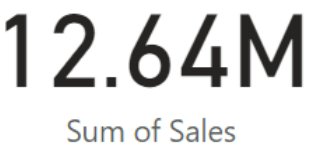
Step by Step Procedure for the creation of the Dashboard:

Key Metrics:

Display the following key metrics:

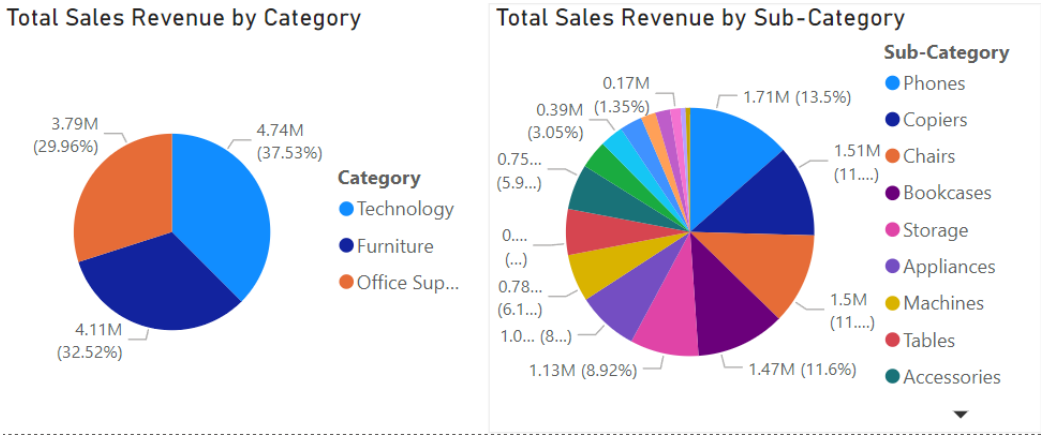
- Total Sales Revenue
- Sales by Product Category
- Top Selling Products
- Sales Trend Over Time
- Monthly Sales Comparison

1. Total Sales Revenue:



First the total sales revenue was calculated using a custom calculation from which the further insights and trends are derived.

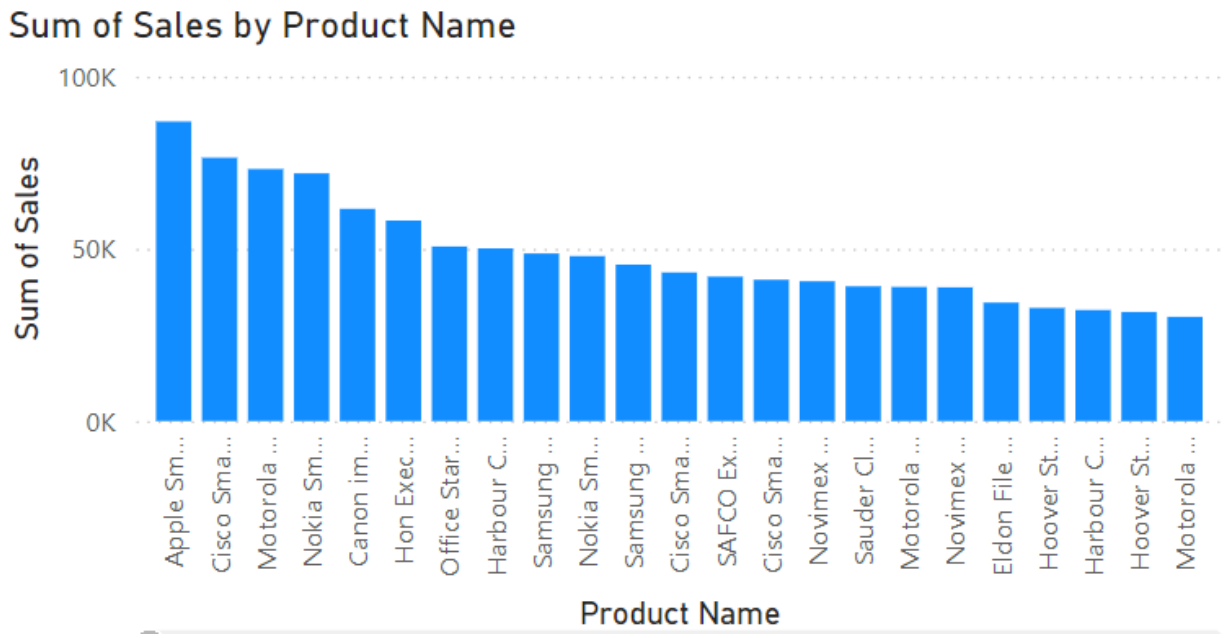
2. Sales by Product Category:



This pie chart gives us the summary of the total sales revenue on each product by its category and sub-category.

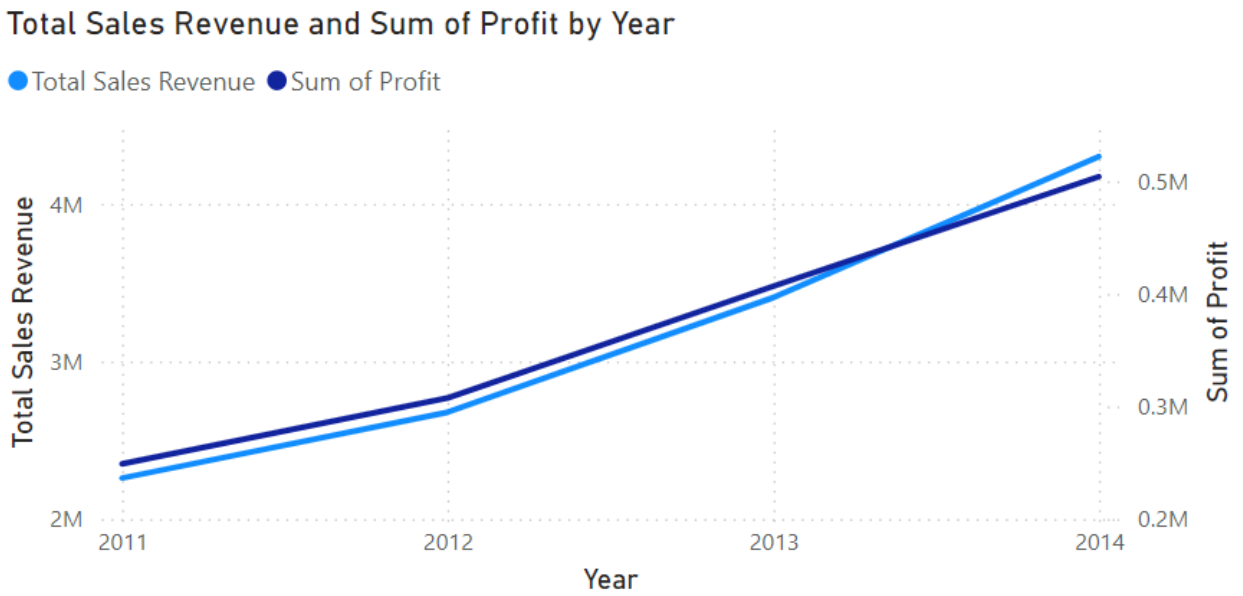
The visualization summarizes the revenue on each product with the accurate count of the total sales.

3. Top Selling product:



We can determine the company's total sales by product name by utilizing the x- and y-axes for the sum of sales and the product name, respectively.
Bar charts are used to provide information about the best-selling items.

4. Sales trend Over Time:



In the above graph we have compared the total sales revenue over the period of 4 years and we have also used the profit parameters to get the insight on how the company is performing over the 4 years.

This is important because a company needs to have profit to provide a better service to the customers.

As we can see the profits have gone below the total revenue in the first quarter of the year 2013, this raises a effective discussion on what can be done better and what parameters must be altered to bring the profit figure up.

5. Monthly sales comparison:

This line chart gives us the sales comparison by month.

Throughout the months we can see that there was a peak sales between the month of October-December Because of the holiday season.

Additionally, we may observe that there is a noticeable decline in sales during the first few months of the year. To counteract this, we can expose clients to products that are extremely important during these first few months.

For example, the sales of dairies and journals would accelerate the sales during the month of January.

These are the custom calculations which were done to arrive at the PowerBi Visualizations

```
Monthly Sales Comparison =
VAR CurrentMonthSales =
    CALCULATE(
        SUM('Global-Superstore - Global-Superstore csv'[Sales]),
        FILTER(
            ALL('Global-Superstore - Global-Superstore csv'[Order Date]),
            MONTH('Global-Superstore - Global-Superstore csv'[Order Date]) = MONTH(MAX('Global-Superstore - Global-Superstore csv'[Order Date]))
        )
    )
VAR PreviousMonthSales =
    CALCULATE(
        SUM('Global-Superstore - Global-Superstore csv'[Sales]),
        FILTER(
            ALL('Global-Superstore - Global-Superstore csv'[Order Date]),
            'Global-Superstore - Global-Superstore csv'[Order Date] <= EOMONTH(MAX('Global-Superstore - Global-Superstore csv'[Order Date]), -1)
        )
    )
RETURN
    CurrentMonthSales - PreviousMonthSales
```

This measure calculates the sales difference between the current month and the previous month. It does this by:

1. Calculating the total sales for the current month.
2. Calculating the total sales for the previous month.
3. Subtracting the previous month's sales from the current month's sales to get the difference.

This measure can be used to analyze sales trends and identify changes in sales patterns over time.

```
Count of Product Name for 0.99 2 =
CALCULATE(
    COUNTA('Global-Superstore - Global-Superstore csv'[Product Name]),
    'Global-Superstore - Global-Superstore csv'[Sales] IN { 0.99 }
)
```

This measure counts the number of unique product names that have a sales value of exactly 0.99.

The **Count of Product Name for 0.99** measure would return: **3**

This is because there are three unique product names (A, B, and D) that have a sales value of 0.99.

This measure is useful for creating reports and dashboards that display the count of products with a specific sales value, in this case, 0.99.

```
Sales Over Time =
VAR SalesByDate =
    ADDCOLUMNS(
        GROUPBY(
            'Global-Superstore - Global-Superstore csv',
            'Global-Superstore - Global-Superstore csv'[Order Date]
        ),
        "Sales", CALCULATE(SUM('Global-Superstore - Global-Superstore csv'[Sales]))
    )
RETURN
    SUMX(SalesByDate, [Sales])
```

When you use this measure in a report, Power BI will:

1. Group the data by date, creating a table with one row per date.
2. Calculate the sum of sales for each date, adding a "Sales" column to the table.
3. Return the total sales over time by summing up the "Sales" column.

This measure is useful for creating charts and reports that show sales trends over time, such as a line chart or area chart.

```
Total Sales Revenue = SUM('Global-Superstore - Global-Superstore csv'[Sales])
```

The **SUM** function adds up all the values in the **Sales** column, and the resulting value represents the total sales revenue.

This measure is useful for creating reports and dashboards that display the total sales revenue, such as a card visual or a table with a single value.

The **Total Sales Revenue** measure is a simple yet powerful way to calculate the total sales revenue in a Power BI report based on the **Sales** column in the **Global-Superstore - Global-Superstore csv** table.

Dashboard