

# Dashboard Analysis Report – Sokrio Technologies

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## 1. Project Goal

The objective of this project was to design an **interactive sales performance dashboard** using **Power BI**. The dashboard should enable decision-makers at **Sokrio Technologies** to:

- Monitor overall sales and revenue trends.
  - Identify top-performing products and categories.
  - Compare sales performance across territories and buyer departments.
  - Evaluate the impact of discounts on order value.
  - Support better forecasting and strategic planning.
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## 2. Data Collection & Preprocessing

**Data Source:** Sales transaction records from Sokrio Technologies.

### Preprocessing Steps:

- **Data Cleaning:** Removed duplicates and null records; dropped completely null fields (e.g., *unit1–unit5, free\_with, promotion\_id*).
- **Handling Missing Values:**
  - Categorical nulls (e.g., *latest\_status*) → categorized as “Unknown.”
  - Numerical nulls (e.g., *units*) → rows with critical gaps removed.
  - Buyer-related fields with partial nulls retained for future enrichment.
- **Feature Engineering:**

- **DiscountGroup** → classified transactions into *With Discount / Without Discount*.
- **MonthYear** → formatted as YYYY-MM for monthly trend analysis.
- **Week No.** → extracted for weekly trend analysis.

**Outcome:** A clean and structured dataset with enhanced features, ready for dashboard visualization.

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## 3. Analysis

### Product Insights

- Pound Cakes and Sliced Cakes dominate revenue.
- The top 10 products account for a major share of overall sales, showing heavy reliance on a few SKUs.

### Category Insights

- Pound Cake alone contributed ~39% of revenue.
- Muffins, Layer Cakes, and Fruit Cakes underperform compared to Pound and Sliced Cakes.

### Revenue Trends

- Revenue peaked in **February 2024** ( $\approx 784K$ ).
- Sharp decline observed in **May 2024** ( $\approx 12K$ ) → possible seasonal or supply chain issue.
- Weekly data showed fluctuations, suggesting demand inconsistency.

### Territory Performance

- Territories **1406, 1401, and 1405** generated the highest order volumes.
- Some territories showed minimal contribution, representing untapped markets.

## Discount Impact

- Orders *without discounts* had a higher Average Order Value ( $\approx 26.9$ ) compared to those *with discounts* ( $\approx 15.7$ ).
- Discounts did not significantly boost order volume, but reduced profitability.

## Buyer Department Insights

- A small group of buyer departments (e.g., *Shree S Fast Food, Protasha, Rifk General Store*) generated disproportionately high revenue.
  - Heavy dependence on a few buyers poses both growth opportunities and risk.
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## 4. Key Findings

1. Revenue concentration in a limited set of products and categories.
  2. Seasonal sales variations with significant monthly fluctuations.
  3. **Territory imbalance**, with some areas far outperforming others.
  4. **The discounting strategy is ineffective**, lowering Average Order Value(AOV) without boosting sales enough.
  5. **Buyer dependency risk** due to reliance on a small group of high-value clients.
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## 5. Recommendations

- **Diversify Product Strategy:** Invest in marketing mid-level categories (Muffins, Layer Cakes) to reduce overreliance on Pound & Sliced Cakes.
- **Territory Expansion:** Replicate best-performing territory practices in weaker areas.
- **Optimize Discounts:** Shift from broad discounts to targeted promotions based on buyer behavior.
- **Strengthen Buyer Relations:** Develop loyalty programs for high-value buyer departments while expanding new partnerships.

- **Seasonal Forecasting:** Use historical monthly and weekly trends to align production and inventory planning with the demand cycle.
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