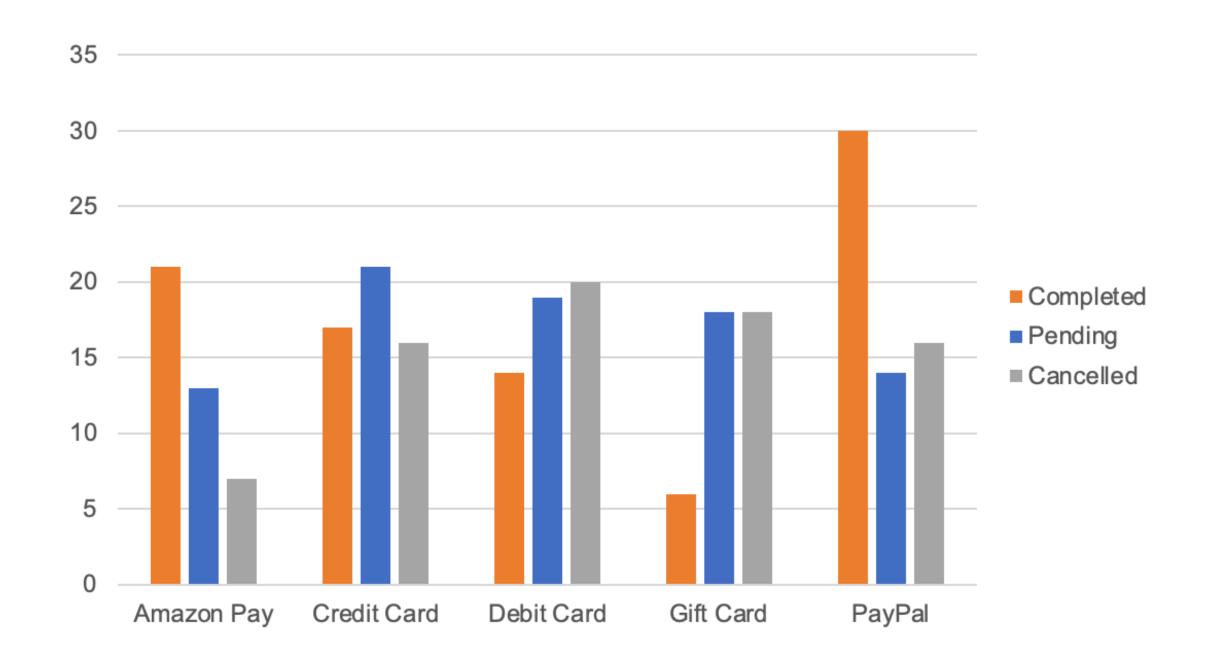
Payment Method Distribution

PayPal is the most popular (24% of orders), followed by **Credit** and **Debit Cards**.

Total Sales by Payment Method

PayPal also leads in value, generating nearly 40% of total sales revenue.

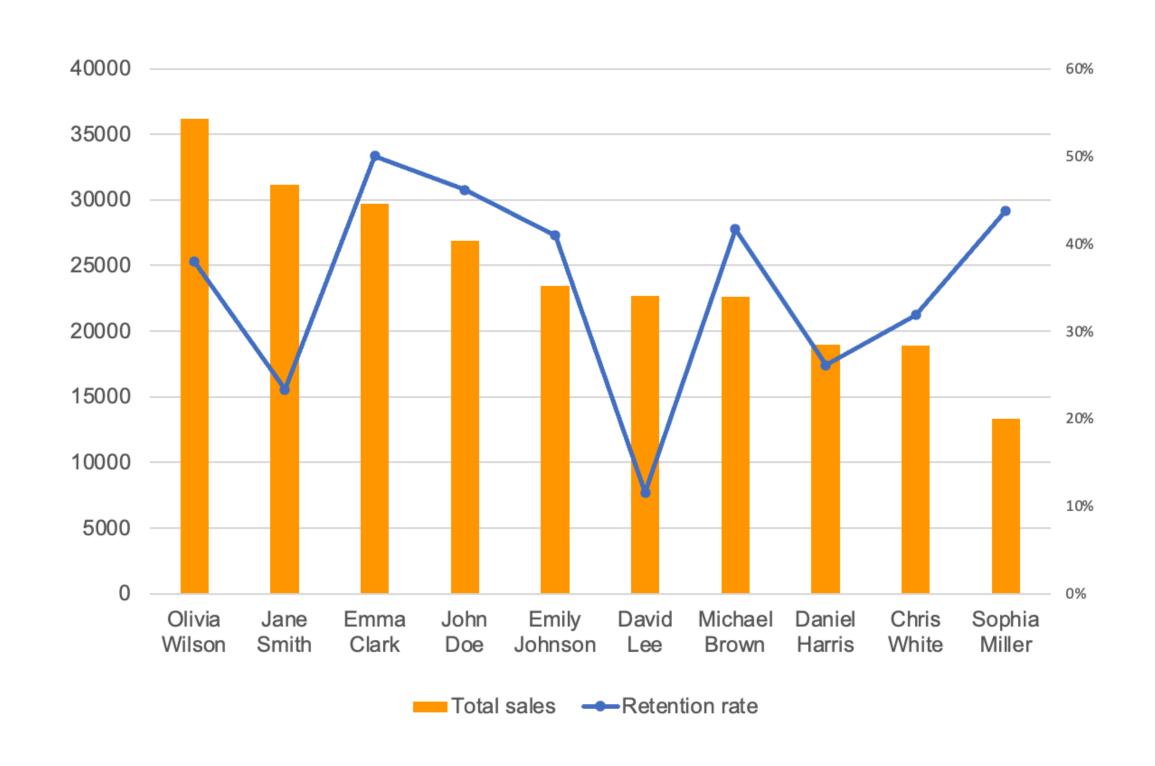
PAYMENT METHOD INSIGHTS



Order Status by Payment Method

Gift Cards and Debit Cards have higher rates of pending or cancelled transactions.

CUSTOMER INSIGHTS



Total Sales and Retention Rates by Customer

- Olivia Wilson is top spender.
- Emma Clark has the highest retention.
- Jane Smith and David Lee are high spenders with low retention
 - candidates for re-engagement campaigns.

STRATEGIC RECOMMENDATIONS

- On Reduce Cancellation Rates:
 - Focus on problematic categories and regions (e.g., Home Appliances, LA & Miami).
- Resolve Pending Orders:

 Improve backend operations and streamline payment workflows.
- Stimulate Weekend Sales:

 Launch targeted campaigns for Saturday and Sunday.
- Enhance PayPal Integration:

 Given its high reliability and revenue impact.

- Nurture Loyal Customers:

 Reward high-retention customers with loyalty programs.
- Re-engage High-Spending,
 Low-Retention Customers:

 Personalized promotions or feedback surveys.
- Investigate Product Return Patterns:

 Especially in Clothing and Appliances, to address root causes.