Mini Super Store Data Set Analysis Project

Project Description

In this project, I undertook a comprehensive analysis of the Mini Super Store data set to derive key insights and present them through an interactive dashboard. The project involved data transformation, categorization, and visualization to address several business questions and provide a clear view of the store's performance.

Objectives and Approach

Currency Conversion and Data Cleaning

The first step was to ensure consistency in the data by converting all currency values from pounds to dollars. This was crucial for standardizing the financial data and making accurate comparisons. Additionally, I replaced all blank fields with the word "Null" to handle missing data effectively.

Sales Categorization

To better understand the sales distribution, I created a new column categorizing sales over $5,000 as "High" and all sales below $5,000 as "Low." This categorization helped in segmenting the sales data for more detailed analysis.

Interactive Dashboard Creation

Using Excel, I built an interactive dashboard that addressed several key business questions:

- Top 5 Item Types with the Highest Sales: I created a visual that highlights the top-performing item types, providing insight into which products are driving the most revenue.
- Bottom 5 Item Identifiers by Sales: Another visual shows the item identifiers with the lowest sales, helping identify underperforming products.
- Yearly Sales Trend: I plotted the yearly trend of sales to understand how sales have evolved over time and to identify any seasonal patterns.
- Average Sales by Outlet Type: This visual displays the average sales across different outlet types, giving a clear view of the performance of various store formats.
- Total Count of Sales: I included a summary section that shows the total count of sales transactions, offering a quick overview of the store's sales volume.
- Sales Performance by Year: The dashboard identifies the years in which the company generated the lowest and highest sales, providing insights into the store's annual performance.

Interactive Slicers

To enhance user interactivity, I added slicers for item type, outlet type, and outlet size. These slicers allow users to filter the data based on specific criteria, making it easier to explore and analyze the data from different perspectives.

Tools and Techniques

This project required a strong understanding of Excel, including the use of pivot tables, basic formulas, and data visualization techniques. The ability to transform data, create calculated columns, and build interactive elements was crucial for developing the dashboard.

Impact and Outcomes

The Mini Super Store Data Set Analysis project resulted in a powerful interactive dashboard that provides valuable insights into the store's sales performance. By standardizing the currency, cleaning the data, and categorizing sales, I was able to present a clear and actionable view of the store's performance. The dashboard allows stakeholders to quickly identify top-performing and underperforming products, understand sales trends, and make informed decisions based on detailed analysis. The use of interactive slicers enhances the user experience, making it easy to explore the data and derive meaningful insights.