

Data Preprocessing Steps

Data Import

- The dataset was downloaded and imported into **Tableau Desktop**.
- Data source connection was established using Excel/CSV format.

Data Cleaning in Tableau

Removing Null Values

- Checked for missing values in key columns like Sales, Product, Placement, Customer ID.
- Replaced nulls with appropriate values or filtered them out.

Removing Duplicates

- Verified unique records using primary identifiers.
- Removed duplicate rows to maintain data integrity.

Data Type Correction

- Converted fields into proper data types:
 - Dates → Date format
 - Sales → Number (Decimal)
 - Categories → String

Data Transformation

Created Calculated Fields

- $\text{Revenue} = \text{Sales} \times \text{Quantity}$
- $\text{Profit Margin} = \text{Profit} / \text{Sales}$
- Sales by Placement Type

Date Feature Extraction

- Extracted Month, Year, Quarter for trend analysis.

Data Structuring

- Renamed column headers for clarity.
- Grouped placement types (Shelf, Endcap, Aisle) into meaningful categories.
- Sorted and filtered irrelevant attributes.

Data Validation

- Cross-checked totals with source file.
- Verified summary statistics (sum, average, count).

Visualization Preparation

- Created:
 - Bar charts (Sales by Placement)
 - Line charts (Sales Trend)
 - Pie charts (Category Contribution)
 - KPI indicators

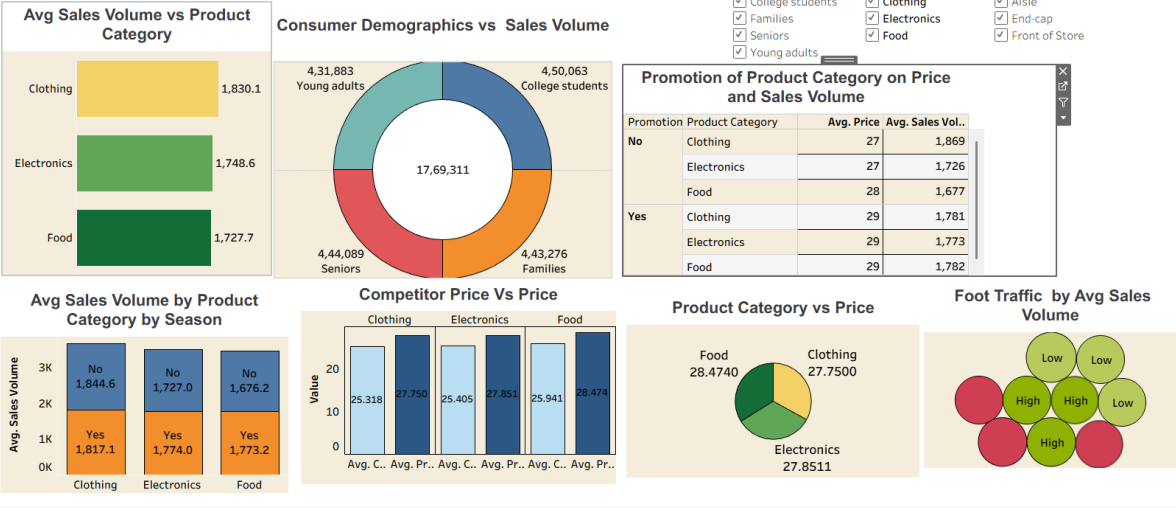
Dashboard & Story Integration

- Combined visualizations into an interactive dashboard.
- Created story points explaining:
 - Best performing placement
 - Monthly trend analysis
 - Strategic recommendations

Website Integration

- Published dashboard to Tableau Public/Server.
- Embedded dashboard into Bootstrap template using iframe.
- Ensured responsiveness across devices.

PRODUCT PLACEMENT ANALYSIS- DASHBOARD



Story 1



The product category clothing has the highest average sales volume

The product position at the Front of store has high sales volume and high foot traffic

The product category at the highest avg sales volume

