Retail Performance Intelligence - Suvidha Supermarket (Python | SQL | Power BI)

This project presents a comprehensive retail analytics solution designed to transform raw sales and purchase data into actionable business insights.
Leveraging Python, SQL, and Power BI, the solution streamlines reporting, automates data processing, and identifies key revenue-driving vendors.

Problem Statement:
Suvidha Supermarket needed a robust analytics system to improve purchase decision-making and vendor management.
The challenge was to convert raw, unstructured datasets into clean, analysis-ready formats,
perform detailed analysis, and visualize key metrics in a decision-friendly format.

Key Features:
- MySQL data pipeline built using Python for structured, analysis-ready datasets.
- Performed Exploratory Data Analysis (EDA) using Pandas, NumPy, and Matplotlib.
- Identified top 10 vendors contributing 76.33% of total purchases.
- Developed a Power BI dashboard reducing reporting time by 40% and improving decision-making.

Tools & Technologies:
Python, MySQL, Pandas, NumPy, Matplotlib, Power BI

Outcome:
The solution significantly optimized reporting workflows, provided deep insights into vendor performance,
and supported data-driven decisions leading to measurable business growth.

835.37K
Sum of TotalSalesDollars

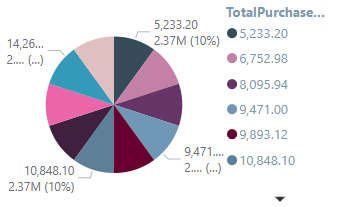
36.65K
Sum of ProfitMargin

66.99K
Sum of TotalSalesQuantity

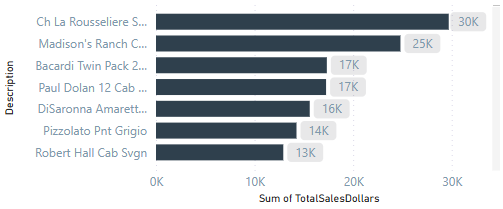
42.12K
Sum of TotalPurchaseQuantity

454.97K
Sum of GrossProfit

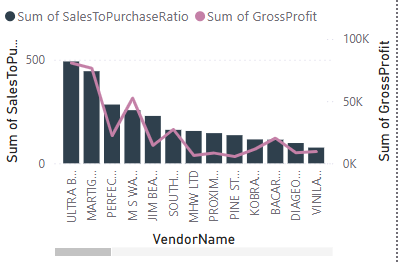
Count of VendorName by TotalPurchaseDollars



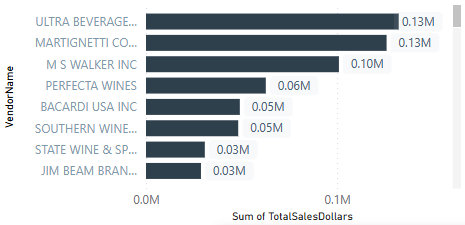
Sum of TotalSalesDollars by Description



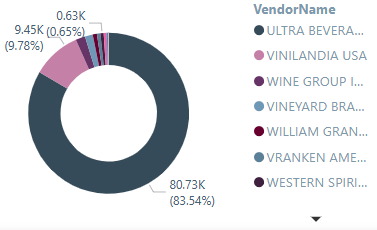
SalesToPurchaseRatio and GrossProfit by VendorName



Sum of TotalSalesDollars by VendorName



Vendors having top 10 Gross Profit



VendorName

Select all
WINE GROU...
WILLIAM GR...
WESTERN S...
VRANKEN A...
VINILANDIA...
VINEYARD B...
VINEXTRA I...
ULTRA BEV...

Suviddha Supermarket Analysis