

# Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization

## 1. Introduction

Strategic product placement in retail environments significantly influences consumer purchasing behavior. This report demonstrates how Tableau can be used to analyze sales impact based on product placement strategies.

## 2. Business Problem Statement

How does product placement (e.g., eye-level shelves, checkout counters, end caps) impact sales revenue, unit sales, and customer conversion rates?

## 3. Dataset Structure

Typical dataset fields required: - Product\_ID - Product\_Name - Category - Placement\_Type - Store\_Location - Units\_Sold - Revenue - Date - Promotion\_Flag

## 4. Data Preparation (Python Example)

Below is sample Python code for preparing the dataset before importing into Tableau:

```
import pandas as pd

# Load dataset
df = pd.read_csv("product_sales.csv")

# Calculate revenue per unit
df["Revenue_per_Unit"] = df["Revenue"] / df["Units_Sold"]

# Aggregate placement performance
placement_summary = df.groupby("Placement_Type").agg({
    "Revenue": "sum",
    "Units_Sold": "sum"
}).reset_index()

print(placement_summary)
```

## 5. Key Tableau Calculated Fields

```
1. Sales Growth:
   (SUM([Revenue]) - LOOKUP(SUM([Revenue]), -1))
   / ABS(LOOKUP(SUM([Revenue]), -1))

2. Placement Effectiveness Index:
   SUM([Revenue]) / SUM([Units_Sold])

3. Promotion Impact:
   IF [Promotion_Flag] = 1 THEN SUM([Revenue]) END
```

## 6. Recommended Tableau Visualizations

- Bar Chart: Revenue by Placement Type
- Heatmap: Store Location vs Placement Performance
- Line Chart: Sales Trend Over Time by Placement
- KPI Dashboard: Revenue, Units Sold, Effectiveness Index

## 7. Insights & Strategic Recommendations

• Eye-level placements typically generate higher revenue per unit. • End-cap displays significantly boost promotional sales. • Checkout placements drive impulse purchases. Retailers should allocate premium shelf space to high-margin products and rotate promotional items strategically to maximize exposure.

***End of Report***