

Exploratory Data Analysis (EDA) Report on Sales Insight.sql

Based on the provided SQL file, the database schema and sample data suggest a sales-related dataset. The analysis covers five main tables: customers, date, markets, products, and transactions.

Database Schema Overview

The sales database contains five tables designed to store information about sales transactions, products, customers, markets, and dates. Here is a breakdown of each table's structure and data.

Customers :- This table stores customer information.

- Columns:
 1. customer_code: VARCHAR(45), Primary Key.
 2. custmer_name: VARCHAR(45). (Note: 'customer' is misspelled as 'custmer'.)
 3. customer_type: VARCHAR(45)
- **Data Summary:** The table includes 38 unique customers. The customer_type field has two distinct categories: "Brick & Mortar" and "E-Commerce".

Date :- This table appears to be a dimension table for dates, likely used for time-series analysis.

- Columns:
 1.) date: DATE, Primary Key.
 2.) cy_date: DATE.
 3.) year: INT.
 4.) month_name: VARCHAR(45).
 5.) date_yy_mmm: VARCHAR(45).
- **Data Summary:** The data spans from June 2017 to at least February 2018, with daily entries for each month.

Markets :- This table holds information about the sales markets.

- Columns :
 - 1.) markets_code: VARCHAR(45), Primary Key.
 - 2.) markets_name: VARCHAR(45).
 - 3.) zone: VARCHAR(45).
- **Data Summary:** The table includes various markets such as "Chennai," "New Delhi," and "Mumbai".

Products :- This table catalogs the products.

- Columns :
 - 1.) product_code: VARCHAR(45), Primary Key.
 - 2.) product_type: VARCHAR(45).
- **Data Summary:** Products are categorized by product_type, with examples like "Desktop," "Keyboards," "Mouse," and "Smart phone".

Transactions :- This is the central fact table, linking all other tables to record individual sales.

- **Columns :**
 - 1.) product_code: VARCHAR(45).
 - 2.) customer_code: VARCHAR(45).
 - 3.) market_code: VARCHAR(45).
 - 4.) order_date: DATE.
 - 5.) sales_qty: INT.
 - 6.) sales_amount: INT.
 - 7.) currency: VARCHAR(45)
- **Data Summary:** This table contains detailed transaction records, including the quantity and amount of sales for a specific product, customer, market, and date. The currency field is consistently "INR" for all sample data entries. The table includes transactions for different product and customer codes, showing the sales volume over time.