

Commodities Prices Solution

SQL

1. Introduction

This project involved analyzing a dataset related to commodities prices using SQL. The goal was to extract meaningful business insights by identifying profitable categories, understanding customer behavior, and optimizing resource allocation.

2. Problem Statement

The main challenge was determining which product categories and subcategories generate the most sustainable profits. The business needed insights into which areas to focus on for growth and which underperforming categories could be considered for discontinuation.

3. Your Role and Contribution

My role involved writing SQL queries to clean, organize, and analyze the data. I also contributed by visualizing the results and interpreting the key insights. The project required advanced SQL skills to extract relevant information from large datasets, generate aggregated metrics, and perform in-depth analysis.

4. Insights

- "Through analysis, I identified that the technology category was highly profitable compared to office supplies and furniture, which showed lower profitability. For instance, the furniture category had consistent losses, suggesting it could be discontinued."
- "At the subcategory level, items like rubber bands and bookcases were identified as loss-making, while products like computers and peripherals drove the highest profits."
- "I also analyzed customer segmentation, uncovering that a small percentage of customers generated a majority of revenue (following the 80/20 rule). This helped recommend targeted strategies to improve customer retention."

5. Learning Outcomes

This project really helped me get understanding of SQL, especially when it comes to using it for business decisions. I learned how to write complex queries and work with large amounts of data without getting stuck. It also gave me a better understanding of how to take raw data and turn it into insights that are actually useful for making decisions. Plus, I learned how to connect the technical side of things with what the business really needs, which is key for making recommendations that lead to growth.