Superstore Retail Business Power BI Dashboard Report

Introduction: -

A superstore retail business is a large, multi-department store that sells various products, including groceries, electronics, home goods, clothing and more. The superstore retail business provided the data to do the analysis and we need to find some insights based on the data.

The following steps are taken to do the analysis: -

Step 1: -

Load the data into the power bi according to the file type select the appropriate file type to load the data.

Step 2: -

Transform the data using power query editor by removing the empty columns and rows, splitting the address columns into city, state, country and pin code. Check the datatypes of each column and assign the appropriate datatype.

Step 3: -

Data modeling: In this step I divided the data into three tables which are Customer, Order Details and Product. After creating the tables I removed the duplicates from each table so that only unique values remain. I converted this flat file into STAR schema for better performance of the analysis and created one to many relationships with fact table (Orders) using model view.

Step 4: -

Calculated columns: In power query I created custom columns which are Sales, Cart Values and Sales of discounted products.

For Sales the formula that I used is Sales = Quantity * Price per each * (1 – Discount)

For cart values I used nested if else statement for multiple conditions such as sales < 1000: Low, <3500: Medium, <10000: High,>10000: Very High.

For Sales of discounted products = Quantity * Price per each * (1 – Discount)

Step 5: -

Creating measures and Formulas: -

Low cart sales and Low cart sales discount >=50%

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Low cart sales formula = CALCULATE(SUM(Orders[Sales]), FILTER(ALL(Orders[Cart Value]), Orders[Cart Value] = "Low"))
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```
Low cart sales above 50% discount = CALCULATE(SUM(Orders[Sales]), FILTER(ALL(Orders[Cart Value]), Orders[Cart Value] = "Low"), ALL(Orders[Discount]), Orders[Discount] >= 0.50)
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Dashboard Components

The Superstore Business consists of the following components:

1. Sales Analytics: This section provides an overview of the sales performance. It includes metrics such as total sales, sales by region and product category.
2. Sales by cart value: In this pie chart we can see the sales according to the cart value low, medium, high, very high
3. Total sales by category: In this chart we see the sales according to the categories which are Technology, Office Supplies and Furniture.
4. Sales by segment: In this we can see the percentage of segment by sales according to the region.

Conclusion:

The Superstore Retail Business Power BI dashboard provides valuable insights into sales. From the above steps, measures, formulas and calculations were needed to get the desired results as per the objective. It helps in making informed business decisions and strategizing business practices.