

# **Sales & Returns Performance Analysis Report**

## **Project #1 – Sales & Returns Performance Trends Dashboard**

**Prepared by:**

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**Role Targeted:**

**Business Analyst | Operations Analyst | CRM Specialist**

**Tools Used:**

**Excel • Tableau**

**Date Completed:**

April 2024

**Portfolio Repository:**

- [GitHub – lylecorymiller](#)
- [LinkedIn – lylecorymiller](#)

# Project #1: Sales & Returns Performance Analysis Report

## Project Overview

This project analyzes **sales performance** and **product return trends** using the **Sample - Superstore Sales Dataset**. The goal is to uncover key patterns in returns, assess their **financial impact**, and deliver **strategic recommendations** to improve **profitability**, **customer satisfaction**, and **operational efficiency**.

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## Objectives

- Analyze **annual sales** and **profit growth** from **2018–2021**
  - Measure the **return rate (%)** and **profit loss (\$)** due to product returns
  - Identify **high-return product subcategories** affecting profitability
  - Highlight **geographic regions** with the most return activity
  - Propose **data-driven strategies** to minimize return losses and improve decision-making
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## Tools Used

- **Excel** - Data Cleaning & preparation
  - **Tableau** - Data Visualization & Dashboard Development
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## Dataset Source

This project uses the [Sample - Superstore Sales Dataset](#), a widely used dataset in analytics for simulating real-world **retail transactions**. It includes details on **orders, products, categories, profits, returns, customers, and regions**, making it ideal for **sales operations** and **profitability analysis**.

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## Data Cleaning & Preparation

Performed in **Excel**, the dataset was cleaned and prepared through:

- **Removed irrelevant columns** (e.g., *Customer Name, Customer Email, Postal Code*)
  - **Standardized column names** and ensured proper formatting
  - **Converted data types** for date, numeric, and currency fields
  - Created a **Data Dictionary tab** to define variables and support documentation
  - Creating **calculated fields** in **Tableau** for:
    - **Returns Rate (%)**
    - **Profit Loss (\$)** due to returns
  - **Exported cleaned dataset** as **.xlsx, .csv** for use in **Tableau** visualizations
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## Key Insights & Findings

### 1. Annual Sales & Profit Performance (2018-2021)

- **Sales** rose from **\$483,966 (2018)** to **\$733,215 in (2021)**.
  - Temporary decline in **2019 (↓ 2.78%)**, followed by strong recovery.
- **Profit** grew steadily from **\$49,556** to **\$93,439**.

**Summary of Impact:** Consistent **profit growth** and a strong **sales rebound** post-2019 signal healthy operations.

### 2. Return Rate & Profit Impact

- **Return Rate:** **8.0%** of all orders were returned.
- **Profit Loss:** Returns caused a total loss of **\$23,232**.

**Summary of Impact:** Return volume was moderate, but the **financial impact** was substantial.

### 3. Top Returned Subcategories (by Volume)

- Most returns came from **Phones (24,853)**, **Chairs (23,948)**, and **Tables (18,100)**

**Summary of Impact:** These subcategories may benefit from **product improvements** or **clearer customer communication**.

### 4. Geographic Return Insights

- Most return activity occurred in **California, Texas, and New York**.

**Summary of Impact:** These high-revenue regions also pose **high return risks**, making them ideal for **localized return strategies**.

### 5. Subcategories with Highest Profit Loss

- Highest return-related losses: **Copiers (\$8,611)**, **Paper (\$3,237)**, and **Accessories (\$2,868)**.

**Summary of Impact:** These categories require attention to **pricing, returns policy, or product quality**.

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## Tableau Dashboard Overview

The Tableau dashboard includes clear, **interactive insights** that display:

- **KPIs:** Return Rate (%), Total Return Loss (\$)
- **Year-over-year Sales and Profit** (line chart)
- **Top Returned Subcategories** (bar chart)
- **Profit Loss by Subcategory** (bar chart in \$)
- **Geographic Map** of product returns (interactive)
- **Dynamic Filters** by Year, Subcategory, and State
  - **Dashboard Name:** *Sales & Returns Performance Dashboard (Tableau Public)*
  - **Upload Details:** *Published to Tableau Public and saved as .twbx file*
  - **Dashboard Preview:** *See Figure 1 below*

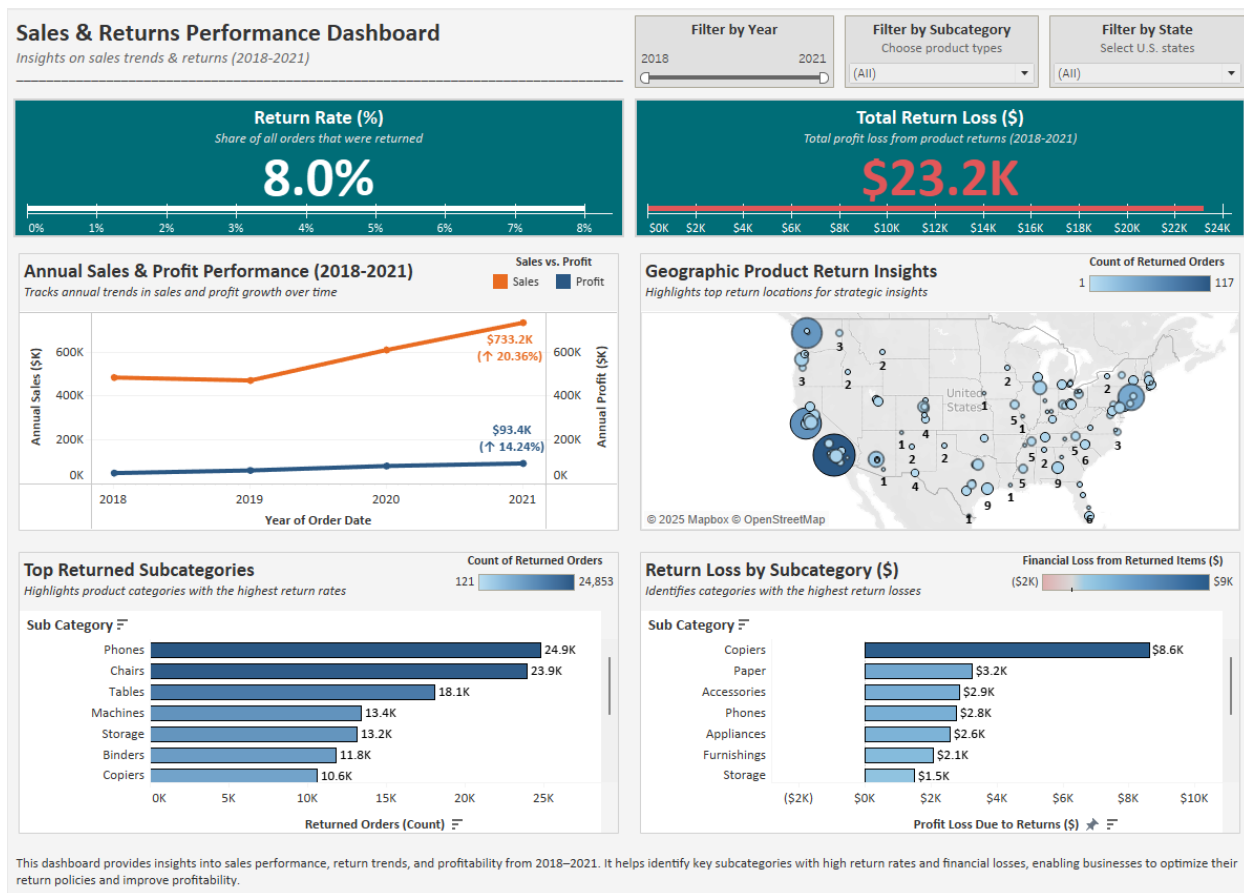


Figure 1: Sales & Returns Performance Dashboard – Tableau Visualization

## Business Impact & Recommendations

This analysis helps reduce **return losses** and improve **sales performance** by:

### 1. Minimize Return Losses in Key Product Lines

- Analyze top returned products to identify **quality issues** or **mismatched expectations**.
- Improve **customer education** and product descriptions to reduce preventable returns.

### 2. Implement Region-Specific Return Strategies

- Develop **localized return policies** for high-return regions (*e.g., California, Texas, New York*).
- Adjust **logistics and supply chain operations** to reduce regional return impact.

### 3. Optimize Profitability Through Policy & Pricing Adjustments

- Reassess **pricing strategies** for high-loss subcategories (Copiers, Chairs, Appliances).
- Introduce **targeted incentives** or stricter **return policies**.
- Leverage **predictive analytics** to improve **inventory planning** and reduce return risk.

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## Calculated Fields & Tableau Analysis

All analysis was completed in **Tableau** using calculated fields to derive **dynamic, filterable metrics** including **Return Rate (%)** and **Profit Loss (\$)**. These were built directly from the **cleaned dataset** to uncover return trends, sales performance, and regional insights across subcategories.

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## File Export & Submission

- **Cleaned dataset** exported as `.xlsx` and `.csv` for use in **Tableau**
- **Tableau Workbook** saved as `.twbx` for **portfolio use**
- **Dashboard image** exported as `.png` and `.pdf` for **professional sharing**
- Finalized documentation (**this report**) saved as `.docx` and `.pdf`
- **GitHub README** included as both `README.md` and `.pdf`
- All **project files** are organized and stored in **GitHub** and **LinkedIn portfolio** for **easy access**

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## Final Thoughts

This project delivers a **data-driven analysis** of **sales trends** and **product return performance** using **Excel** and **Tableau**. It uncovers **profit loss**, highlights **operational risks**, and provides **actionable recommendations** aligned with the goals of roles such as **Business Analyst**, **Operations Analyst**, and **CRM Specialist**.

The interactive dashboard is published on **Tableau Public** and is part of my **professional portfolio** for **hiring managers** to explore: [Sales & Returns Performance Dashboard on Tableau Public](#).