EXCEL- RETAIL PROJECT

Diagnosing Declining Sales and Revenue Leakage Analysis
Role: Data Analyst – Sales Intelligence Division
Tools Used: Excel (Power Pivot, Power Query, DAX, Pivot Tables)

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2018-2022 REPORT

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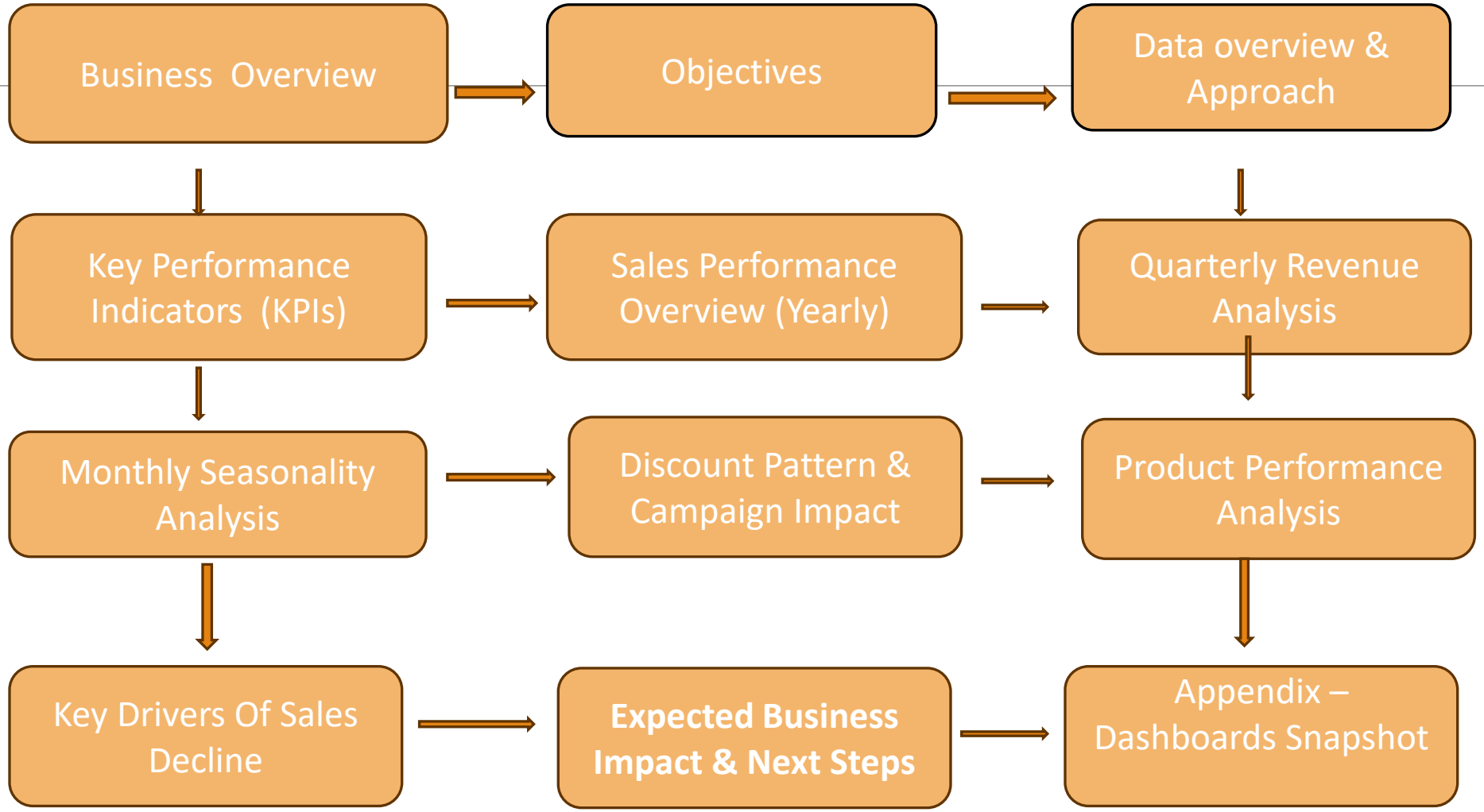


Business Overview

- A growing e-commerce retail company operating across Europe. Over the past few years, the management has observed fluctuating revenue trends and a steady decline in overall sales performance.
- Therefore, the Executive leadership requires clarity on root causes and corrective actions

Objectives

To use historical sales data to:

- ❑ Identify when and where sales began to decline
- ❑ Detect sources of revenue &minimize leakage
- ❑ Recommend data-driven strategies to restore growth and profitability

Dataset Overview

Period: **2018–2022**

Transactions across European markets

Key fields: Product, Category, Country, Quantity, Discount %, Net Revenue

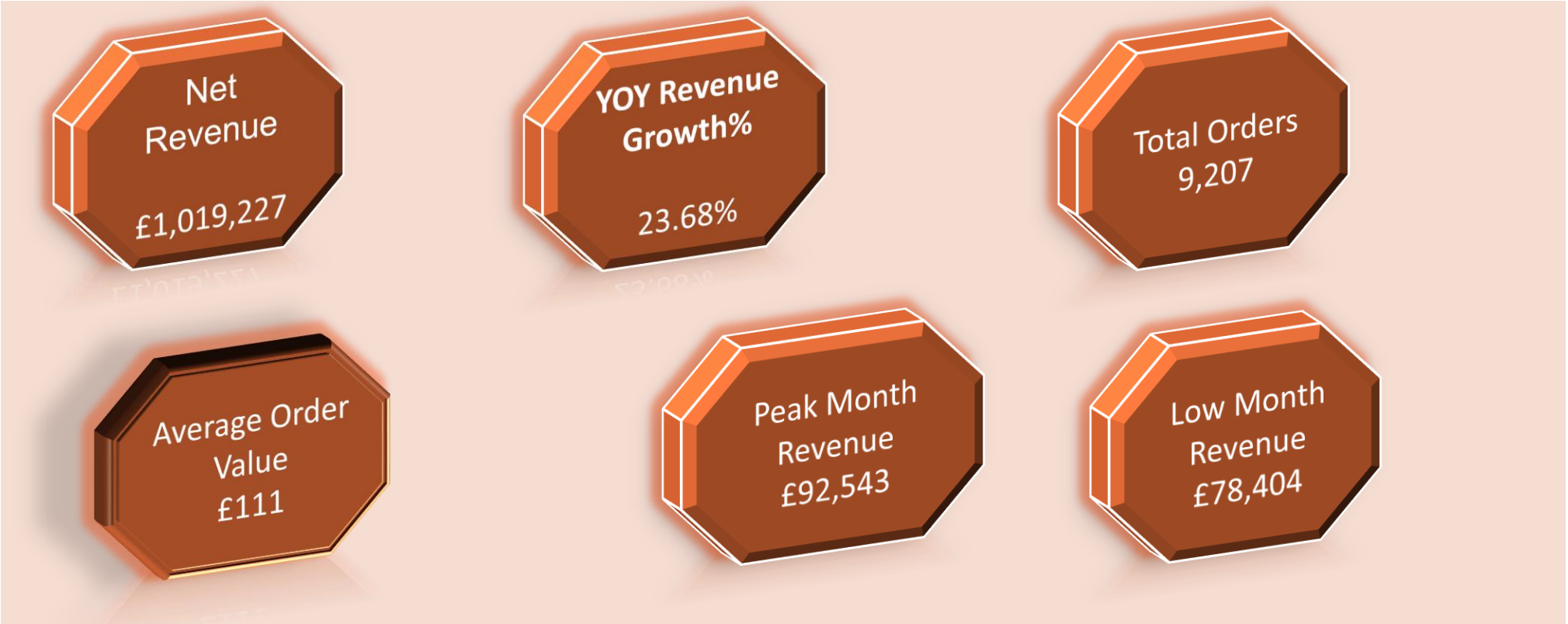
Analytical Approach

Built a Power Pivot data model

Created DAX measures for Net Revenue, Growth, Seasonality

Developed an Executive-level Pivot dashboard

Key Performance Indicators (KPIs)



Sales Performance Overview (Yearly)

Key Findings:

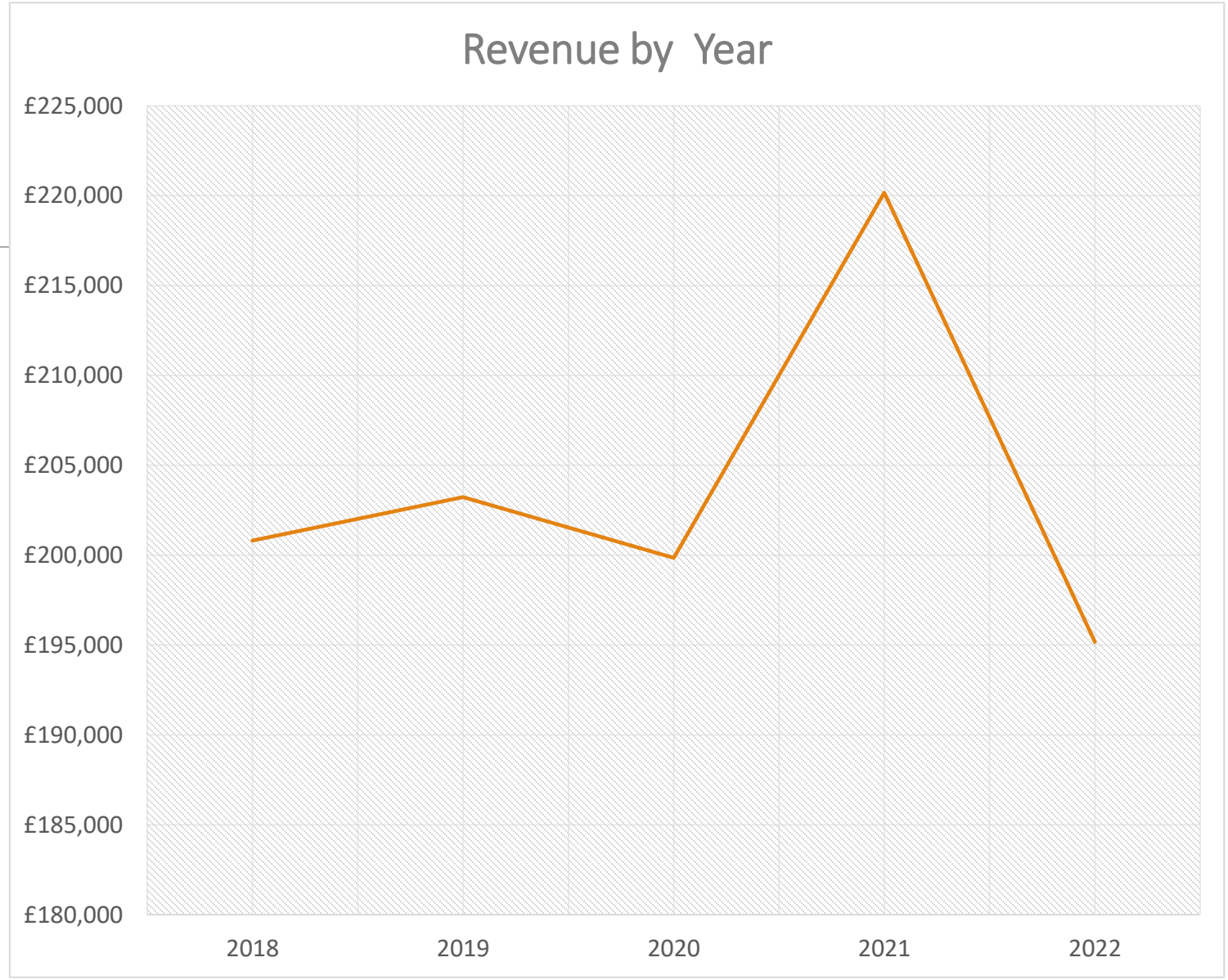
Revenue peaked in 2021 (£220k)

Decline observed in 2022 (£195k)

Growth trend reversed after steady improvement

Insights

➞ The sales decline is recent and structural, not random
➞ Signals changes in pricing, campaign effectiveness, or product strategy



Quarterly Revenue Analysis

Observations:

- Q2 and Q3 consistently outperform other quarters
- Q1 and Q4 show recurring underperformance
- Q4 weakness persists even during traditionally strong retail periods

Insights

➞ Seasonal opportunities are not fully capitalized
➞ Campaign timing and execution need optimization

Monthly Seasonality Analysis

Revenue Patterns

- Peak Month: May (£92,543)
- Lowest Month: November (£78,404)
- Noticeable Volatility Across Months

Insights

➞ Revenue Is Highly Seasonal
➞ Targeted Promotions Do Not Sufficiently Support Weak Months

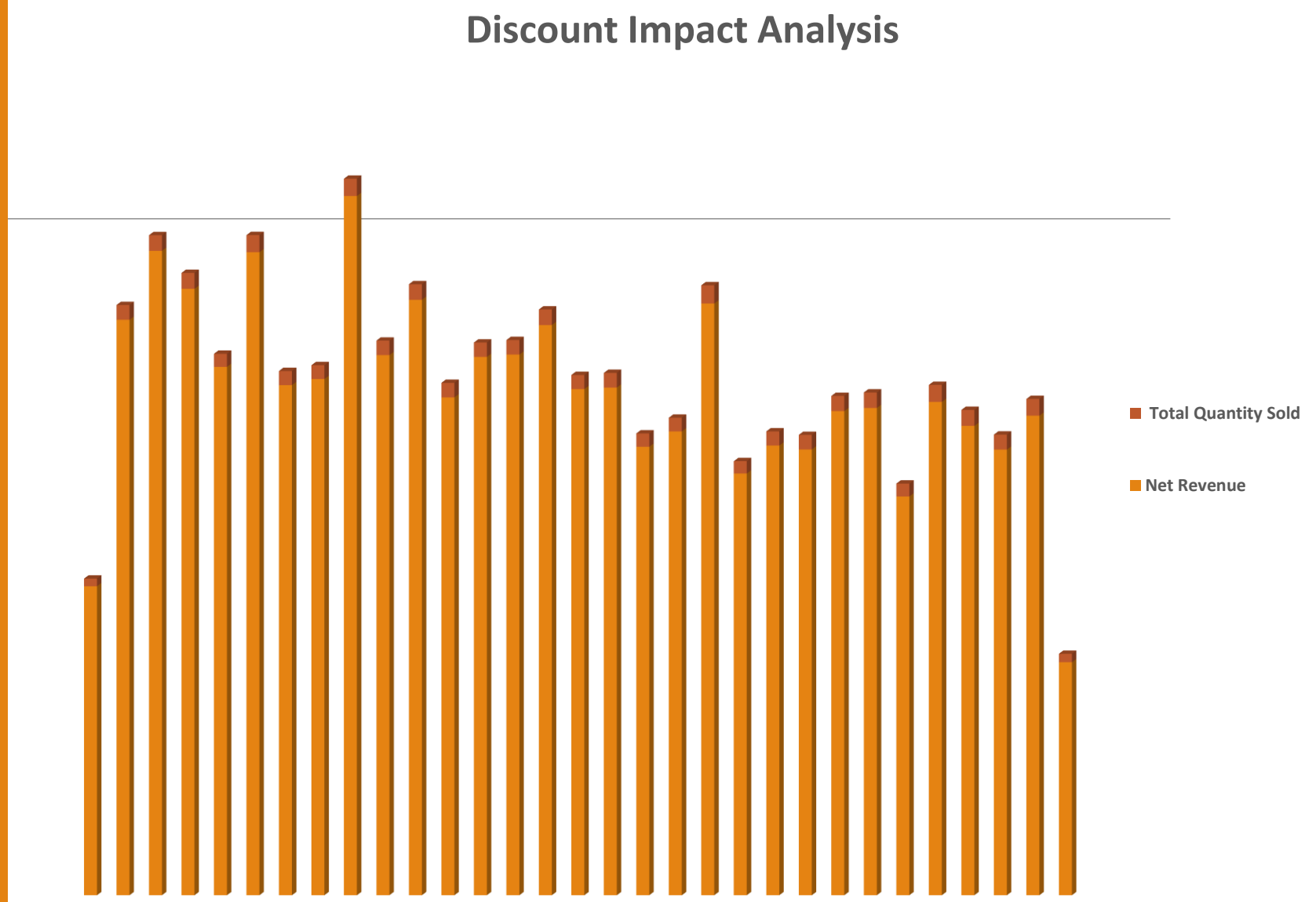
Discount Patterns & Campaign Impact

Key Observations:

- Average discount remains stable at ~15% year-round
- Higher discounts do not consistently drive higher revenue
- Some low-discount months still record revenue declines

Insights

➞ Blanket discounting causes revenue leakage
➞ Discount strategy lacks precision and ROI measurement



Product Performance Analysis

Top Revenue Contributors

Toy Car, Wireless Mouse, Mug, Bag, Lamp

High volume and strong revenue contribution

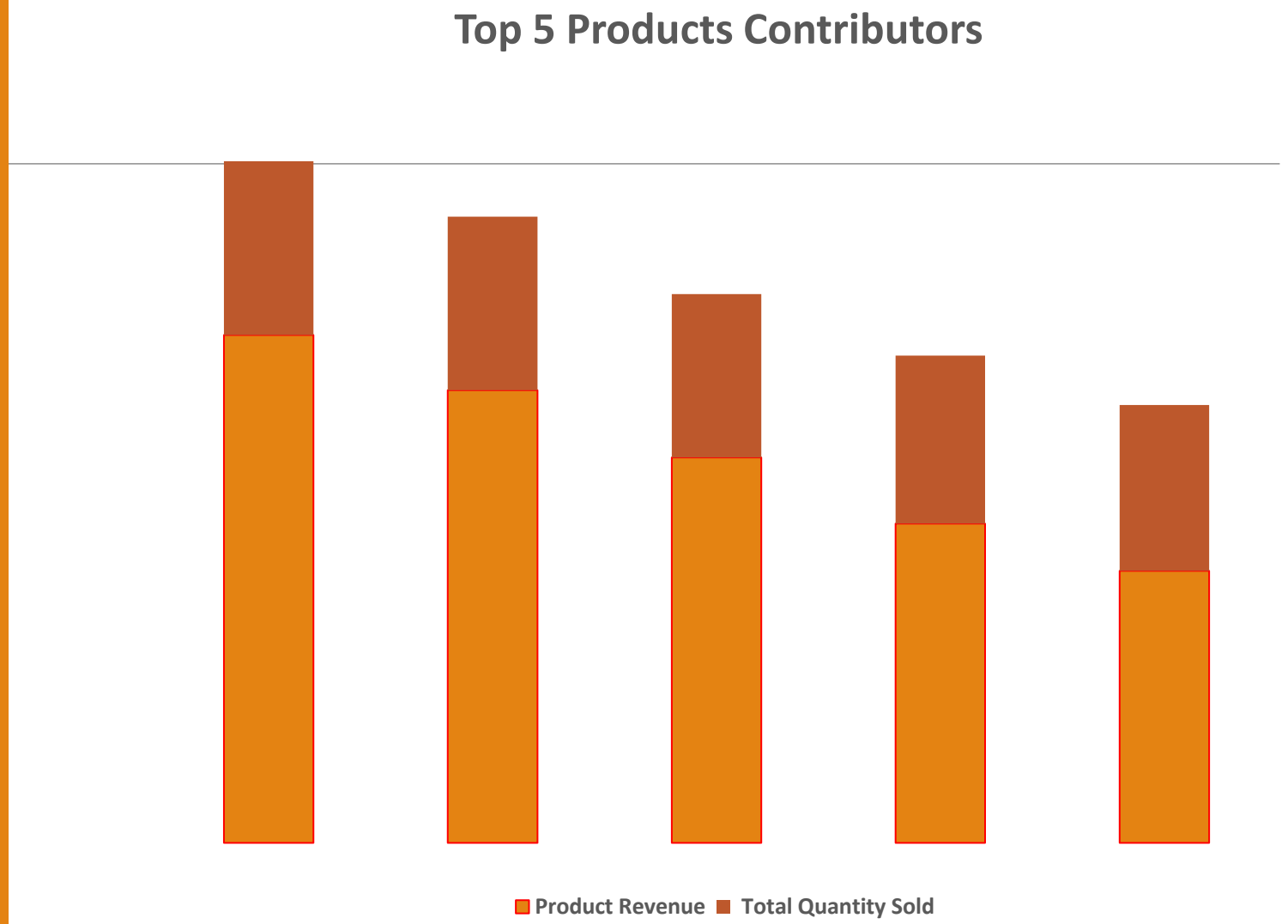
Underperforming Products

Gift Wrap, Notebook, Pen Set, Clock, Candle Set

Low revenue impact despite ongoing sales

Insights

➞ Product portfolio inefficiencies dilute margins
➞ Resources are spread across low-value products



Key Drivers Of Sales Decline

Identified Root Causes

- Ineffective, blanket discounting
- Weak campaign targeting
- Underperforming product lines
- Poor alignment between seasonality and promotions

Expected Business Impact & Next Steps

Expected Impacts

- Reduced revenue leakage
- Improved net revenue retention
- More predictable seasonal performance
- Stronger profitability without deeper discounting

Next Steps

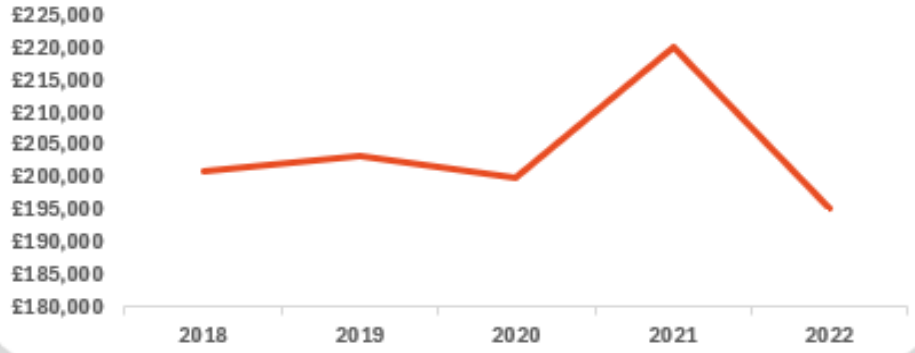
- Implement recommended strategies
- Monitor KPIs monthly
- Refine campaigns using data-driven feedback loops

Sales Performance & Revenue Leakage Analysis — Europe E-Commerce 2018 – 2022

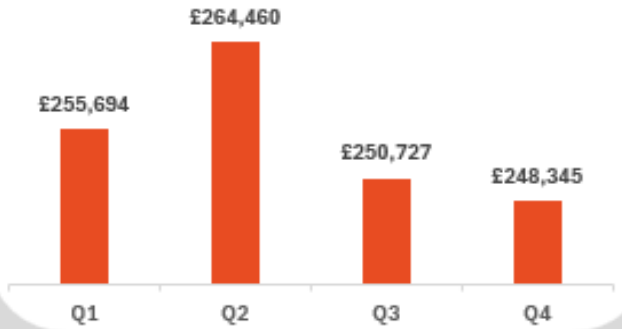
Year: 2018 | 2019 | 2020 | 2021 | 2022

Net Revenue	YOY Revenue Growth%	Total orders	Average Order Value	Peak Month Revenue	Low Month Revenue
£1,019,227	23.68%	9,207	£111	£92,543	£78,404

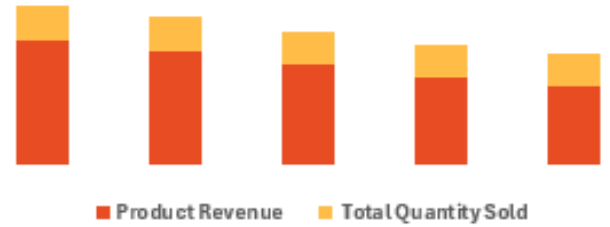
Revenue by Year



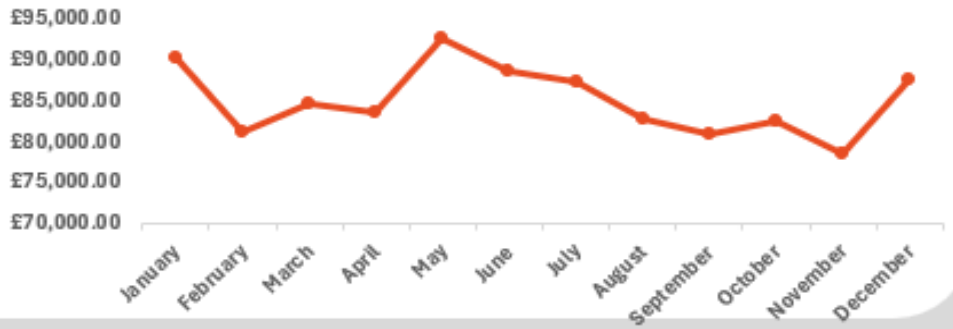
Revenue by Quarter



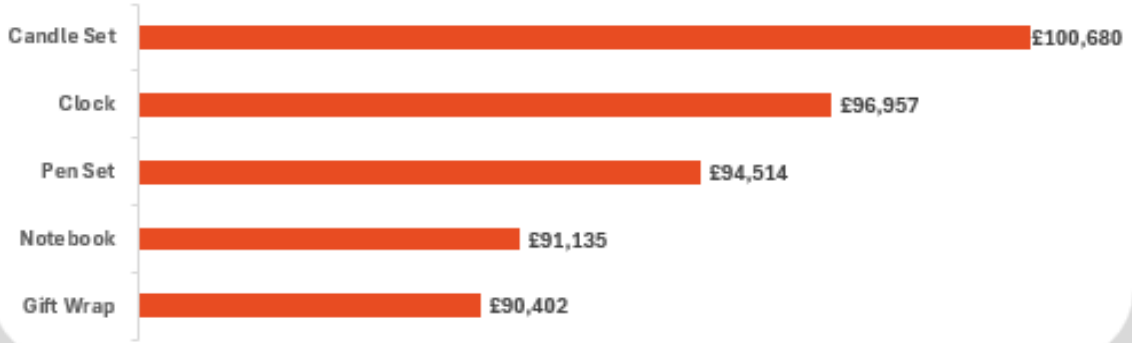
Top 5 Products Contributors



Revenue by Month



Top 5 Underperforming Products



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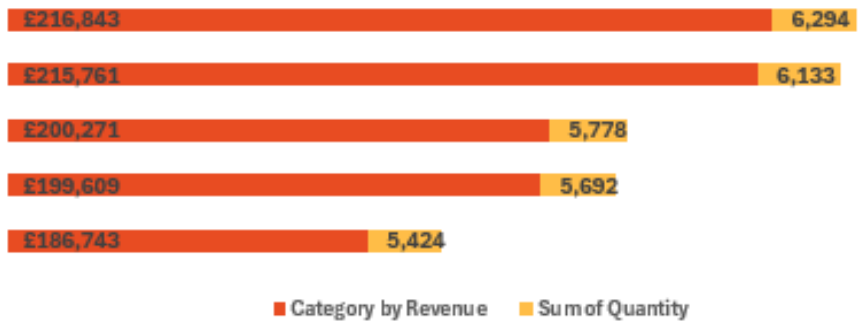
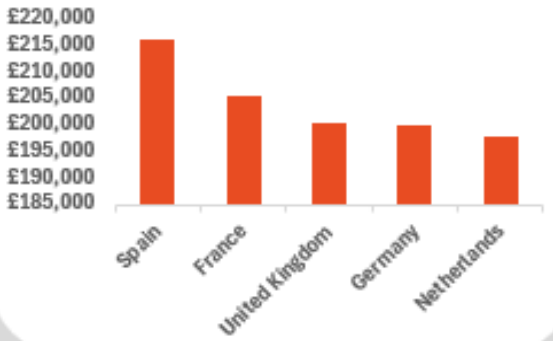
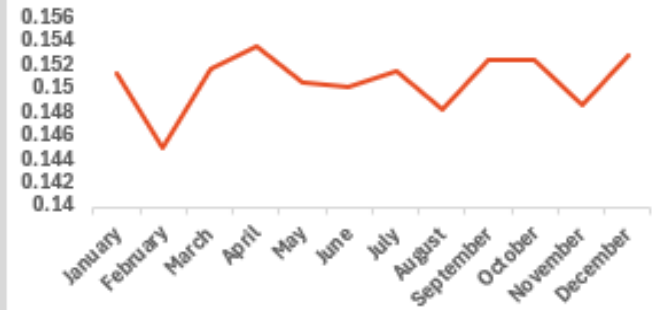
Revenue by Category

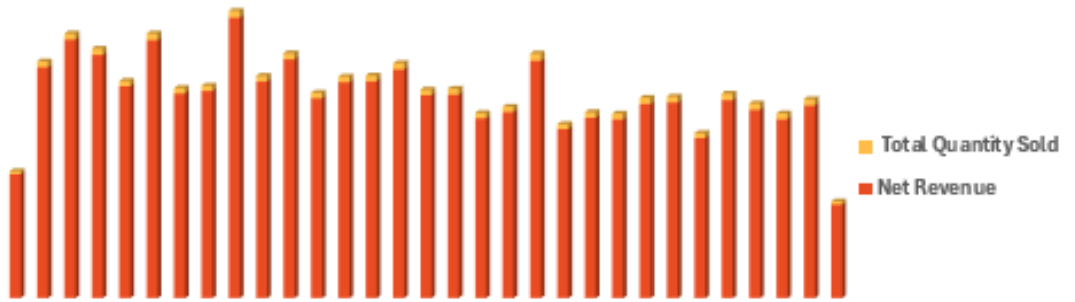


Revenue by Country



Average Discount % by Month



Quarterly Revenue by Year

Discount Impact Analysis