

# Oreo Sales Analysis – Excel-Based Data Project

## 1. Outline

This report provides a structured sales analysis of Oreo's performance for the year 2023 using Microsoft Excel. It follows a defined analytical process including:

- Introduction
- Story of Data
- Data Splitting and Preprocessing
- Pre-Analysis Insights
- In-Analysis Observations
- Post-Analysis Recommendations
- Visualizations & Charts
- Conclusion

The purpose is to evaluate Oreo's regional sales performance, product distribution, customer base, and salesperson efficiency to identify patterns and opportunities for business growth.

## 2. Introduction

### Objective of the Project

The goal of this project is to analyze Oreo's sales data for 2023 to understand key performance trends across customers, products, and regions.

### Problem Being Addressed

Sales data can often be fragmented, making it difficult for management to see where the strongest and weakest areas lie. This analysis organizes and visualizes the data to reveal the most profitable regions, products, and customers that drive Oreo's success.

### Key Datasets and Methodologies

The dataset includes Oreo's 2023 sales transactions categorized by region, city, product type, and sales representatives.

All analysis was performed using Microsoft Excel, utilizing:

- PivotTables for data aggregation
- COUNTIFS and SUMIFS for conditional analysis
- Charts and maps for visual representation of sales distribution
- Interactive dashboard elements for deeper insight

## 3. Story of Data

The dataset captures **Oreo's sales performance across U.S. regions and cities in 2023**, highlighting top customers, leading products, and the sales trend over months.

### **Stakeholders of the Project**

- Sales managers monitoring performance
- Marketing teams designing campaigns
- Senior executives evaluating regional profitability

### **Value to the Industry**

This analysis demonstrates how Excel can effectively transform corporate sales data into actionable insights for decision-making and business optimization.

### **Data Source**

Oreo internal sales dataset for the year 2023.

### **Data Structure**

Each record represents a sales transaction and contains:

- Month
- Product Category
- Customer Name
- Salesperson
- Region & City
- Sales Amount (USD)

### **Important Features and Their Significance**

- **Sales Amount:** Key revenue indicator.
- **Region:** Determines geographical performance.
- **Salesperson:** Measures individual contribution.
- **Product Type:** Shows which categories are most profitable.
- **Customer:** Identifies major clients.

### **Data Limitations**

Data covers only one fiscal year (2023) and may not reflect long-term sales cycles or global market behavior.

## **4. Data Splitting and Preprocessing**

### **Data Cleaning**

- Duplicate records removed.
- Non-numeric sales values corrected.
- Regional names standardized.

### **Handling Missing Data**

Any missing revenue values were replaced with the regional average.

### **Data Transformation**

New calculated fields introduced include:

- Average Monthly Sales
- Regional Sales Share (%)
- Customer Revenue Contribution

### **Data Splitting**

The analysis was split across:

1. Product categories
2. Customers
3. Salespersons
4. Regional performance

### **Industry Context**

This study falls under FMCG (Fast-Moving Consumer Goods) analytics, where data-driven insights guide sales strategy, regional expansion, and marketing focus.

## **5. Pre-Analysis Insights**

- The North region recorded the highest revenue at \$141,680, followed by the East at \$108,276.
- Beverages were the top-selling product, generating \$110,577 in revenue.
- Nancy Freehafer was the top-performing salesperson, contributing 39.3% of total sales.
- Company D was identified as the leading customer, accounting for 41.7% of revenue.
- December had the highest monthly sales at \$66,643, while February saw the lowest at \$19,986.
- Sales by City revealed concentrated activity in key urban markets, particularly in the northern and eastern United States.

## **6. In-Analysis Observations**

- The sales trend fluctuated through the year, with strong peaks in June, October, and December, indicating seasonal demand cycles.
- Beverages dominated product sales, followed by Sauces (\$69,000) and Jams & Preserves (\$51,541), showing a balanced product mix.
- Among customers, Company D, H, and BB collectively contributed the majority of total sales revenue.
- Regional performance analysis revealed a strong North-South disparity, with the South and West lagging behind.
- Sales by City map visualization highlighted clusters of high sales density in northeastern states.

- The top three salespersons contributed over 75% of all revenue, showing concentrated sales performance.
- Despite monthly fluctuations, total annual revenue showed steady upward momentum from mid-year onward.
- Nancy Freehafer's performance led all others, suggesting strong client management or regional dominance.
- The West region showed lower performance, indicating possible market underpenetration or limited distribution coverage.

### Methods Used in Excel

- PivotTables for regional and product segmentation
- COUNTIFS for tracking sales frequency
- AVERAGEIFS for city-level revenue comparison
- Charts, slicers, and conditional formatting for visualization clarity

## 7. Post-Analysis Recommendations

- **Regional Focus:** Strengthen marketing and distribution efforts in the South and West to balance national sales performance.
- **Customer Relations:** Maintain partnerships with Company D and Company H, while exploring acquisition of mid-tier clients to diversify revenue.
- **Product Strategy:** Expand the Beverages and Sauces categories, as they show consistent performance across all regions.
- **Salesperson Development:** Study Nancy Freehafer's sales approach for potential replication in lower-performing territories.
- **Seasonal Campaigns:** Leverage sales peaks in June and December with promotional campaigns.
- **Data Continuity:** Continue collecting and analyzing multi-year data to better understand long-term growth trends.
- **City-Level Penetration:** Enhance outreach in mid-performing cities to close the gap between top and bottom markets.

### Comparison with Initial Insights

Initial assumptions about Beverages and Northern region dominance were validated, though the sharp variation between months suggests stronger planning is needed for off-peak periods.

## 8. Data Visualizations & Charts

The analysis featured several visuals:

- **Pie Charts:** Top Customers, Products, and Salespersons.
- **Line Chart:** Monthly Sales Trend (January–December).
- **Radar Chart:** Regional Performance Comparison.
- **Map Visualization:** City-wise sales distribution.

These visuals provided an integrated dashboard view summarizing Oreo's 2023 performance.

## **9. Conclusion**

This project demonstrates how Excel can effectively transform sales data into business intelligence for fast-moving consumer goods like Oreo.

The analysis highlights strong performance in northern regions, clear product leaders, and valuable insights into customer and salesperson dynamics.

Overall, Excel's visualization and analytical capabilities allowed for a comprehensive understanding of Oreo's 2023 sales structure proving that even traditional tools can power modern data-driven decision-making.