Data Analysis of Power BI Project

Q1

The initial step involved data preparation to ensure accurate analysis. Since the dataset lacked a dedicated Sales column, a new Sales column was created by multiplying the Order Quantity and Order Price/Each, incorporating discounts where applicable. This meticulous approach ensured a precise representation of sales revenue.To gain an overview of the overall sales performance, a crucial measure was devised and The total sales amount was computed to be $2.3 million,

Q2

To assess sales from discounted products, a custom measure was created in Power BI. The measure involved filtering sales transactions where the discount value was not equal to zero. By employing this measure, the analysis aimed to isolate the performance of products that were sold with discounts.

Upon implementing the aforementioned measure, the total sales value from discounted products was computed of 923.13k in sales.

Q3

I have calculated the cart value using both the Switch function and the AND function to define the cart values properly. Once the cart values were calculated and the visualization was obtained, a crucial insight emerged: the lowest cart value, approximately 1.28 million, dominates.

Q4

A customized measure was meticulously crafted using the 'SUM' function. This measure efficiently computed the total sales figure within the dataset. Utilizing the 'FILTER' function, the dataset was filtered through, specifically targeting the low cart value category. 'ALL' function was employed to maintain the integrity of the measure. By isolating the measure from the influence of slicers and filters applied elsewhere in the report. Upon the completion of the analysis, The total sales from the low cart value category amounted to a figure of 1.28 million.

Q5

The analysis revealed that the total sales amount for transactions with a low cart value and a 50% discount amounted to $14.11k.To get the desired data, a measure was devised by employing the 'AND' function, which allowed for the simultaneous application of multiple filters. This measure effectively narrowed down the dataset to transactions meeting two specific criteria: a low cart value and a 50% discount. The 'SUM' function was then applied to calculate the total sales amount corresponding to these filtered transactions

Q6

Created a new column, 'Date Difference,' to calculate the difference between order date and ship date. This provided a crucial metric for evaluating shipping efficiency, then using measures I have found separate Averages of Date Difference of each Ship Mode to get the final values. Upon analyzing the data, it was revealed that the 'Standard Class' shipping mode experienced the highest average delivery time, taking an average of 5 days for orders to be delivered.

Q7

Maintaining a logical hierarchy within the matrix visualization, the data elements were organized meticulously.

Rows were organized based on Order Dates, providing a chronological overview, and in Values 1st I have Sales then I have the YTD (which I have calculated using Quick Measures)

Upon conducting the analysis, it was observed that the Year-to-Date (YTD) sales amounted to 7,50,471.31. This figure reflects the cumulative sales total from the start of the year up to the latest available date in the dataset.

Q8

Utilized Quick Measure functionality in Power BI to accurately compute the Year-over-Year growth percentage.

To present our findings effectively, we utilized a line graph. The X-axis represents Order Dates, enabling a chronological representation of the data. On the Y-axis, the Cumulative YOY percentage is plotted. This choice of visualization offers a clear and concise representation of the data trends over time