Digital Marketing Analyst Functional Test - Sales Data

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Date : 18/01/2025

Time Taken : 1 Hour 47 Minutes

Introduction

This report summarizes the activities undertaken in the Digital Marketing Analyst Functional Test, aimed at cleaning, analyzing, and evaluating sales data using Excel. The activities involved in this test include data validation, calculations, error checks, and performance evaluations. I have used multiple Excel sheets to address different tasks and scenarios.

Section 1: Data Cleaning and Validation

- In this section, I **cleaned and validated** the data by finding missing or incorrect dates, standardizing region and salesperson names, and flagging rows with blank or zero values in the Quantity and Unit Price columns.

Challenges/Decisions:

- For missing dates, I have taken the average of the previous and the next entry date. I standardized names to keep consistency.

Section 2: Calculations and Analysis

- Sales Amount Calculation: I added a 'Total Sales' column to find the overall value for each transaction by making the calculations valid when the row values were not blank.
- Sales by Product and Region: A **pivot table** was created to summarize total sales by product and region. This allowed me to assess sales performance at the regional and product level.
- Top Salespersons: I used Excel formulas to identify the top 3 salespersons by total sales. I used the **SUMIF** function to find the highest sales figures and **Rank** function to MATCH to display the names.

Section 3: Advanced Analysis and Logical Reasoning

- Dynamic Calculation of Discounts: I have added a column showing a dynamic discount calculated based on the following rules: a 15% discount for sales ≥ $2,000; a 10% discount for sales falling between $1,000 and $1,999; and no discount for below $1,000.
- Error Check: I then **highlighted** those transactions that were having **more than a discount of $300**, using Conditional Formatting.

Section 4: Decision-Making Scenario

- Target Comparison: I further compared actual sales, from the pivot table, against the target sales for each region. I determined, based on the comparison, whether or not the regions met their sales targets.

Evaluation:

- All four regions have performed well and achieved their sales targets.
- **East region** has the **highest sales 201,184**, well exceeding its **target of 15,000**.
- **West** has achieved the target, but there is room for further growth since its **actual sales 125,281** are **more than 10 times the target sales**.
- Most Needing Improvement Area:
- **South** region, at **106,631 in actual sales** against the **target of 8,000**, shows quite a significant increment. This was probably brought about by strong performance elsewhere, so regional diversification can further be improved upon.

Conclusion

The tasks were concluded by ensuring that in cleaning and analyzing the sales data, the application of appropriate Excel formulas and techniques was applied. Certain regions especially in the east need much more concentration regarding sales, whereas some did well.