

# Global Electronics Retailer – Data Analysis Report

Prepared By  
Mohamed Daoud – Nov 2025

## Project Overview

This project analyzes the Global Electronics Retailer dataset to evaluate sales performance, profitability, delivery efficiency, and product-level trends. It demonstrates skills in data cleaning, transformation, pivot-table analysis, insights extraction, and business recommendations.

## Executive Summary

Total KPIs:

- Total Revenue: \$55.7M
- Total Profit: \$32.6M
- Total Units Sold: 62K
- Profit Margin: 58.6%

Insights show a clear seasonal dip in Q2, with strong Q4 recovery driven by holiday demand. Profitability remains consistent across months, indicating effective pricing strategy.

## Dataset Used

The analysis combines data from:

- Sales (transactions, quantity, dates, currency)
- Products (brand, category, pricing)
- Customers (region, country)
- Stores (store metadata)
- Exchange Rates (currency → USD)

## Data Cleaning Summary

- Standardized date formats
- Removed duplicates & checked missing values
- Fixed inconsistent region/country names
- Created calculated fields:
  - \* Revenue (Qty × Unit Price USD)
  - \* Cost (Qty × Unit Cost USD)
  - \* Profit (Revenue – Cost)
  - \* Delivery Days (Delivery Date – Order Date)
- Merged datasets using XLOOKUP.

## Master Dataset Transformation

The Sales sheet was enriched with:

- Product Name, Subcategory, Category
  - Region & Country
  - Brand information
  - Standardized pricing in USD
- Result: A single analysis-ready Master Table.

## Exploratory Analysis (Pivot Tables)

Key pivot analyses created:

- Top Revenue-Generating Products
- Average of Delivery by Country.
- Revenue by Month.
- Revenue by Country.
- Profit by Month
- Revenue vs. Profit Comparison
- Revenue by Category / Subcategory
- Profit by Brand
- Delivery Days Distribution

## Key Insights (with Visuals)

- Strongest revenue months: Q1 & Q4
- Seasonal drop in March–April (Q2)
- Revenue & Profit trends are aligned → stable margins
- Computers & Home Appliances generate highest revenue
- Adventure Works & Contoso are top-performing brands
- Most deliveries occur within 1–7 days; Canada shows slower delivery

### Monthly Revenue Trend

Revenue increases strongly in Q1 and Q4 but dips in March–April due to seasonal demand drops.

**Monthly Revenue Trend (USD)**



Data shows Seasonal drop between March - April before recovering in Q2

### **Monthly Profit Trend**

Profit follows the same pattern as revenue, confirming stable margins across months.

#### **Monthly Profit Trend (USD)**



Data shows Seasonal drop between March - April before recovering in Q2

### **Revenue vs Profit Comparison**

The alignment between profit and revenue shows strong pricing control and cost efficiency.

#### **Revenue vs Profit Monthly Performance (USD)**

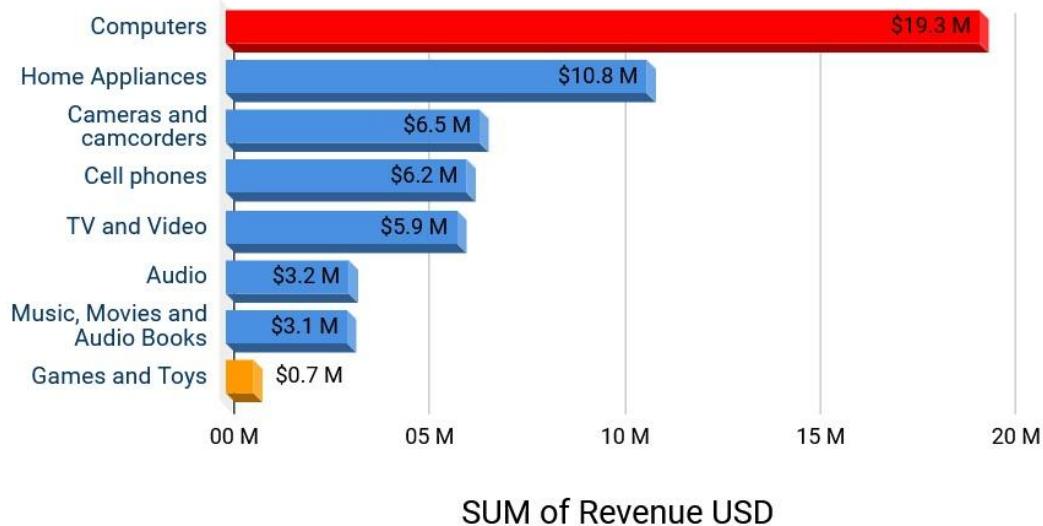


Data shows clear alignment between Revenue and Profit

## Sales by Category

Computers and Home Appliances generate most of the revenue.

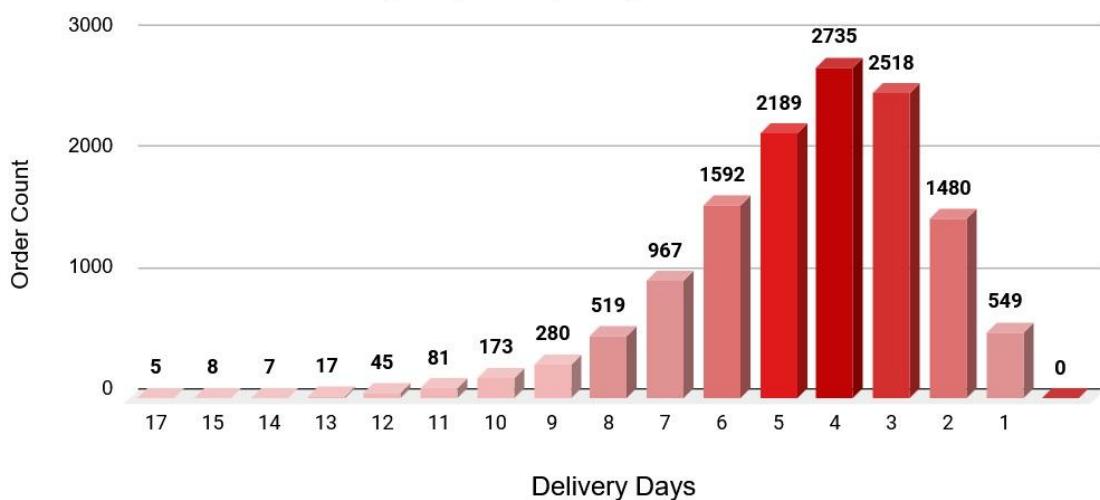
### Revenue by Product Category



### Delivery Days Distribution

Most deliveries happen within 1–7 days while Canada shows slower delivery.

### Delivery Days Frequency Distribution



## Dataset Limitations

- Single-year data → limited trend analysis
- Missing delivery dates for some orders
- No demographic information (age, gender)
- No return/refund data → profit may be slightly overstated
- Limited geographic coverage

## Business Recommendations

- Increase marketing & promotions in Q2 to offset seasonal drop
- Strengthen inventory planning for Q4 high-demand period
- Optimize pricing for lower-profit categories
- Improve delivery efficiency in slower regions (Canada)
- Prioritize investment in top-performing brands & categories
- Build an automated dashboard (Power BI / Looker Studio)

## Conclusion

This report reflects a full end-to-end analytics workflow: cleaning, enrichment, pivot analysis, KPI computation, insights, and recommendations. The dataset is now ready for dashboarding or predictive modeling.