

# Online Sales Data Analysis Summary

## Customer Insights

### Total Customers

SELECT COUNT(DISTINCT CustomerID) AS TotalCustomers FROM online\_sales\_dataset;

**Result:** 35,389

**Insight:** A strong and diverse customer base shows a wide market reach, ideal for segmentation and retargeting strategies.

### Orders Per Customer

SELECT CustomerID, COUNT(DISTINCT InvoiceNo) AS TotalOrders  
FROM online\_sales\_dataset  
GROUP BY CustomerID  
ORDER BY TotalOrders DESC  
LIMIT 10;

CustomerID	Total Orders
NULL	4966
53125	6
96367	5
91749	5
81806	5
81631	5
78858	5

76858	5
63229	5
53121	5

**Insight:** Most active customers placed 5–6 orders. A high number of NULL customer IDs may represent guest checkouts or incomplete data capture.

## Top Spenders

CustomerID	Total Spent
84431	\$9,777.49
81067	\$9,678.65
81631	\$8,690.41
98923	\$8,655.47
80001	\$8,547.84
76402	\$8,235.68
29700	\$8,033.66
72172	\$7,874.69
52808	\$7,843.39
26371	\$7,723.45

**Insight:** These 10 customers contributed over \$84,000 in revenue. They are ideal targets for loyalty and re-engagement campaigns.

## Most Used Payment Methods

```
SELECT PaymentMethod, COUNT(*) AS UsageCount
FROM online_sales_dataset
```

GROUP BY PaymentMethod  
ORDER BY UsageCount DESC;

Payment Method	Usage Count
Bank Transfer	16,747
Credit Card	16,530
PayPal	16,505

**Insight:** All methods are nearly equally used, but Bank Transfer leads slightly. Maintaining all three supports diverse customer preferences.

### Customer Count by Country

Country	Customers
France	3,740
Germany	3,692
Sweden	3,681
Netherlands	3,678
Portugal	3,666
Norway	3,666
Belgium	3,654
United Kingdom	3,644
Australia	3,631
Spain	3,619
United States	3,618

Italy	3,576
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**Insight:** Customer distribution is very even across countries. France, Germany, and Sweden are top contributors.

## Revenue Insights

### Total Revenue

```
SELECT ROUND(SUM((Quantity * UnitPrice) * (1 - Discount)), 2) AS TotalRevenue
FROM online_sales_dataset;
```

**Result:** \$43,511,380.64

**Insight:** The dataset captures over \$43.5M in sales, a strong foundation for deeper analysis.

### Revenue by Product Category

Category	Total Revenue
Furniture	\$8,801,411.27
Accessories	\$8,731,407.99
Apparel	\$8,684,127.77
Stationery	\$8,657,717.05
Electronics	\$8,636,716.56

**Insight:** All five categories are balanced in contribution, suggesting a diverse and stable product portfolio.

### Revenue by Country

Country	Revenue
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Belgium	\$3,752,604.63
United States	\$3,715,510.84
Sweden	\$3,673,575.93
Germany	\$3,672,379.79
France	\$3,648,590.47

**Insight:** The top 5 countries each generated over \$3.6M in revenue. Belgium and the US lead slightly.

## Time-Based Trends

### Monthly Sales Trend

**Insert Chart: “Monthly Revenue Trend”**

**Insight:**

- Highest: July 2022 (\$678,116.69)
- Lowest: Sept 2025 (\$87,494.00 — likely incomplete)
- Strong Q4 performance supports seasonality planning.

### Sales by Weekday

Day	Revenue
Wednesday	\$6,301,444.54
Sunday	\$6,290,122.82
Monday	\$6,289,717.78

**Insight:** Wednesday is the highest-performing day — a key opportunity for campaign scheduling.

## Yearly Sales Totals

Year	Revenue
2020	\$7,621,765.92
2021	\$7,709,872.47
2022	\$7,664,838.53
2023	\$7,572,346.26
2024	\$7,757,094.26
2025	\$5,185,463.25

**Insight:** Revenue was stable between 2020–2024. The 2025 drop likely reflects incomplete data.

## Product Performance

### Top Products by Quantity Sold

Insert Chart: “Top Products by Quantity”

Product	Units Sold
USB Cable	103,574
Backpack	103,513
Wall Clock	102,745
White Mug	102,541
Desk Lamp	102,474

**Insight:** Utility products drive volume. Great candidates for bundles and promotions.

## Top Products by Revenue

Insert Chart: “Top Products by Revenue”

Product	Total Revenue
White Mug	\$4,086,720.66
USB Cable	\$4,048,807.52
Desk Lamp	\$4,001,348.54
Backpack	\$4,000,374.25
Wall Clock	\$3,962,511.80

**Insight:** White Mug and USB Cable are top-grossing. Some products like Headphones earn more per unit.

## Customer Segmentation

Avg Spend per Customer by Country

Country	Avg Spend
US	\$997.56
Belgium	\$992.91
Italy	\$972.67
UK	\$971.23
Spain	\$970.57

**Insight:** US and Belgian customers spend the most, suggesting strong high-value segments.

## Avg Spend per Customer by Category

Category	Avg Spend
Furniture	\$996.64
Accessories	\$996.54
Electronics	\$992.37

**Insight:** Higher average spend in categories like Furniture and Accessories may indicate luxury or high-ticket appeal.

## Avg Spend per Customer by Payment Method

Method	Avg Spend
Bank Transfer	\$1,031.81
PayPal	\$1,022.89
Credit Card	\$1,016.36

**Insight:** Customers using Bank Transfer spend the most — could point to bulk or B2B orders.

## Final Summary

This project demonstrates how SQL, visualization, and business reasoning come together to generate actionable insights. The data reveals stability, global diversity, product balance, and powerful customer value — everything a recruiter wants to see in a future analyst.