



Task 2 – Data Visualization and Storytelling

Introduction

This task focuses on exploring the sales dataset and presenting the findings through a Power BI dashboard. The goal was not only to build charts, but to understand the underlying patterns in the data and communicate them in a clear and meaningful way. The final output includes several visualizations that highlight key business insights.

Dataset Description

The dataset contains transactional sales information such as product categories, regions, customer types, sales amounts, unit costs, unit prices, sales channels, and dates. These fields provide enough depth to analyze revenue patterns, customer distribution, and regional performance.

Approach

The data was imported into Power BI and reviewed for consistency. Basic cleaning steps such as verifying data types and checking date fields were performed in Power Query. Visualizations were then created using standard Power BI charts, with an emphasis on clarity and simplicity.

Visualizations and Insights

Sales by Product Category

A bar chart was used to compare total sales across different product categories. Clothing and Furniture recorded the highest revenue. Food and Electronics followed closely behind. This suggests that the business has a strong and balanced product mix, with no single category dominating excessively.

Sales by Customer Type

A pie chart was created to show the split between new and returning customers. The distribution turned out to be almost equal. This indicates that the business is performing well in both customer acquisition and retention.

Sales by Region

A column chart was used to analyze regional sales. The North region generated the highest sales, while the South region reported the lowest among the four. The differences, however, were not extreme. This provides useful direction for regional sales strategies.

Monthly Sales Trend

A line chart was created to observe month-wise patterns. Sales fluctuated throughout the year, with noticeable peaks in the early months and again later in the year. These variations suggest seasonal factors that could be explored further.

Geographic Sales Overview

A map visual was added to give a geographical view of sales distribution. This helps quickly identify high-performing regions and supports discussions around market reach and potential expansion.

Additional Calculations

A simple profit measure was created using Unit Price, Unit Cost, and Quantity Sold to support deeper analysis where needed.

Conclusion

The dashboard summarizes the main trends in the sales data and provides a clear view of product performance, customer behavior, and regional differences. The visualizations are designed to be easy to interpret while still offering valuable insights that could help in decision-making.

Overall, the task demonstrates the ability to analyze a dataset, select appropriate visuals, and present findings in a professional and structured manner.