Super Store Revenue Report

This Power BI project focuses on analyzing Super Store revenue across various locations in the USA, leveraging interactive dashboards to provide key business insights. The objective is to enhance data-driven decision-making through advanced visual analytics.

High Level tasks performed

- **Collecting & Exploring Data:** Gathered raw data from multiple sources and analyzed its structure.
- **Cleaning & Preparing Data:** Used Power Query to remove duplicates, adjust data types, fill in missing values, and optimize data for analysis.
- **Building the Data Model:** Structured the data by separating key entities like Products, Customers, and Orders for better insights.
- **Choosing the Right Visuals:** Selected Power BI charts and graphs to best represent revenue trends and business performance.
- **Designing the Dashboard:** Created an intuitive, user-friendly layout that allows seamless interaction.
- **Adding Interactive Features:** Implemented slicers, filters, and drill-throughs to enable deeper analysis.
- **Testing for Accuracy:** Verified data consistency and dashboard functionality.
- **Publishing & Sharing:** Deployed the dashboard to Power BI Service and packaged it into an app for easy access.

Objective

The aim of this project is to analyze Super Store's revenue and profit across different aspects—such as product categories, regions, and customer segments—using Power BI's advanced visualization capabilities.

Data Scope

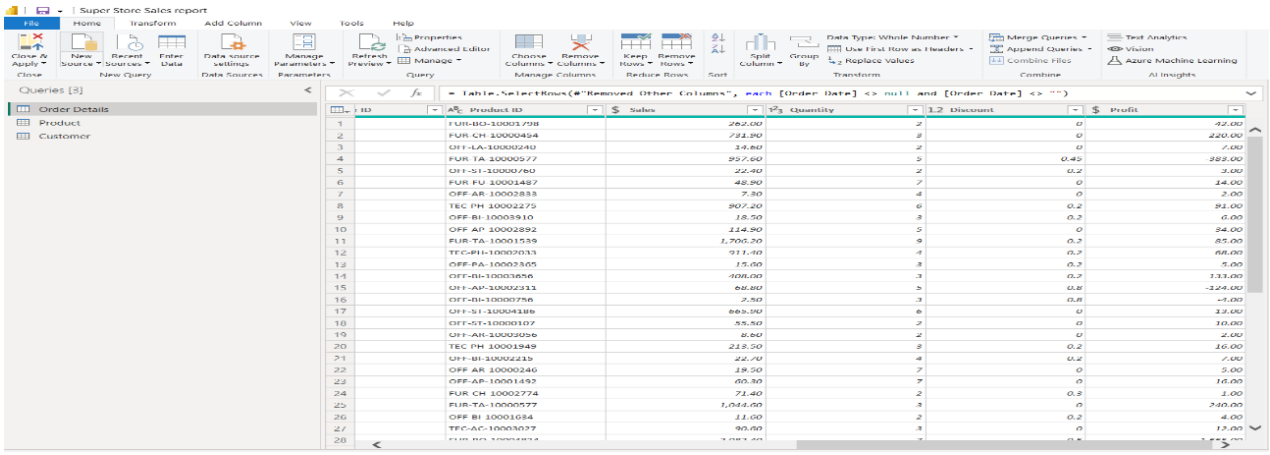
- **Time Frame:** 2017 - 2020
- **Key Metrics:** Revenue, Profit, and Sales Performance by Category, Region, and Customer Segment.

Data Transformation and Modeling

To make the data more usable and insightful, several steps were taken:

- **Cleaning & Refining Data:** Addressed various data quality issues by removing duplicates, correcting data types, eliminating empty rows, and filling in missing values.
- **Structuring Data for Efficiency:** Initially, product, customer, and order details were combined in a single dataset. To enhance performance and facilitate better analysis, these were separated into three distinct queries.

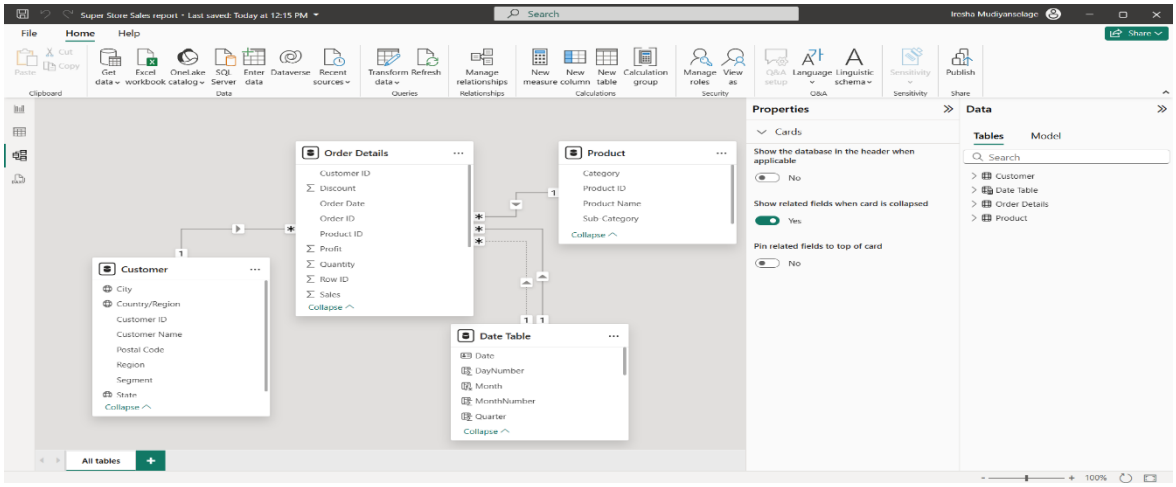
- **Creating Relationships:** Designed a star schema model to improve performance and enable meaningful analysis.



Data Model

The structured data model includes:

- **Fact Table:** Contains all sales transactions, including revenue and profit details.
- **Dimension Tables:** Includes details on Customers, Products, Regions, and Date.
- **Key Metrics & Calculations:** Used DAX formulas to measure revenue growth, profit, and year-over-year performance.



Dashboard Layout and design.

The Power BI dashboard is structured into several key pages:

- **Main Page:** Has navigation links to Overview and Revenue by Measures Pages.
- **Overview Page:** A detailed look at overall sales and profitability trends.
- **Revenue by Measures Page:** Breakdown of revenue based on product categories, regions, and customer segments.

- **Detail Pages (Drill-through Enabled):** Additional insights accessible through drill-through functionality for in-depth analysis.

Figure1 : Main Page

Figure 2: Overview

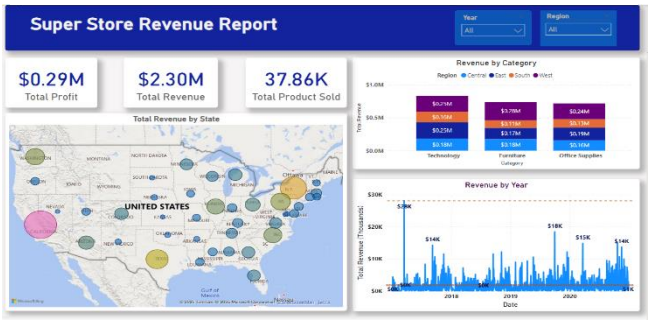


Figure 3: Revenue by Different Measures

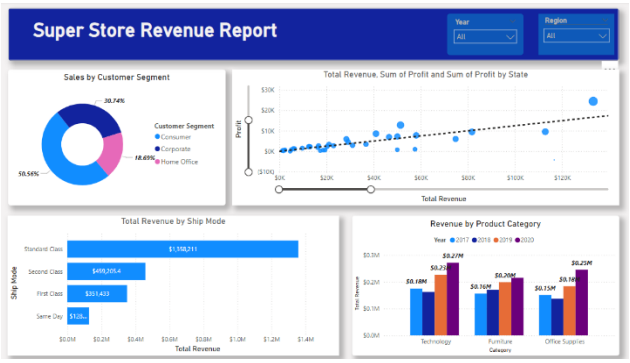


Figure 4: Detail Page

Key Insights & Takeaways

- **Total Revenue (2017-2020):** $2.3 million
- **Total Profit (2017-2020):** $0.29 million
- **Yearly Performance:**
    - Lowest revenue recorded in 2018: $0.47 million
    - Highest revenue recorded in 2020: $0.73 million
- **Best Performing Region:** The West region had the highest revenue.
- **Top-Performing State:** California led with $137,652 in revenue.
- **Customer Segment Breakdown:**
    - Consumer segment: **50%** of total revenue
    - Corporate segment: **30%**
    - Home Supplies segment: **18%**

This Power BI dashboard equips stakeholders with clear, interactive insights into revenue and profitability trends, helping drive informed business decisions.

Link

https://www.loom.com/share/7c9b30cb443945fabf5c20461f956bf5?sid=c7636a4b-868f-4b4b-9a3c-87004c5faac9