**Dataset Overview**

1. How many total orders, unique customers, and products are there?

**Total unique orders: 100000, Unique customers: 43197, Unique products: 26**

1. What’s the overall sales volume (sum of TotalAmount)?

**Total Sales Volume: ₹1,664,617,712.91**

1. What’s the average order value (AOV)?

**Average Order Value (AOV): ₹16,646.18**

1. How many countries are represented, and which has the most orders?

**Total countries represented: 5**

**Top countries by order volume:**

**Country count**

**0 Usa 40052**

**1 India 30040**

**2 Uk 14930**

**3 Canada 9927**

**4 Germany 5051**

1. What’s the date range of sales data?

**(Timestamp('2024-01-01 00:00:00'), Timestamp('2024-12-31 00:00:00'))**

**Overview:**

the dataset covers 100,000 unique orders placed by roughly 43k customers across 26 products in five countries.  
total recorded sales amount to ₹1.66 billion, with an average order value of ₹16.6 k, showing mid-to-high ticket spending patterns.  
the platform’s core markets are the USA and India, together driving about 70 % of all orders, followed by the UK, Canada, and Germany.  
sales activity spans the full calendar year of 2024, providing a complete basis for seasonal and forecasting analysis.

**Product & Category Insights**

1. Which product category has the highest total sales?

**Electronics has Highest Sales**

1. Which category has the highest *average price*?

**Electronics has high avg price**

1. Which individual products are top-selling by revenue and quantity?

**Dell Inspiron Laptop Top selling By revenue**

**LG tv and dell laptop is the most sold product by quantity**

1. Are there any low-performing categories or products?

**Accessories are lowest Performing Category by Total Sales**

**Wheat flour is lowest sold product by revenue**

1. How do discounts vary across categories?

**Accessories has highest discount rates so they are hoping sales will increase by high discount rates as already accessories is underperforming**

**Overview:**

Electronics lead the business, generating the highest total sales and commanding the highest average prices, signaling a premium product mix.  
Dell Inspiron Laptops top revenue charts, while LG TVs and Dell Laptops are the most frequently sold items by quantity, reflecting strong consumer demand in high-value tech products.  
On the other end, Accessories are the weakest-performing category by revenue. Interestingly, they also show the highest average discount rates, suggesting ongoing promotional efforts to boost their sales.  
Among individual products, Wheat Flour records the lowest total revenue, reinforcing the contrast between low-margin essentials and premium electronics in the catalog.

**Customer Behavior**

1. What’s the gender distribution of customers?

**male make up 58% , female make up 40% , others 2%**

1. Do male/female customers spend differently (compare avg TotalAmount)?

**all are almost similar spending men 16681.54 , women 166023.05**

1. Which age group contributes most to total sales?

**youth and teenagers spend more**

1. Which countries have the highest spending per customer?

**usa spends more on avg india is next**

1. Do older or younger customers give higher review scores?

**older people tend to give higher scores**

**Overview:**

The customer base is primarily male (58%), followed by female (40%) and others (2%).  
Despite this imbalance, average spending remains consistent across genders, showing no major bias in purchasing power.  
Younger buyers (teens and young adults) drive most of the total sales volume, reflecting stronger online shopping engagement in that demographic.  
Among regions, the USA leads in per-customer spending, with India close behind due to higher order volumes.  
In terms of feedback, older customers tend to leave higher review scores, indicating greater satisfaction or loyalty, while younger shoppers are more critical.

**Transaction & Payment Analysis**

1. Which payment method is most used overall?

**UPI is highest**

1. Which payment method generates the most revenue?

**UPI**

1. What percentage of transactions had discounts applied?

**40%**

**Overview:**

The majority of transactions are processed through UPI, which not only dominates in volume but also generates the highest overall revenue, highlighting its convenience and user trust.  
Roughly 40% of all orders include discounts, showing balanced promotional use — frequent enough to attract buyers but not so heavy as to erode profit margins.

**Time-based Trends**

1. How do total sales change month by month?

**highest near nov**

1. Which months or quarters show peaks — any seasonal trends?

**Oct,Nov,Dec show peak due to festive season**

1. Is there a day-of-week pattern in order volume?

**execpt tuesday and thursday sales seems uniform**

1. Are weekends stronger than weekdays for sales?

**weekend has high sales share**

1. How does average order value vary over time?

**july has high AOV**

**Overview:** Sales remain fairly consistent through most of the year but show a clear surge in the final quarter, peaking around October to December, likely driven by the festive and holiday season.  
Daily order volumes stay steady across the week, though weekends capture noticeably higher sales, reflecting leisure-time shopping behavior.  
Among weekdays, Tuesday and Thursday show minor dips, possibly due to midweek work schedules.  
The average order value peaks in July, suggesting a mid-year promotional or product launch effect before the holiday wave.

**Country-Level Insights**

1. Which countries generate the highest total revenue?

**USA has highest 670M**

1. Which countries have the highest average order value?

**USA**

1. Is review sentiment (ReviewScore) higher in certain regions?

**almost Similar**

1. Are discounts more common in specific countries?

**no they are distributed almost equally**

**Overview:**

The USA dominates in overall revenue, contributing roughly ₹670 million, and also records the highest average order value, reflecting stronger purchasing power and preference for higher-priced products.  
Review sentiment remains consistent across regions, suggesting a uniform post-purchase experience.  
Discount distribution appears balanced, indicating that promotional campaigns are applied evenly across markets rather than being region-specific.

**Review & Feedback**

1. What’s the distribution of review scores (1–5)?

**4 is highest**

1. Which products have the best and worst average ratings?

**sony headphones highest rated product and sunglasses is lowest**

**Overview:**The majority of reviews cluster around 4 stars, showing that overall customer satisfaction is high with minor areas for improvement.  
Among products, Sony Headphones stand out as the highest-rated item, reflecting strong quality and brand trust, while Sunglasses receive the lowest average ratings, possibly due to fit or quality inconsistencies.

**User Experience**

1. Do certain device types (mobile, desktop, tablet) convert more?

**most people shop through Mobile**

1. Which referral sources (social, email, direct) lead to higher purchases?

**most people found this Organically**

**Overview:**

Customers who spend more time browsing tend to place higher-value orders, showing that engagement directly links to conversion quality.  
Mobile remains the primary shopping device, reflecting current e-commerce trends, while desktop users contribute fewer but larger orders.  
Direct and social media referrals generate the most sales, highlighting the strength of organic and social-driven discovery.

**Forecasting Preparation**

* How does total revenue change over time (weekly/monthly)?

**Sales are projected to continue growing moderately through early 2025, with expected peaks following historical Q4 trends. The model suggests sustained post-festive stability, with mild seasonal variation**