

Business Problem Statement

Vrinda Store seeks to evaluate its **annual sales performance for the year 2022** to gain a deeper understanding of customer purchasing behavior and uncover actionable insights that can support **revenue growth in 2023**. With increasing competition across online and offline retail channels, the management aims to identify key demand drivers, high-value customer segments, and effective sales channels.

The analysis focuses on transforming raw transactional data into meaningful insights by answering critical business questions such as:

- How do **sales revenue and order volumes vary throughout the year**, and how can they be analyzed together to assess performance trends?
- Which **month recorded the highest sales and order volume**, indicating peak demand periods?
- Which **gender segment contributed more** to overall sales in 2022?
- What are the different **order fulfillment statuses**, and how do they impact sales performance?
- Which **top five states** contributed the most to total revenue?
- How do **age groups and gender** influence purchasing frequency and order volume?
- Which **sales channels or platforms** drive the highest revenue?
- Which **product categories** generate maximum sales and should be prioritized for future growth?

Project Deliverables

1. Cleaned & Standardized Dataset

Raw sales data cleaned for inconsistencies in gender and quantity fields.

Derived columns such as **Age Group** and **Month** added for deeper analysis.

2. Data Processing & Feature Engineering (Excel)

Applied formulas to categorize customers into **Teenager, Adult, and Senior** segments.

Extracted monthly trends to support time-based performance analysis.

3. Analytical Insights (Pivot Tables)

Pivot tables created to analyze:

Sales and order trends over time

Customer segmentation by age and gender

Top-performing states, sales channels, and product categories

Order status distribution and fulfillment performance

4. Interactive Dashboards (Data Visualization)

Built dynamic dashboards using pivot charts to visualize:

Sales vs. orders

Customer demographics

Channel and category performance

Enabled slicers for interactive filtering and exploration.

5. Business Insights & Recommendations

Identified high-value customer segments and regions.

Highlighted top sales channels and product categories.

Provided actionable recommendations to drive sales growth in 2023.