PROJECT SUMMARY

Project Title: UK Sales Performance Analysis (Jan 2023 – Jun 2024)

Business Context

This project analyses sales transaction data for a simulated UK-based company selling electronics and accessories. The objective is to evaluate sales performance across regions, products, and time periods to support data-driven decision-making.

Objectives

- Analyse overall sales performance
- Identify key revenue drivers
- Evaluate regional and salesperson performance
- Analyse monthly revenue trends
- Provide actionable recommendations

Dataset

This dataset is a simulation of UK sales transactions for a company that sells electronics from January 2023 to June 2024. The dataset contains 500 rows, with each row representing a single transaction. The data is organized into the following columns: order ID, order date, region, salesperson, product, category, units sold, unit price, and revenue.

One additional column was added: Order size, which helps better understand sales segmentation.

Data Preparation

- Converted the dataset into an Excel table to enable a more organized, structured, and efficient analysis.
- Checked data consistency across all columns and confirmed the absence of missing or wrong values.
- Added one additional column to the dataset:

    - ✓ **Order Size** – to better understand sales segmentation and support portfolio storytelling.

Analysis Approach

The analysis focuses on evaluating sales performance using key commercial performance indicators, including total revenue, order volume, and average order value.
Performance is further analysed across regions, products, categories, and order

size segments to identify revenue drivers, concentration patterns, and trends over time.

Key metrics analysed include:

1. **Total Revenue**
2. **Total Orders**
3. **Average Order Value**
4. **Revenue by Region**
5. **Revenue by Product and Category**
6. **Revenue by Order Size (segmentation analysis)**
7. **Salesperson Performance**
8. **Revenue Trend Over Time (January 2023 – June 2024)**

Exploratory analysis was conducted to evaluate sales performance across regions, products, categories, salespeople, and time periods. This approach was used to identify key revenue drivers, performance patterns, and areas of concentration prior to final reporting.

Analysis and Visualisation:

An interactive dashboard was developed using PivotTables and PivotCharts to visualise key sales KPIs. The dashboard enables users to explore revenue performance by region, product, and time period (Monthly Revenue) through slicers, providing a clear and high-level overview of overall business performance.

Key Findings

- Sales performance is concentrated mainly in two UK regions.
- Revenue is primarily driven by three high-value products and one top-performing product.
- Sales performance varies in volume and differs in deal size versus transaction volume.
- Revenue trends show variability over time.

Revenue by Region

Sales performance is concentrated mainly in three UK regions. London is the top city, driving a significant share of total revenue. This indicates a strong geographical dependency, meaning that poor performance in this city would have a substantial impact on overall revenue.

Product Performance

Revenue is predominantly driven by laptops, followed by other high-value products such as monitors and docking stations. Lower-performing products, such as mice, keyboards, and headsets, contribute less to total revenue, indicating an opportunity for portfolio optimization or targeted promotional strategies.

Salesperson Performance

Salesperson performance varies not only in total revenue generated but also in sales volume, suggesting that each employee has a distinct selling style. Some salespeople focus on high-value transactions, while others prioritize higher-frequency orders.

Time-Based Trends

Revenue shows variation over time, with noticeable peaks and dips that suggest potential seasonality or external demand factors. Periods of lower performance may require further investigation to identify operational or market-driven causes.

Insights

1. **Overall Performance and Volatility**

- Revenue shows high month-to-month volatility.
- Sales fluctuate significantly across months, with sharp peaks and drops rather than a smooth trend.

Why it matters?

High volatility makes forecasting difficult and increases business risk, especially when costs are relatively fixed. If revenue drops suddenly, fixed costs still need to be paid.

Evidence: This is shown in the Monthly Revenue Trend line chart.

2. **Regional Revenue Concentration**

- Revenue is concentrated in a small number of UK regions.
  The Revenue by Region chart shows that three UK regions contribute a disproportionately large share of total revenue compared to others.

Why it matters?

This creates dependency on specific regions, increasing the business's exposure to regional market or operational risks.

Evidence: This can be seen in the Revenue by Region bar chart.

3. **Product Revenue Drivers (Pareto Pattern)**

- A small number of products generate most of the revenue.
  High-value products account for a large share of total sales, while many other products contribute only marginally.

Why it matters?

The business can prioritise inventory, marketing, and sales efforts on the most impactful products to maximise returns.

Evidence: This is visible in the Revenue by Product chart and can be further analysed by category using the slicer.

4. **Salesperson Performance Differences**

- Salespeople generate revenue in different ways.
  Some rely on fewer high-value orders, while others achieve results through higher order volumes.

Why it matters?

Evaluating performance using only revenue or only order count can be misleading. Both metrics are needed for a fair assessment.

Evidence: This is shown in the Salesperson Performance pivot table.

5. **Revenue concentration by Order Size**

- Large orders generate the majority of total revenue, while small and medium orders account for most sales transactions.

Why it matters?

This indicates that overall revenue performance is highly dependent on a relatively small number of high-value orders. A reduction in large-order activity could therefore have a disproportionate impact on total revenue, despite continued transaction volume.

Evidence: This is shown in the Revenue by order size pivot table.

6. **Year-on-Year Performance**

- Recent-year performance does not show consistent improvement compared to the previous year, indicating limited growth momentum.

Recommendations

1. Reduce Revenue Volatility

Introduce targeted promotions or sales incentives during historically weaker months to stabilise revenue throughout the year.

2. Reduce Regional Dependency

Invest in sales and marketing initiatives in underperforming regions to diversify revenue sources and reduce reliance on top-performing regions.

3. Optimise Product Focus

Prioritise high-performing products in marketing campaigns and inventory planning, while reviewing the strategic role of low-performing products.

4. Tailored Sales Management

Evaluate salesperson performance using both revenue and order volume, and align training and incentives with different selling styles.

Limitations

This analysis is based on simulated transactional data and does not account for external factors such as market conditions, pricing changes, or operational constraints.

Next Steps

- Analyse customer-level behaviour to identify high-value customers
- Incorporate cost data to assess profitability
- Extend analysis with forecasting or scenario modelling

Appendix (KPIs, PivotTables, Dashboard screenshots)

The following KPIs were used to evaluate sales performance throughout the analysis:

- **Total Revenue:** Total sales value generated over the analysis period.
- **Total Orders:** Total number of sales transactions.
- **Average Order Value (AOV):** Average revenue generated per order.
- **Revenue by Region:** Distribution of revenue across UK regions.

- **Revenue by Product and Category:** Contribution of individual products and categories to total revenue.
- **Revenue by Order Size:** Revenue distribution across small, medium, and large orders, used to assess deal-size concentration.

The following ***PivotTables*** were created to support exploratory analysis and validate insights:

- **Revenue by Region:**
  Used to identify geographic concentration and regional performance differences.
- **Revenue by Product and Category:**
  Used to identify key revenue drivers and assess product mix.
- **Salesperson Performance:**
  Used to compare revenue contribution and transaction volume by salesperson.
- **Order Size Analysis:**
  Used to compare revenue contribution and number of transactions across small, medium, and large orders, highlighting differences between transaction volume and revenue impact.

The final ***Sales Performance Dashboard*** was developed using PivotTables and PivotCharts and includes:

- KPI summary cards (Total Revenue, Total Orders, Average Order Value)
- Revenue by Region visualisation
- Revenue by Product visualisation
- Monthly Revenue Trend chart
- Interactive slicers for region, product category, and salesperson

(Dashboard screenshots provided below)

Total Revenue	Count of Order ID	Average of Revenue (£)
£ 901,515	500	£ 1,803