

UK Retail Analytics

Business Context:

A UK-based online retail company wants to **understand its sales performance, product trends, and customer behavior** to increase revenue, reduce cancellations/returns, and expand market share outside the UK.

The dataset contains over 540,000 transactions recorded between **Dec 2010 and Dec 2011** with detailed product, transaction, customer, pricing, and geographic information.

Business Goals:

1. Identify top-selling and underperforming products to optimize inventory.
2. Detect patterns in cancelled or returned invoices to reduce revenue leakage.
3. Understand buying behavior — typical quantities, price points, peak times/dates.
4. Segment customers by frequency and value to design loyalty or marketing programs.
5. Analyze sales distribution by country to discover expansion opportunities.
6. Provide actionable insights to support **data-driven business decisions**.