

Introduction	Data Description	Summary of Returns Analysis 1.0	Summary of Returns Analysis 1.1	Summary of Returns Analysis 1.2	Analysis	Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Feat..
--------------	------------------	------------------------------------	------------------------------------	------------------------------------	----------	---------------------------	------------	---------------------------------------	---------------------------------------	----------------------------

Super Store Returns Analysis

This presentation delves into the product return data of the fictional "Super Store." Our focus is on a comprehensive examination of profit and return data to identify and address root causes, accompanied by potential solutions. Key questions guiding our analysis include:

Evaluation Metric:

Determining the most effective evaluation metric: return rate, total cost of returns, or total number of returns.

Root Causes of Returns:

Identifying and analyzing the primary root causes contributing to product returns.

Prevalence of Returns:

Pinpointing when returns are most prevalent.

Likelihood of Return by Item:

Analyzing which items are most likely to be returned.

Geographical Trends in Returns:

Investigating regional variations to understand where in the country items are most likely to be returned from.

Our aim is to provide actionable insights for strategic decision-making in addressing return-related challenges.

Introduction	Data Description	Summary of Returns Analysis 1.0	Summary of Returns Analysis 1.1	Summary of Returns Analysis 1.2	Analysis	Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Feat..
--------------	------------------	------------------------------------	------------------------------------	------------------------------------	----------	---------------------------	------------	---------------------------------------	---------------------------------------	----------------------------

Data Overview: Super Store Sales and Returns (2018-2021)

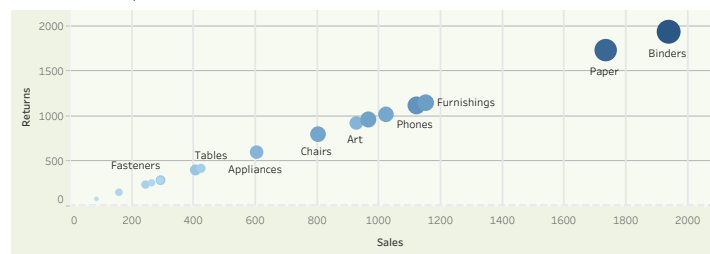
This analysis encompasses Order and Return Data from the "Super Store" spanning the years 2018 to 2021.

To facilitate a comprehensive review, I've merged the **Orders dataset** with the **Returns dataset**, utilizing a left join approach.

Additionally, a calculated field has been introduced to ascertain both the **return rate** and **total number of returns**.

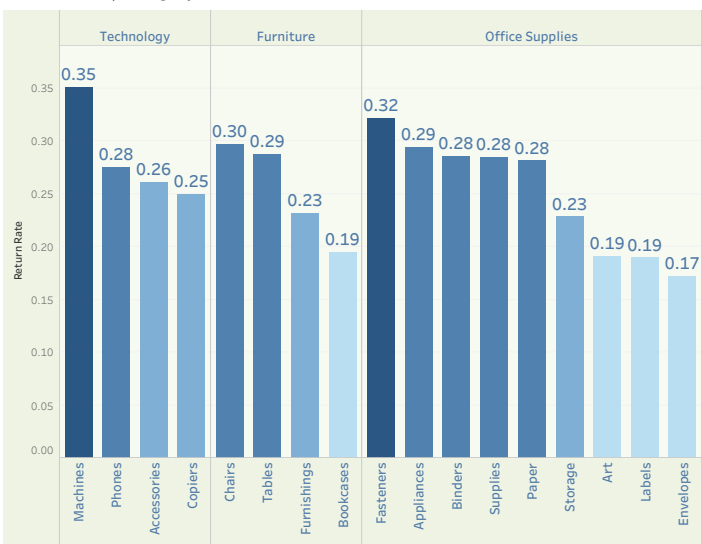
This integration aims to provide a unified perspective on sales and returns for strategic insights.

Total Returns | Total Sales

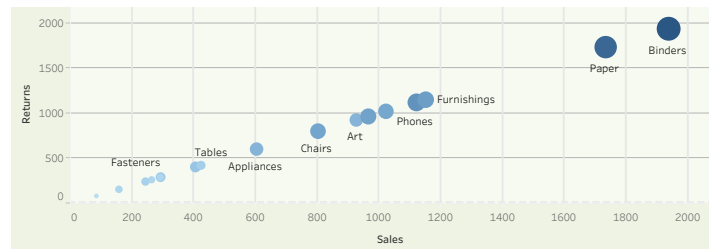


Return Rate measurements help us understand the proportion of returned products compared to total units sold, with a focus on customer satisfaction and product quality.

Return Rate | Category



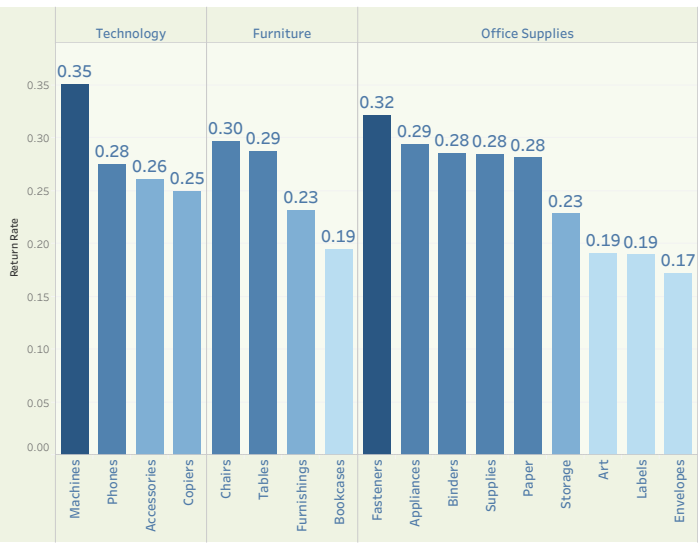
Total Returns | Total Sales



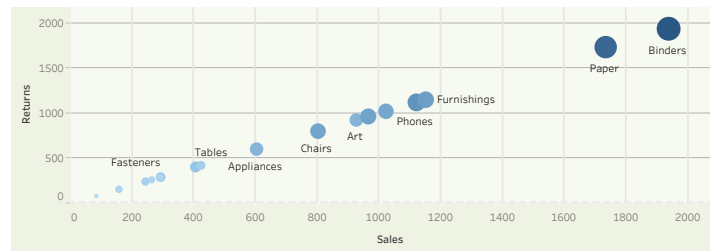
Total Cost of Returns is useful for examining return policies and logistics.

Total Number of Returns offers insights into potential issues with logistics and inventory management.

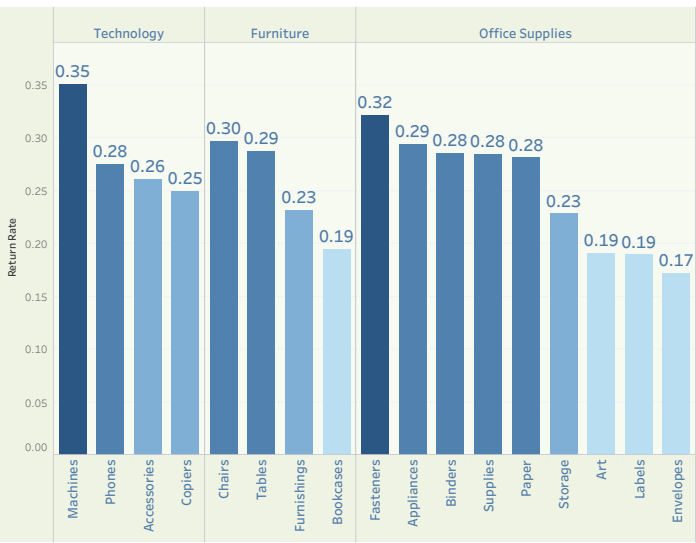
Return Rate | Category



Total Returns | Total Sales



Return Rate | Category



We have chosen to calculate by Return Rate for the following visualizations

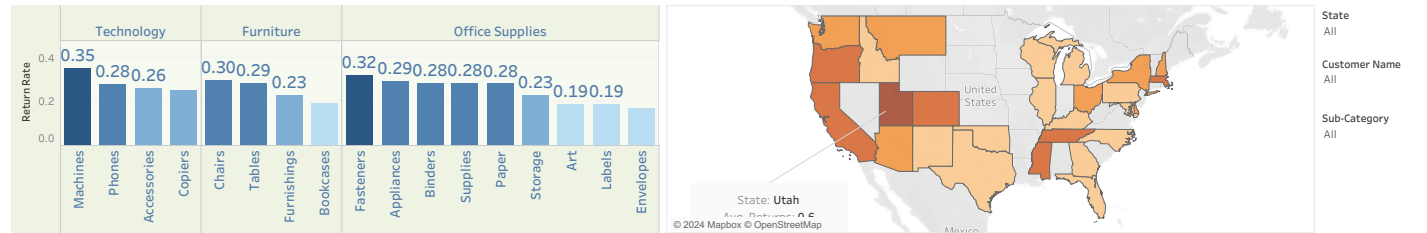
Introduction	Data Description	Summary of Returns Analysis 1.0	Summary of Returns Analysis 1.1	Summary of Returns Analysis 1.2	Analysis	Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Features - Sub Categ..
--------------	------------------	------------------------------------	------------------------------------	------------------------------------	----------	---------------------------	------------	---------------------------------------	---------------------------------------	--

Analysis

Four Indicators of Potential Returns:

- Category:** Notably, Machines, Fasteners, & Chairs emerge as the most frequently returned items, signifying potential areas for closer scrutiny in product quality or customer expectations.
- State:** Our analysis pinpoints Utah, California, & Oregon as states with a higher likelihood of submitting returns, suggesting a regional pattern that warrants targeted interventions or localized customer engagement strategies.
- Customer:** Among our clientele, Hilary, Roland, & Sandra stand out as individuals with a higher propensity to return their purchases. Understanding their preferences and experiences could be instrumental in tailoring our offerings and services.
- Month:** Aug, Sep, Dec show peaks in returns, prompting a closer examination of external factors influencing purchasing decisions during these months.

Data Description	Summary of Returns Analysis 1.0	Summary of Returns Analysis 1.1	Summary of Returns Analysis 1.2	Analysis	Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Features - Sub Catego...	Return Dashboard Features - State
------------------	------------------------------------	------------------------------------	------------------------------------	----------	---------------------------	------------	---------------------------------------	---------------------------------------	--	--------------------------------------



Summary of Returns Analysis 1...	Summary of Returns Analysis 1.1	Summary of Returns Analysis 1.2	Analysis	Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Features - Sub Catego...	Return Dashboard Features - State	Return Dashboard Features - Month of O...
----------------------------------	---------------------------------	---------------------------------	----------	------------------------	------------	------------------------------------	------------------------------------	---	-----------------------------------	---

Conclusion

Returns by Month:

Recommendation : Considering the higher return rates during the end of the 3rd through the 4th quarter, strengthening customer support during this period could enhance satisfaction and mitigate returns.

Location and Logistics:

Action Item: A review of shipping procedures and carrier contracts for regions exhibiting high return rates could unveil opportunities to optimize logistics and enhance the overall customer experience.

Low Sales Quarters:

Suggestion: Implementing promotional programs, such as loyalty points for returning customers, during low-earning quarters could incentivize repeat purchases and bolster sales performance.

Scatter plot showing Returns (Y-axis, 0K to 2K) versus Sales (X-axis, 0 to 2000). Data points are labeled: Supplies, Appliances, Chairs, Art, Furnishings, Phones, Paper, Binders.

Horizontal bar chart showing Avg. Returns (Y-axis, 0.0 to 0.4) by Month of Order Date (X-axis, Dec to Jan). Data values are displayed above each bar.

Month of Order Date	Avg. Returns
Dec	0.23
Jan	0.26
Feb	0.20
Mar	0.21
Apr	0.19
May	0.19
Jun	0.18
Jul	0.39
Aug	0.34
Sep	0.29
Oct	0.17
Nov	0.33
Dec	0.33

Dual chart showing Avg. Returns (left Y-axis, 0.0 to 0.3) and Total Sales (right Y-axis, 0 to 600) by category (X-axis). Avg. Returns are shown as blue bars, and Total Sales are shown as a yellow line.

Category	Avg. Returns	Total Sales
Accessories	0.28	100
Appliances	0.30	120
Art	0.19	50
Binders	0.29	100
Chairs	0.30	550
Furnishings	0.24	100
Labels	0.19	50
Paper	0.29	100
Phones	0.28	400
Storage	0.23	150
Tables	0.30	600

Heatmap showing Return Rate (color scale, 0.0 to 1.0) by State. The state of Utah is highlighted with a tooltip showing an Avg. Return Rate of 0.6.

State: Utah
Avg. Return Rate: 0.6

Horizontal bar chart showing Return Rate (Y-axis, 0.0 to 0.6) by category (X-axis). Data values are displayed above each bar.

Category	Return Rate
Mac..	0.35
Pho..	0.28
Acc..	0.26
Cop..	0.25
Chai..	0.30
Tabl..	0.29
Fur..	0.23
Boo..	0.19
Fas..	0.32
App..	0.29
Bin..	0.28
Sup..	0.28
Pap..	0.28
Stor..	0.23
Art	0.19
Lab..	0.19
Env..	0.17

Sub-Category: All

State: All

Month of Order Date: All

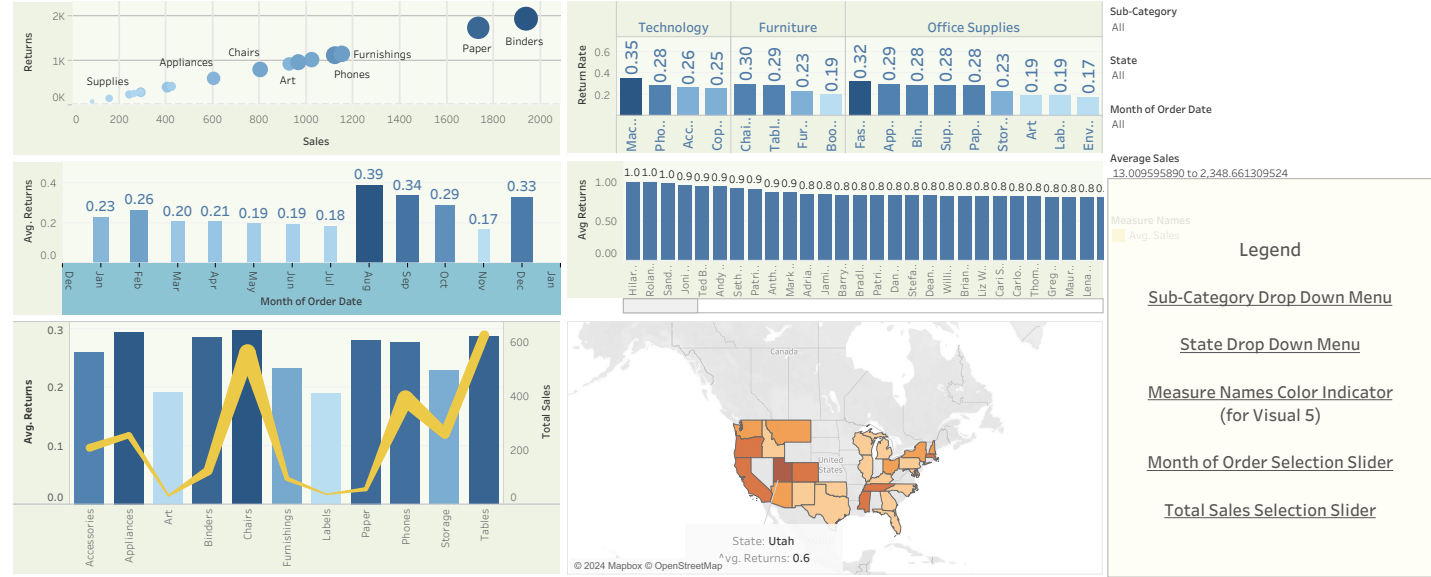
Average Sales: 13,009,595,890 to 2,348,661,309,524

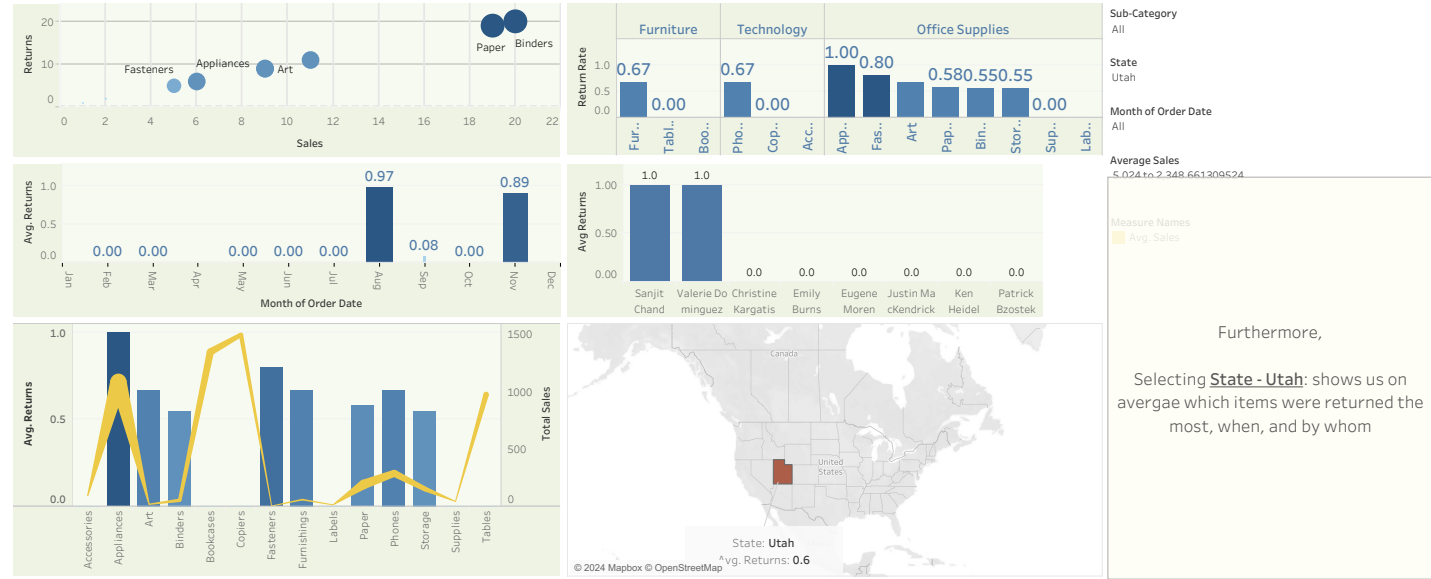
Measure Names: Avg. Sales

Dashboard Overview

Top row moving down:

- [1. Total Returns | Total Sales](#)
- [2. Return Rate | Category](#)
- [3. Return Rate | Month of Order](#)
- [4. Return Rate | Customer](#)
- [5. Return Rate and Total Sales | Category](#)
- [6. Return Rate | State](#)

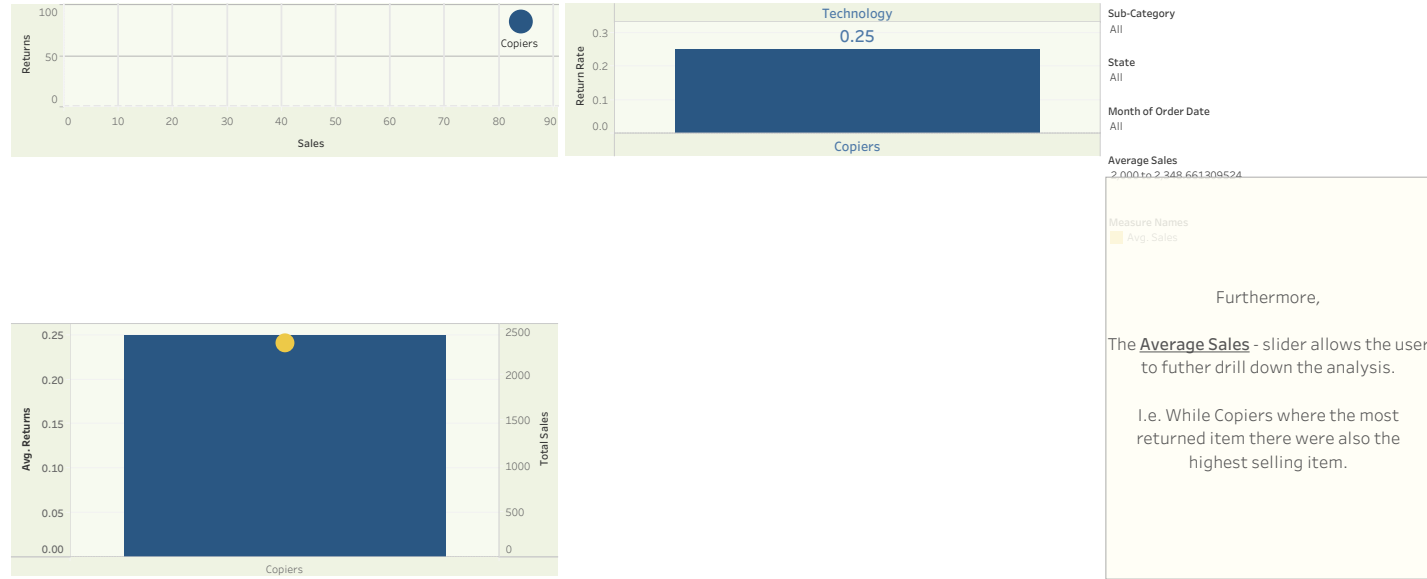


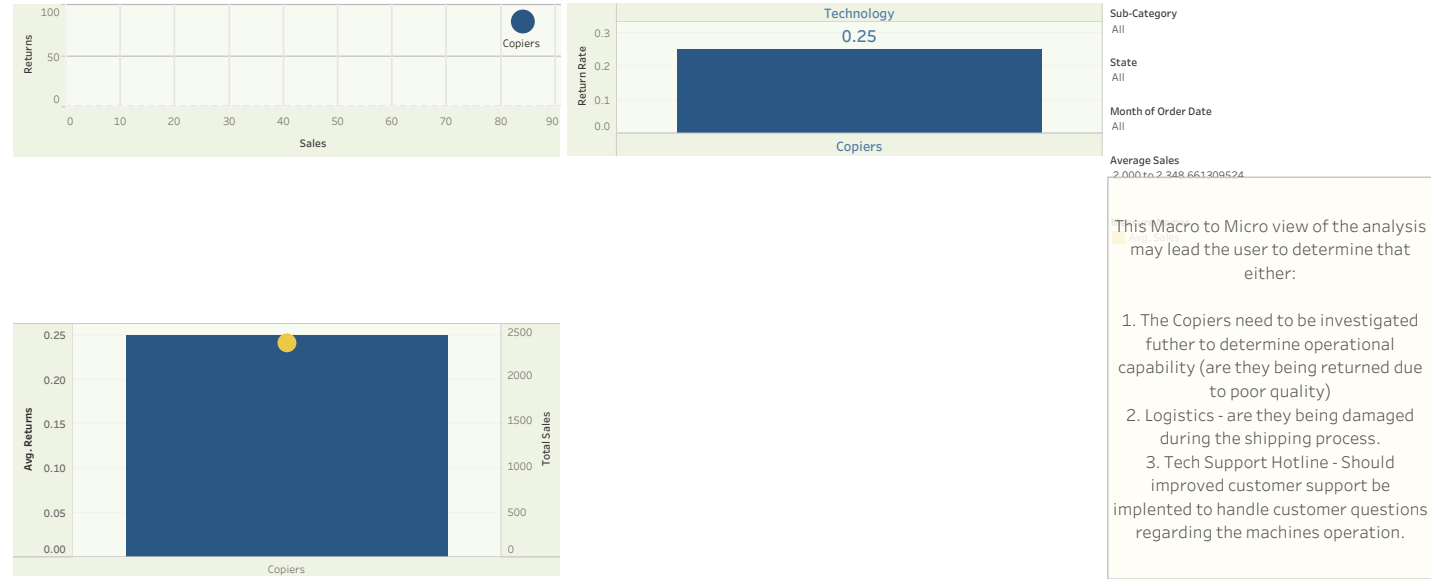


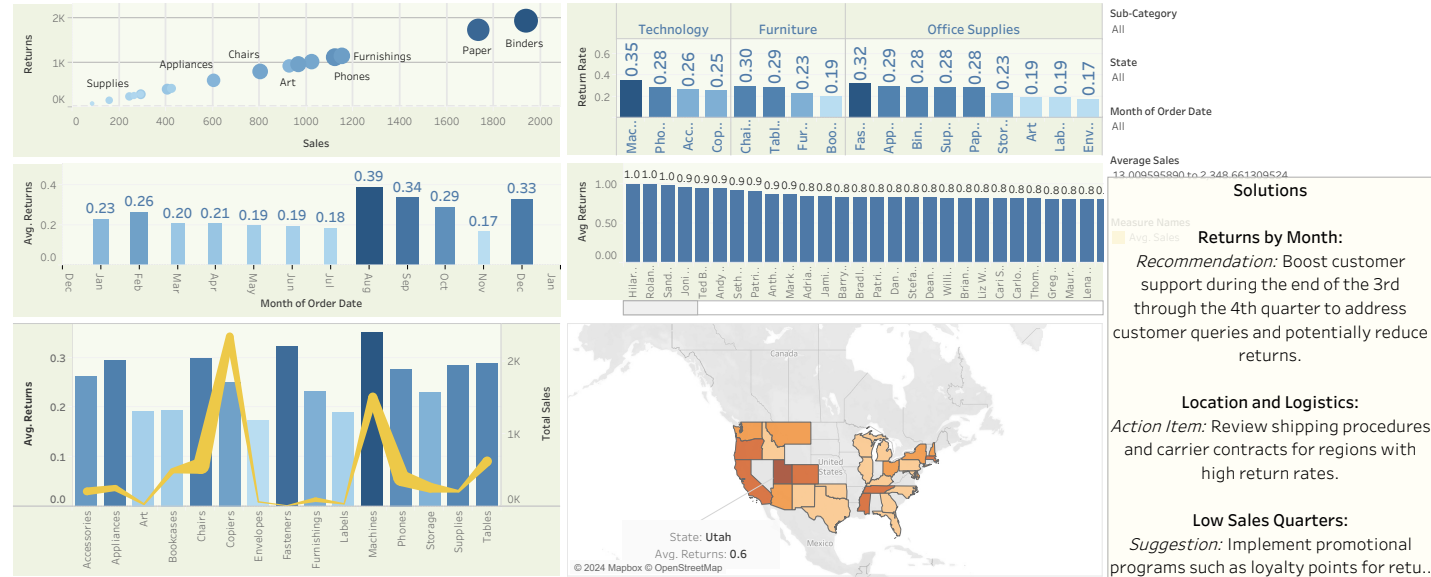
The dashboard displays five visualizations related to product returns and sales data.

- Top Left: Returns vs Sales** (Bubble Chart): Shows the relationship between Sales (X-axis, 0 to 180) and Returns (Y-axis, 0 to 200). Data points are labeled: Supplies, Storage, Phones, Paper, and Binders.
- Top Right: Avg. Returns by Month** (Bar Chart): Shows the average return rate by month. The Y-axis is Avg. Returns (0.0 to 0.4). The X-axis lists months from Jan to Dec. The value for Dec is 0.39.
- Middle Left: Avg. Returns by Measure** (Bar Chart): Shows the average return rate for various measures. The Y-axis is Avg. Returns (0.00 to 1.00). The X-axis lists measures from Bart to Craig. The value for Bart is 1.00.
- Middle Right: Avg. Returns and Total Sales by Product** (Dual-Axis Chart): Shows the average return rate (blue bars) and total sales (yellow line) for various products. The X-axis lists products from Accessories to Tables. The Y-axis for Avg. Returns ranges from 0.0 to 0.6, and for Total Sales from 0 to 1000.
- Bottom: Map of the United States**: A map showing the geographical distribution of data points across the United States.

Additionally, the **Month of Order Date** drop-down menu allows you to select a month and see the specific activity across all visualizations for the selected month. i.e. on Average in August, Copiers where returned the most frequently in Arizona.







Root Causes of Returns	Conclusion	Return Dashboard Overview - Graphs	Return Dashboard Overview - Legend	Return Dashboard Features - Sub Catego...	Return Dashboard Features - State	Return Dashboard Features - Month of O...	Return Dashboard Features - Average Sa...	Return Dashboard Wrapping up - Conclu...	Return Dashboard Solutions	Conclusion
------------------------	------------	------------------------------------	------------------------------------	---	-----------------------------------	---	---	--	----------------------------	------------

Synopsis and Conclusion

Synopsis: In our in-depth analysis of the “Super Store” sales and return data spanning 2018-2021, we’ve unearthed valuable insights to guide strategic decision-making. Notably, Machines, Fasteners, & Chairs emerge as categories prone to returns, while Utah, California, & Oregon exhibit higher return rates. Individuals like Hilary, Roland, & Sandra, and specific months like Aug, Sep, Dec, present opportunities for targeted interventions. Our focus on return rate as a metric has allowed for a nuanced understanding of potential issues and trends.

Conclusion: To enhance customer satisfaction and mitigate returns, we propose reinforcing customer support during the latter half of the year, strategically reviewing shipping procedures in regions with high return rates, and implementing promotional programs during low-sales quarters. This comprehensive approach aims to not only address current challenges but also position the “Super Store” for improved operational efficiency and sustained customer loyalty. By leveraging these insights, we are poised to elevate our customer experience and drive positive outcomes for the business.