

# onlineRetail

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# Original Data

<https://archive.ics.uci.edu/ml/datasets/Online+Retail+II>

- Large Dataset (1067371 Rows)
- 8 Features
- Messy and Missing Data

# Business Concerns

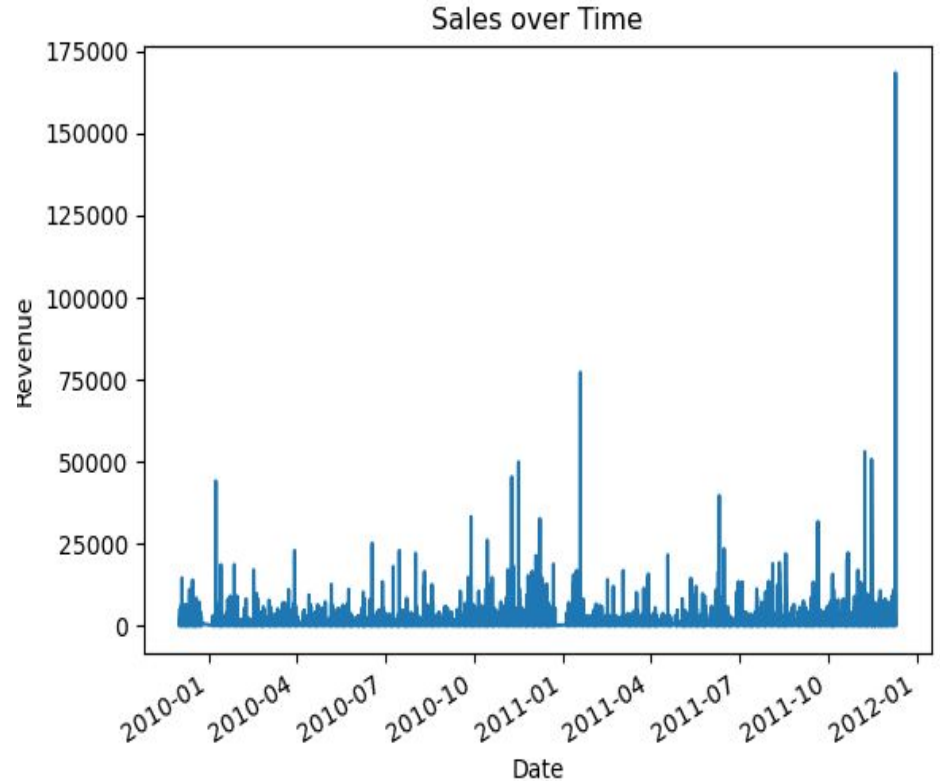
- What is our total revenue?
- How do our sales look over time?
- How do our sales look by country?
- What are our most profitable items?

# Total Revenue

- Data Covers 12/01/2009 to 12/09/2011
- Only revenue can be ascertained as we have no COGS data
- Total revenue is roughly 21,000,000 pound Sterling

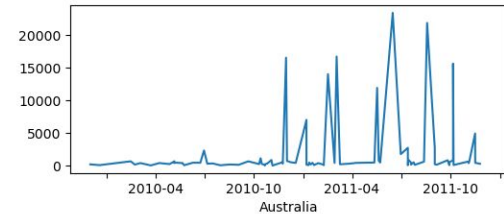
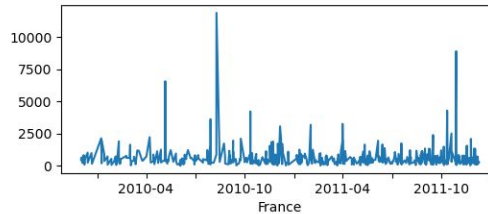
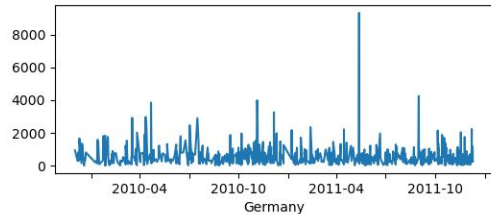
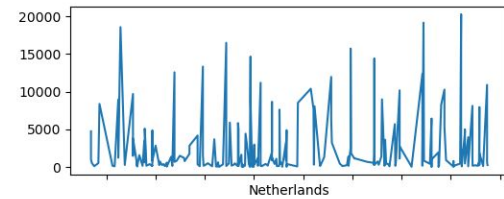
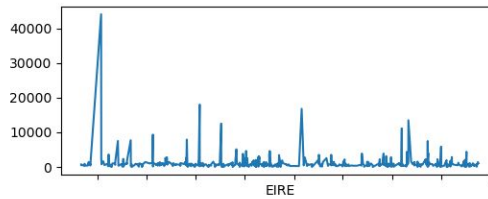
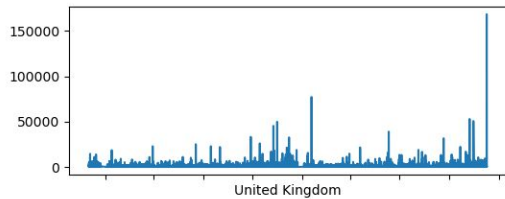
# Sales over Time

- Top sales at end of 2011
- Notable peaks at starts/ends of years
- Overall upwards trend



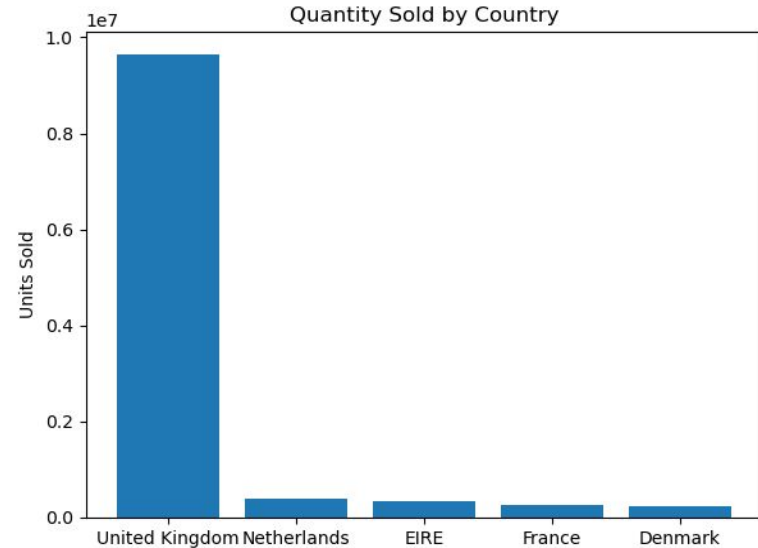
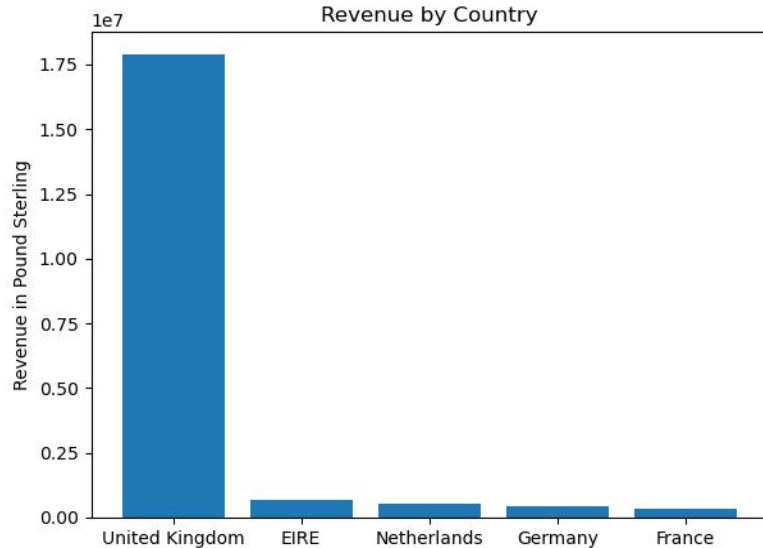
# Sales by Country

- Selected top 6 countries by total revenue
- Small sample sizes in some e.g. Australia
- Differing peak times - can focus sales in a country by peak



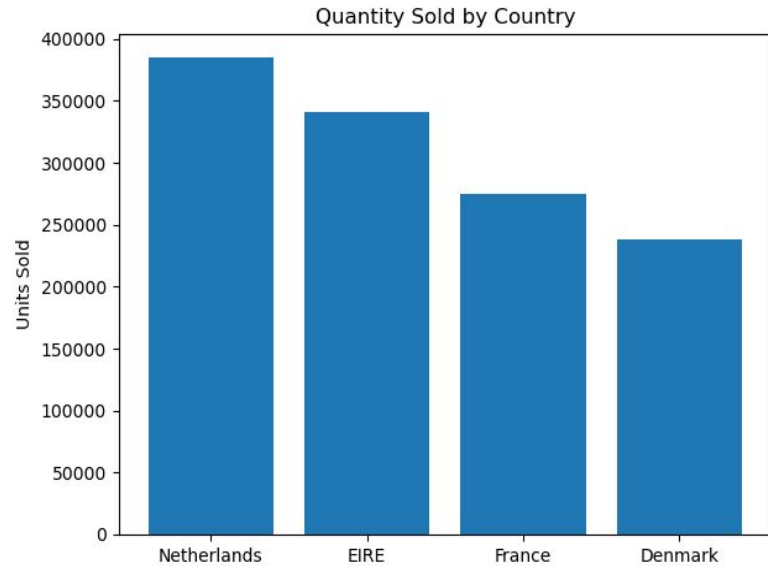
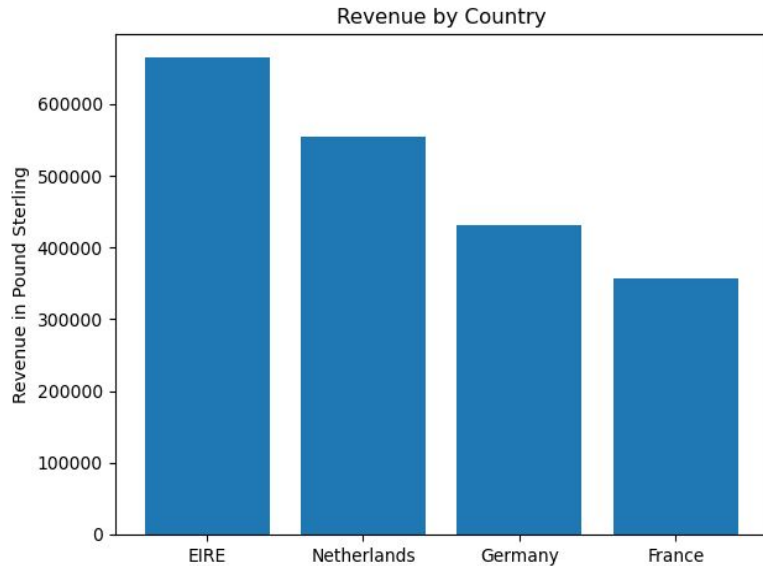
# Revenue and Quantity

- UK Dominates Our Market
- Both by Total Revenue and By Quantity Sold



# Revenue and Quantity - No UK

- Without UK, Ireland and Netherlands are our top sellers



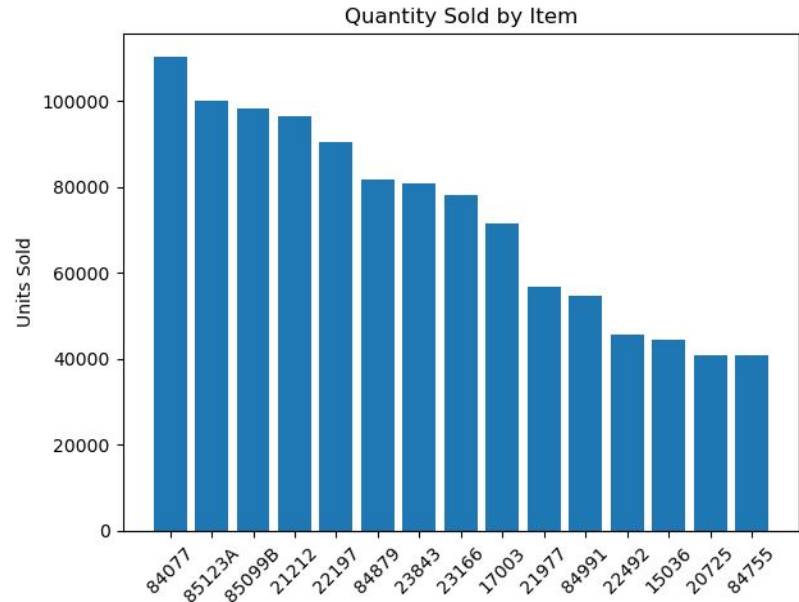
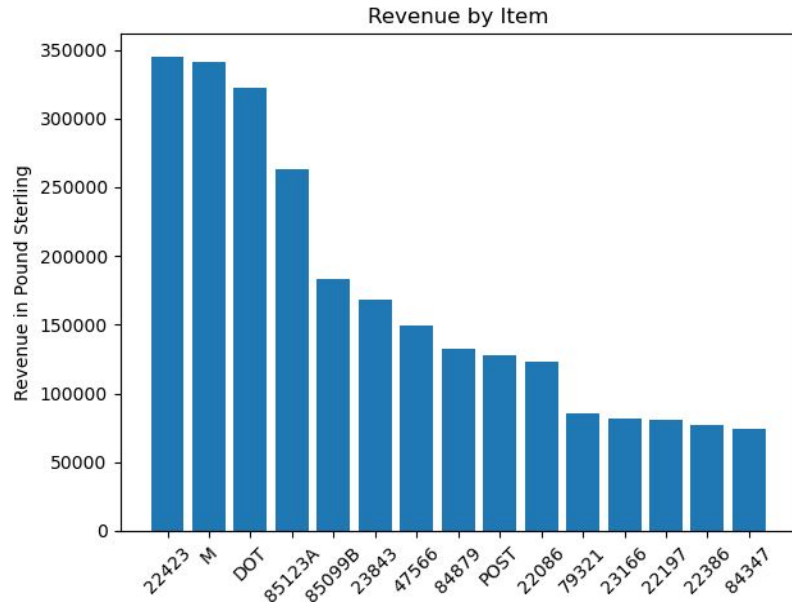


# Where to Sell

- UK is our bread-and-butter
- Ireland buys higher priced items at slightly lower quantities
- Netherlands buys larger quantities of lower priced good
- Must examine our items for further analysis

# Most Profitable Items

- Top Item By Revenue Isn't Top Item By Quantity



# Top Items By Revenue

- Selected Items By Revenue
- Shows Possible Item Focus:
  - 85123A has largest revenue and quantity, our best item
  - 22197 is sold a lot but doesn't sell for a lot
- Actual Decisions Depend on COGS

