Sales and Revenue Analysis Dashboard Report

Project Overview

This project involved creating an interactive dashboard to analyse sales performance across multiple years. The dashboard visualises key business metrics, such as total revenue, quantity sold, top customers, top products, and revenue per market. The aim was to provide stakeholders with a comprehensive tool for tracking business performance and identifying trends.

Problem Statement

The primary problem addressed in this project was the need for a consolidated view of sales data across different years, markets, and customer segments. Without a proper visualisation tool, stakeholders found it difficult to:

1. Identify revenue trends across time.
2. Determine which products and customers contributed most to overall sales.
3. Understand market-specific performance and how it influenced overall revenue.

Technologies Used

1. **Tableau:** This business intelligence tool was used to create the dashboard, enabling the integration of multiple charts, graphs, and KPIs. It allowed for interactive filtering and drill-down capabilities.

2. **SQL**: SQL queries were employed to extract and aggregate the required sales data from the underlying database. SQL was used for data wrangling, filtering, and preparing datasets to feed into the dashboard.

3. **ETL Process** An Extract, Transform, Load (ETL) process was likely used to fetch raw sales data from transactional systems (e.g., a CRM or ERP), transform it for analysis, and load it into a database or directly into the BI tool.

Data Model
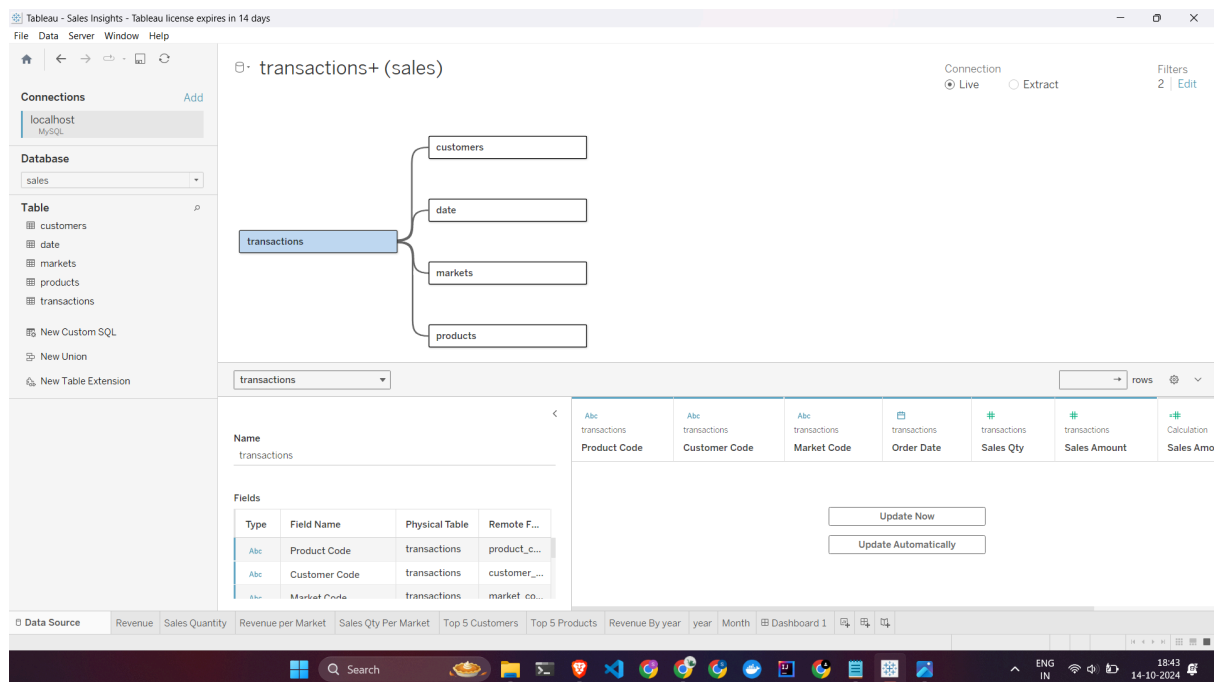
Data Sources

1. **Sales Data**: This dataset included sales transactions, customer details, product details, and market information. Key fields included:
    1.1.   Sales amount (INR)
    1.2.   Quantity sold
    1.3.   Customer name
    1.4.   Product name
    1.5.   Market (Region)
    1.6.   Date (Year, Month)

2. **Aggregated Metrics**: Metrics like total revenue, total quantity sold, and average revenue per customer/product were calculated based on the raw sales data.

Dashboard Components and Features

1. **KPIs**:
   - Displays overall sales revenue over the analysed period.
   - Displays the total number of products sold.

2. **Revenue by Year (Line Graph)**: This graph provides an overview of revenue trends across the years. Each point on the graph corresponds to a specific month's revenue, making it easy to spot seasonal trends or year-over-year growth/decline.

3. **Top 5 Customers (Bar Chart)**: This chart shows the top 5 customers based on revenue contribution. It helps stakeholders identify key accounts that drive the business.

4. **Top 5 Products (Bar Chart)**: This visualises the products generating the highest revenue. It's crucial for understanding product performance and focusing on high-demand items.

5. **Revenue per Market (Bar Chart)**: This chart provides insights into how different geographic markets are performing in terms of revenue. It highlights areas that require more focus or show high potential.

6. **Interactivity**: Filters were implemented throughout the dashboard, allowing users to drill down by specific years, markets, customers, and products. This provides users with a flexible tool to analyse data from various perspectives.

Conclusion Derived from the Dashboard

1. **Revenue Trends**: There is an observable increase in revenue in certain months across the years, while other months show a decline, indicating possible seasonality in sales. For example, revenues were higher in the months of September and December in 2019 and 2020, possibly due to promotional activities or seasonal demand.

2. **Key Customers**: Electricalsara Stores was the highest revenue-generating customer, contributing a significant portion of the total sales. This customer should be prioritised for retention efforts, and their purchasing behaviour could provide insights into expanding similar customer relationships.

3. **Top Products**: The top-performing product was "Prod040," generating the highest sales revenue. Focusing on inventory, marketing, and distribution strategies for these top products could lead to further revenue growth.

4. **Market Performance**: Delhi NCR and Mumbai were the highest-performing markets, accounting for the bulk of sales. These markets should continue to be the focus of future marketing campaigns. Conversely, low-performing markets like Bengaluru and Bhubaneswar may require targeted efforts to increase sales or reconsideration of market strategy.

5. **Seasonal Trends**: The dashboard shows that revenue dips in the middle of the year, possibly indicating periods where promotional efforts or product launches could be intensified to drive sales during traditionally slower months.

Recommendations

- **Customer Retention Strategies**: Focus on retaining high-value customers like Electricalsara Stores through loyalty programs, targeted offers, or personalised engagement.
- **Product Strategy**: Invest in marketing and distribution efforts for top-performing products like Prod040, as these items are driving a significant portion of revenue.
- **Geographic Focus**: Continue to invest in the top-performing markets (Delhi NCR, Mumbai), while exploring growth opportunities in lower-performing regions.
- **Address Seasonality**: Introduce promotional campaigns during revenue dips in mid-year months to stabilise sales across the year.

Dashboard