Comprehensive Sales Analysis Report Documentation

In this report, I have documented the process and methodology used to create the Comprehensive Sales Analysis Report.

The process that I followed are as follows –

1. Data Collection
   To achieve this objective for the Comprehensive Sales Analysis Report, I started with the collection of data required from the various sources. At the center was the dataset exported from internal SQL database, which contains detailed records of all the sales transactions. Further, I combined data from regional databases of sales covering all geographical regions of interest.

2. Data Cleaning and Preparation
   Using the data collected, I cleaned it and prepared it for later analysis. Part of handling missing values was identifying those absent values and doing something with them. Where possible, I imputed the missing values; in other cases, where this was not feasible, I removed those incomplete records. I standardized the formats so that all were in a date format MM/DD/YYYY, currency formats, and other data types that required consistency. I also identified and removed duplicates for the integrity of the dataset to ensure that skewed analysis results would not happen.

3. Data Transformation
   I then converted the raw data into a format that was useful for analysis. This involved data aggregation to obtain total sales, profit, and quantity sold over different time periods and regions. Product categorization into groups assisted in the analysis of sales performance by product type,

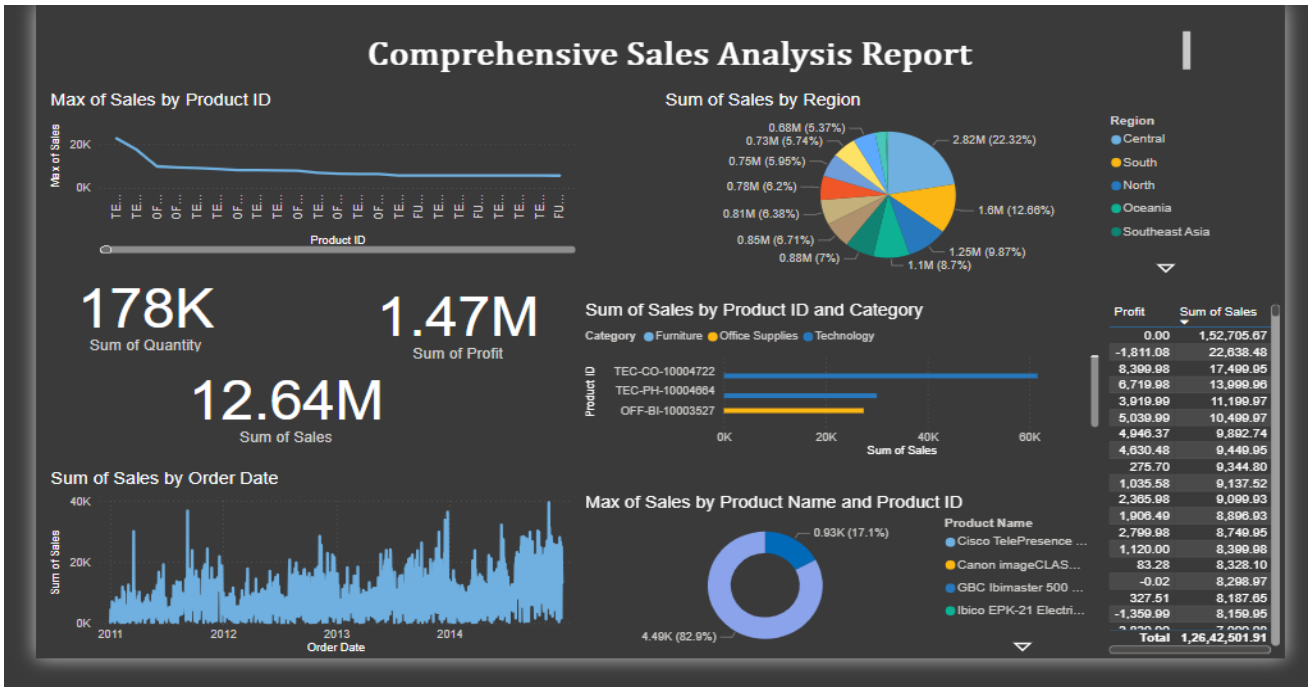
identification of trends within certain categories, and further analysis. For example, product categories might include Furniture, Office Supplies, Technology, etc.

4. Custom Calculations and Metrics
   The following are some of the custom calculations and metrics that would derive meaningful insights: aggregation of total sales figures to come up with an overall number in sales, calculation of total profit by summing up individual profit from all sales transactions, aggregation in quantity of products sold.

5. Data Visualization
   I used different chart types to visualize data and create an informative dashboard.
   - Max of Sales by Product ID: This I did using a line chart, running the MAX function to receive the maximum sales for each product ID.
   - Sum of Sales by Region: I used a pie chart summing sales data for every region.
   - Sum of Sales by Order Date: This is represented with a line chart, summing sales over time to show trends and seasonality.
   - Sum of Sales by Product ID and Category: I used a column chart to walkthrough aggregate sales data for every product ID into its respective category.
   - Max of Sales by Product Name and Product ID: A donut chart was used while presenting this information, applying the MAX function to discover, for every product, the highest sales.
   - Detailed Sales Table: This is a table showing the overview of the breakdown of data to include profit and the sum of sales without extra calculations.

6. Final Review and Presentation

   After doing that, I conducted a thorough review for accuracy and clarity. I checked the data against the calculations and logically arranged the visual components within the dashboard so that key metrics would be highlighted and clear to read.



Final look of my Sale analysis Dashboard