**A SUPERSTORE RETAIL BUSINESS ANALYSIS**

**Problem Statement:**

Superstore Analysis aim to provide insight into how best to increase sales and reach goals. The objective is to monitor how many orders placed and improve customer satisfaction.

**Steps involved in making this project:**

1. Data Extraction

The Superstore sales data was extracted from the provided Excel file and loaded into Power BI Desktop.

1. Data Cleaning

The Superstore data was cleansed in Power BI to ensure data consistency and accuracy for analysis, including tasks like handling missing values, correcting data types, and addressing formatting inconsistencies.

1. Data Loading and Transformation

* "The Superstore data was loaded into Power BI and transformed in Power Query Editor to ensure data quality and prepare it for analysis."
* "We employed Power Query Editor to clean and transform the Superstore dataset, including correcting data types and addressing inconsistencies."
* "After loading the Superstore data, we utilized Power Query for data wrangling tasks like handling missing values and shaping the data for optimal analysis in Power BI."

1. Data Modeling:

We employed a star schema data model to optimize relationships between the fact table (Sales) and dimension tables (Customers, Products, Geography, etc.) for efficient analysis of Superstore sales data in Power BI.

1. Data Analysis and visualization:

* "This Power BI project utilizes data analysis techniques to extract insights from the Superstore dataset, uncovering customer trends and informing business decisions."
* "Through data analysis in Power BI, this project unveils valuable insights from Superstore sales data, providing a data-driven perspective for strategic planning."

Analyzed the set of data and generated insights with

1. What are the total sales of products superstore?
2. What are the Sales of discounted products?
3. Find out each order's cart value?
4. Separately find out the total from the low cart value category.
5. Find the total sales coming from the low cart category and discount more than or equal to 50% to find out the contribution and cause.
6. Find out the number of days it takes to deliver for each shipment type, so that delivery issues can be looked at on priority.
7. Find out in which month of the year generates the most revenue?
8. Find out how is the Growth of Year-on-Year Sales since 2014?

1. What are the total sales of products superstore?

As per our analysis of the Superstore data the total sales of the products sold to customers is $2.33M (Two million three hundred thirty thousand dollars).

1. What are the Sales of discounted products?

 Discounted products contributed $37,930 to the overall sales, indicating a potential area for driving sales through strategic promotions.

1. Find out each order's cart value?

We have categorized cart values under 4 categories as mentioned below and created a table with three columns (CustomerID, cart value and sum of sales)

* Low: Below $50
* Medium: $50 - $150
* High: $150 - $300
* Very High: Above $300

1. Separately find out the total from the low cart value category.

Interestingly, orders categorized as 'Low' cart value (under $50) contributed a total of $1 million to overall sales. This result warrants further exploration to ensure data accuracy or potentially indicates a higher average order value than initially anticipated.

1. Find the total sales coming from the low cart category and discount more than or equal to 50% to find out the contribution and cause.

Interestingly, even within the 'Low' cart value category (under $50), discounted products (greater than or equal to 50% off) generated $14,110 in sales. This could indicate targeted promotions attracting budget-conscious shoppers or potentially low-margin sales on discounted items.

1. Find out the number of days it takes to deliver for each shipment type, so that delivery issues can be looked at on priority.

Analysis of delivery times by 'ship mode' revealed significant variations. Standard Delivery (stdc) took an average of 29,875 days, followed by Standard Class (sc) at 6,298 days, Freight Classic (fc) at 3,357 days, and finally Fast Delivery (fd) at an average of 24 days. These findings suggest potential delivery inefficiencies, particularly with Standard Delivery, which warrants further investigation to optimize shipping processes and improve customer satisfaction.

1. Find out in which month of the year generates the most revenue?

Our analysis of sales data indicates a seasonal trend, with a significant spike in January followed by a gradual decrease. Further investigation is recommended to determine the underlying factors driving this pattern and identify potential strategies to maintain sales momentum throughout the year.

1. Find out how is the Growth of Year-on-Year Sales since 2014?

 Sales data reveals a significant increase in performance starting in 2016. While sales remained consistent above $400,000 in both 2014 and 2015, they have since skyrocketed to surpass $600,000 in both 2016 and 2017.