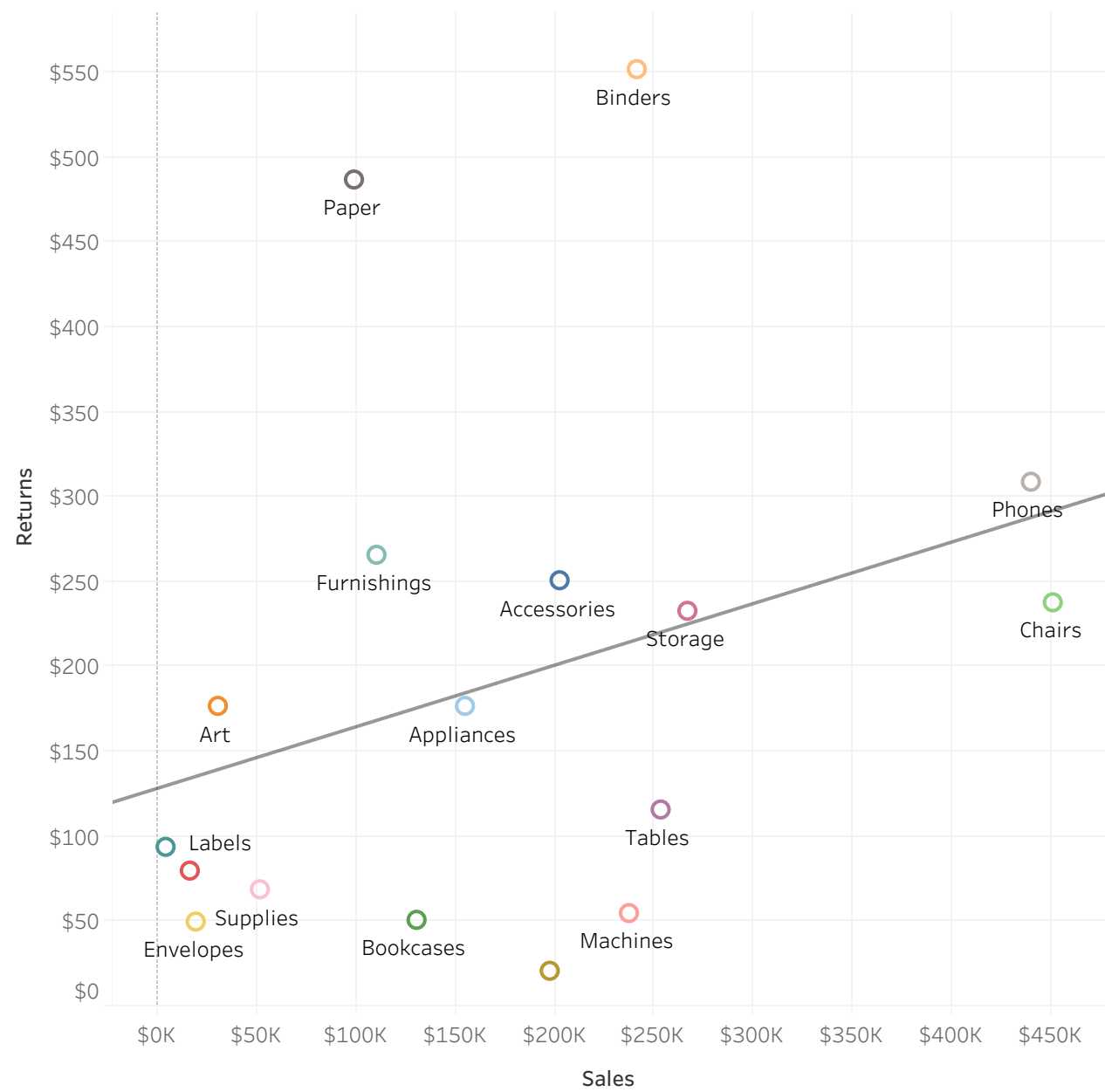
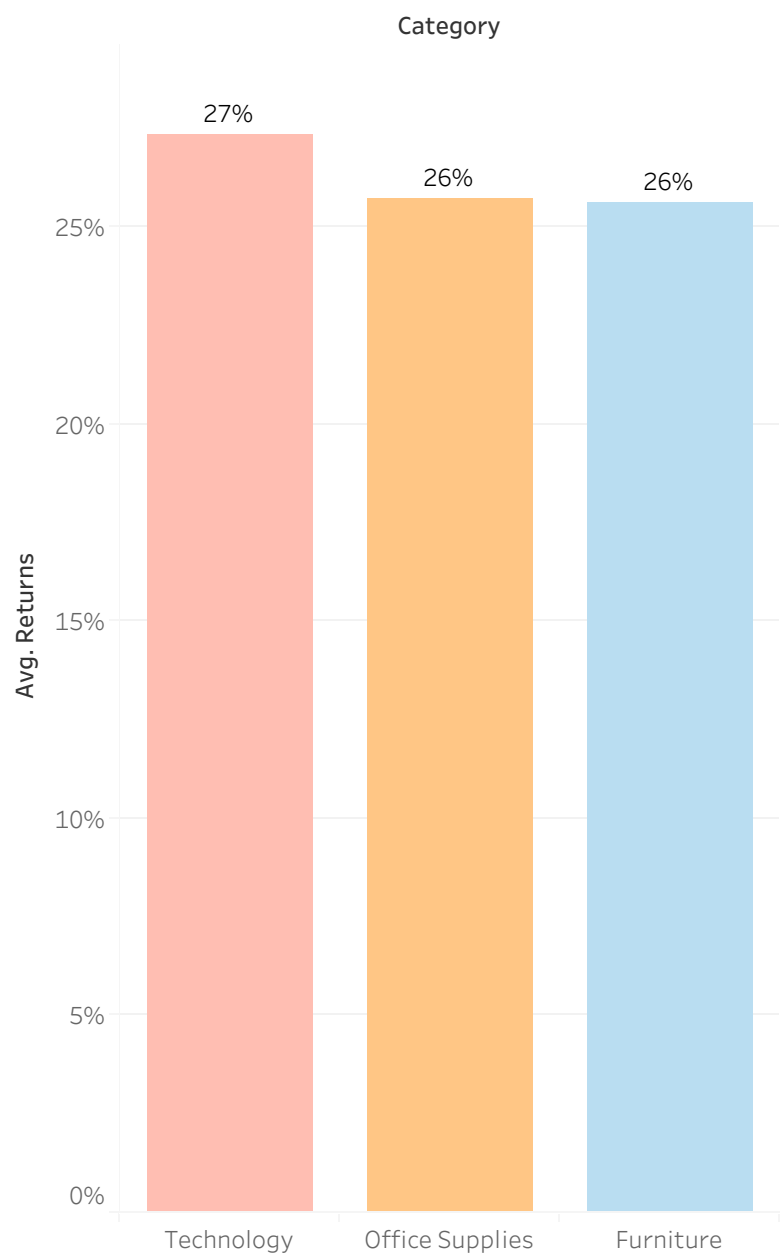


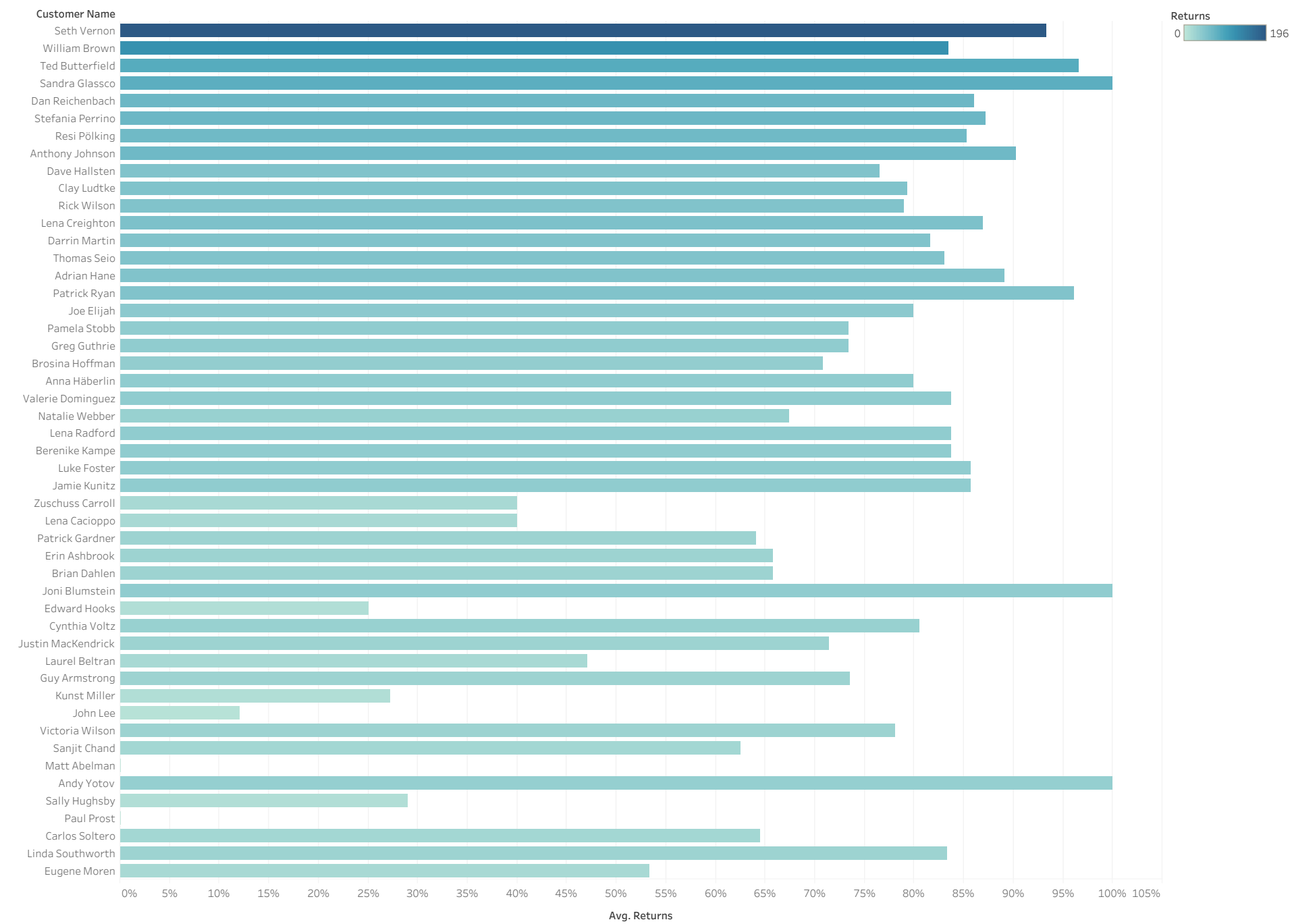
Correlation Sales vs Returns



Return Rate by Product Category



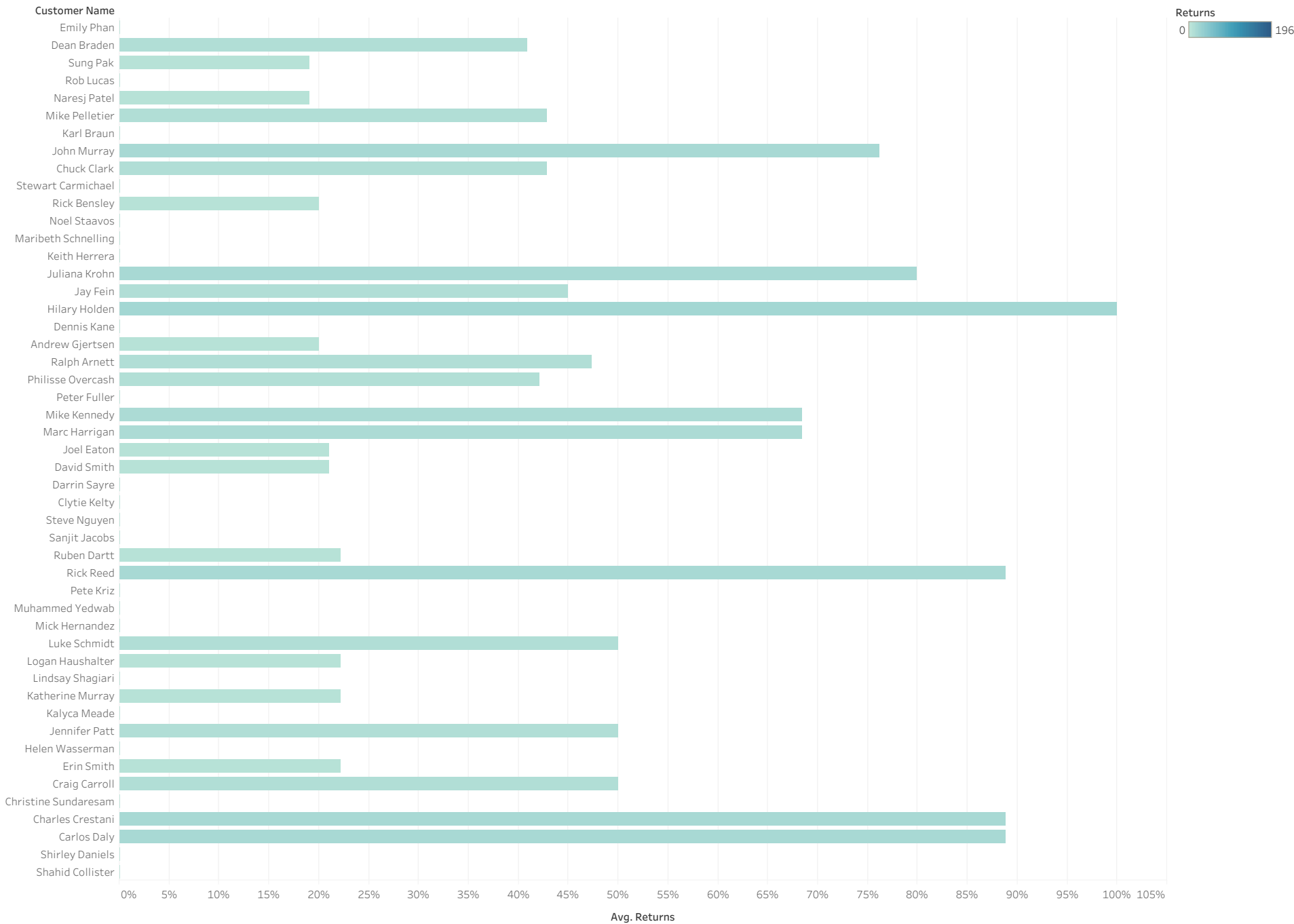
Return Rate by Customer



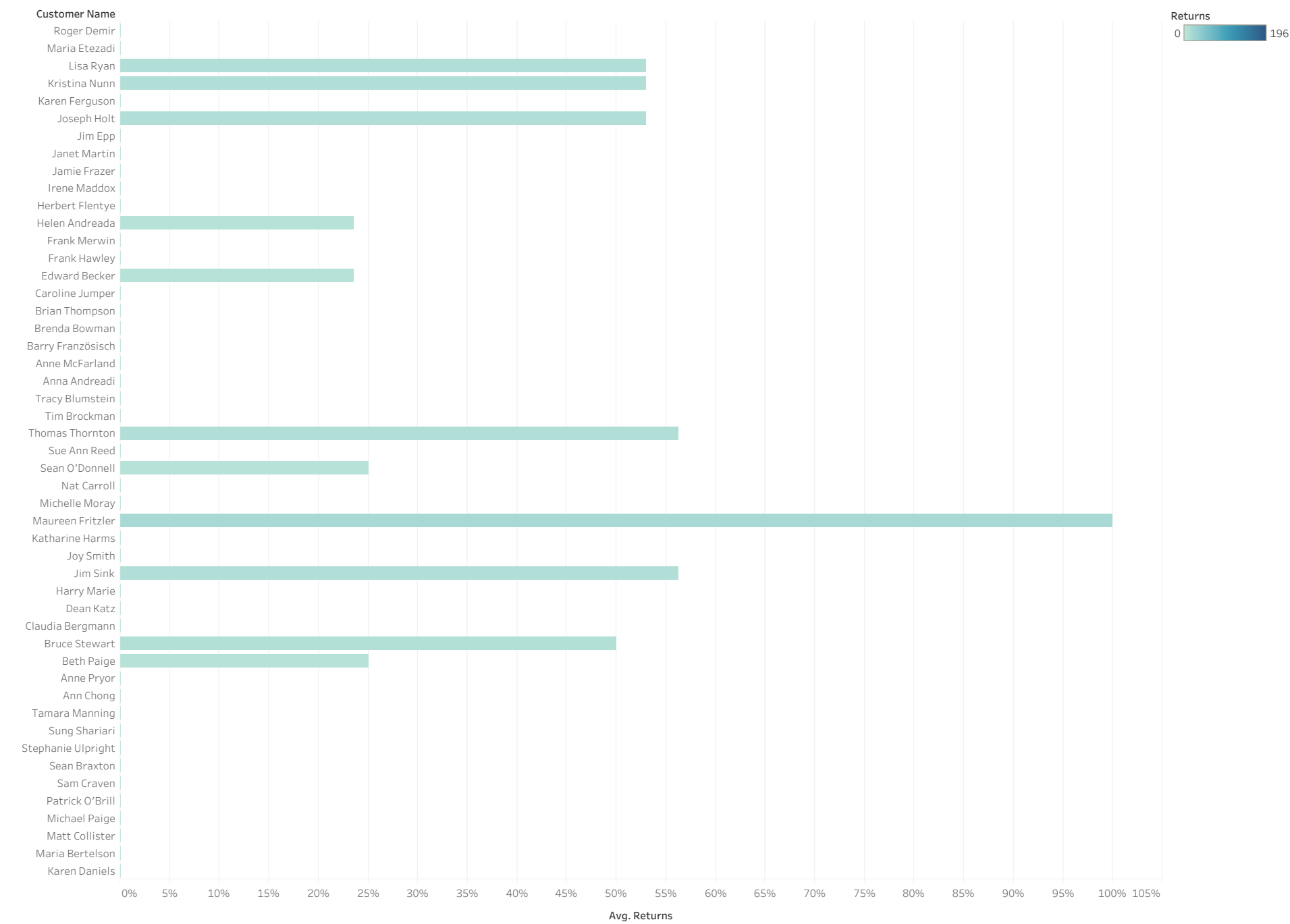
Return Rate by Customer



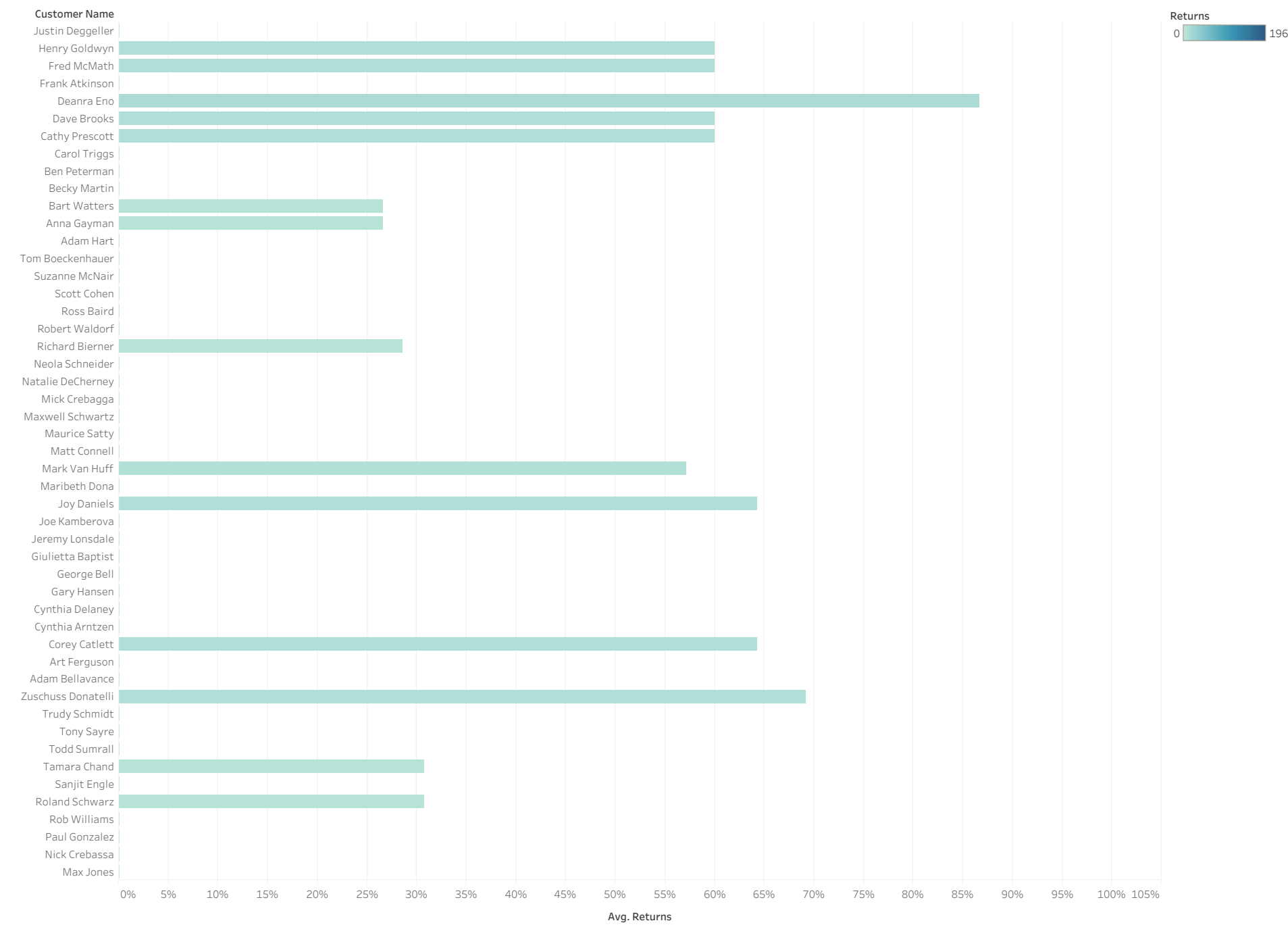
Return Rate by Customer



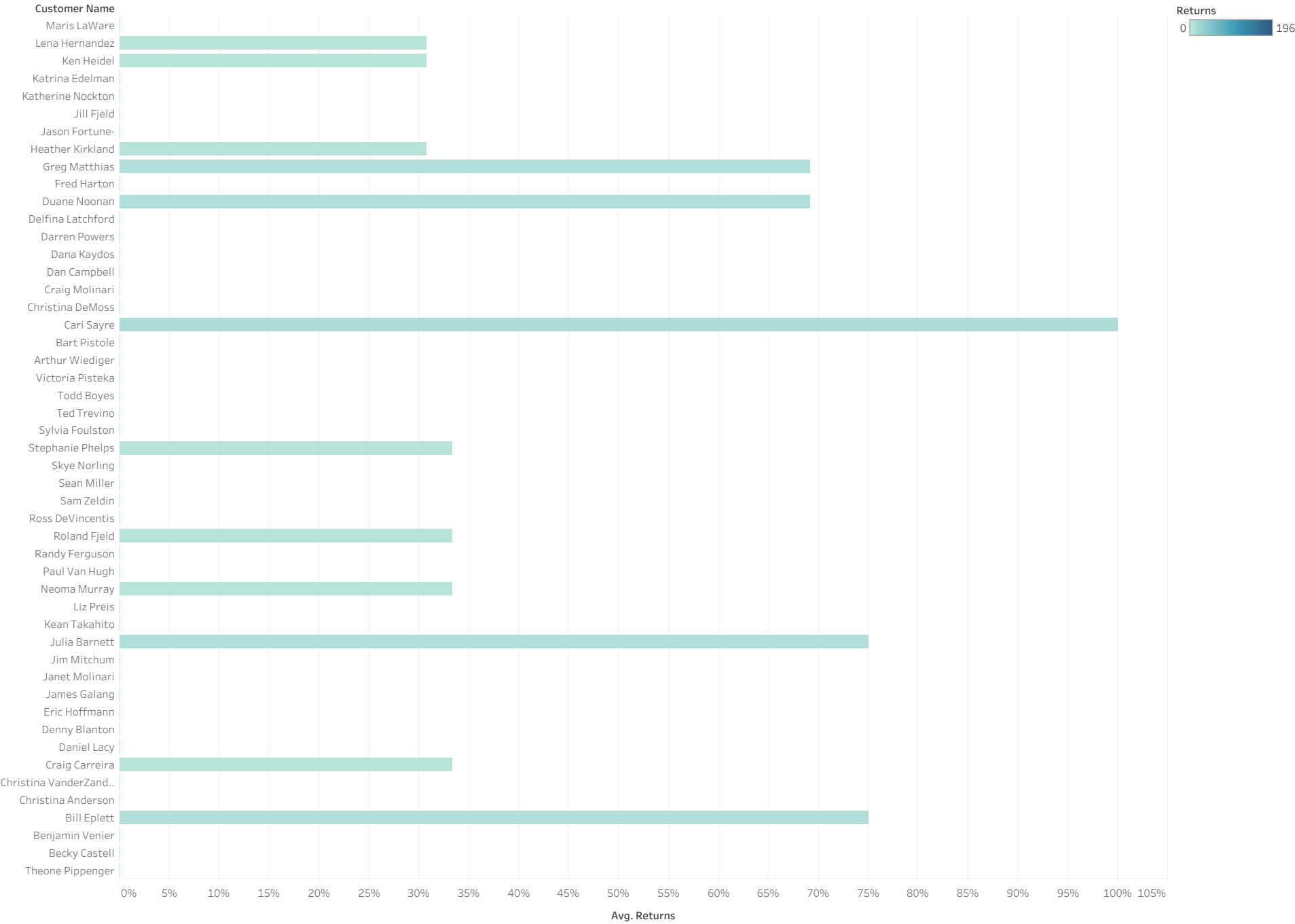
Return Rate by Customer



Return Rate by Customer

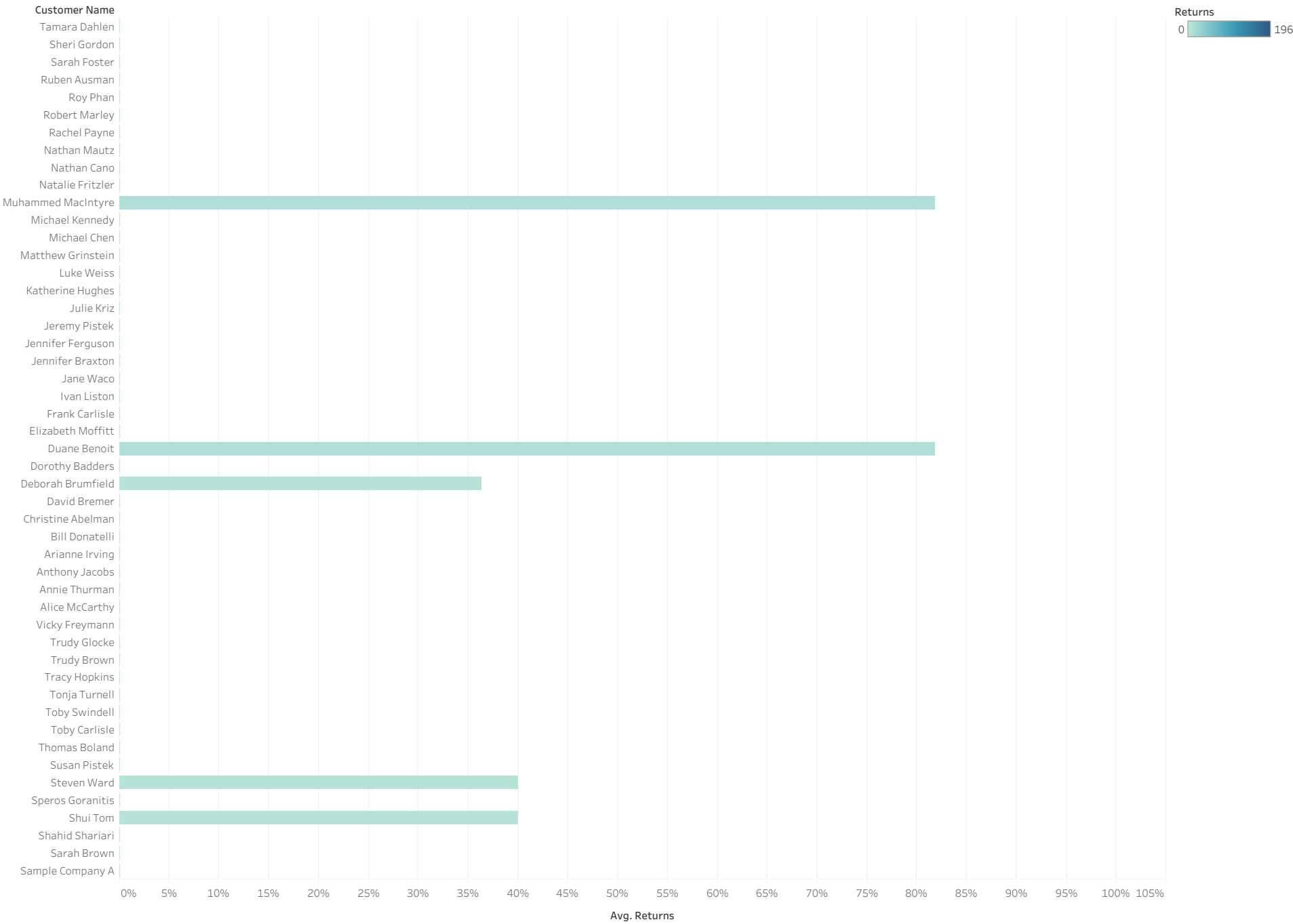


Return Rate by Customer

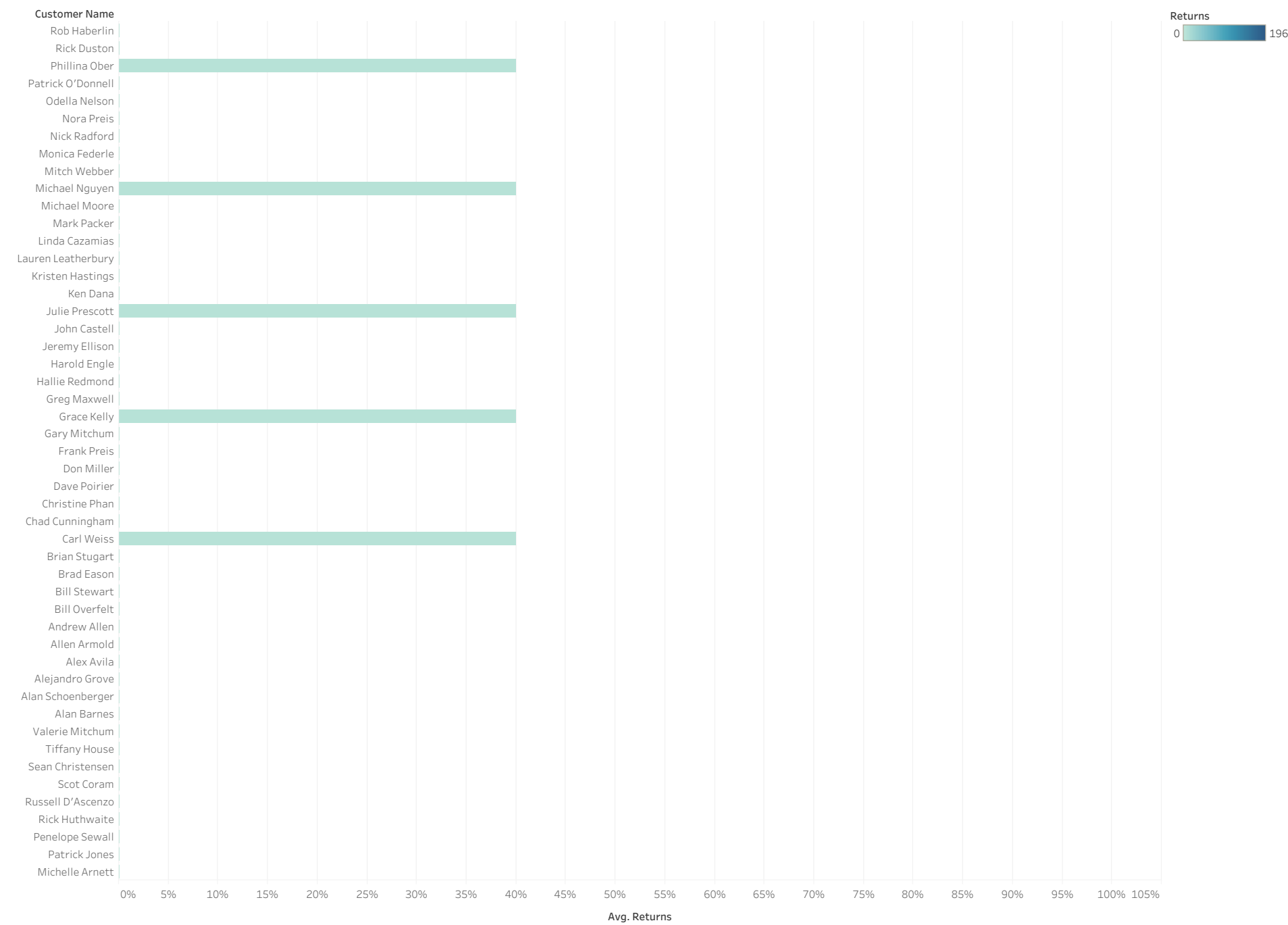




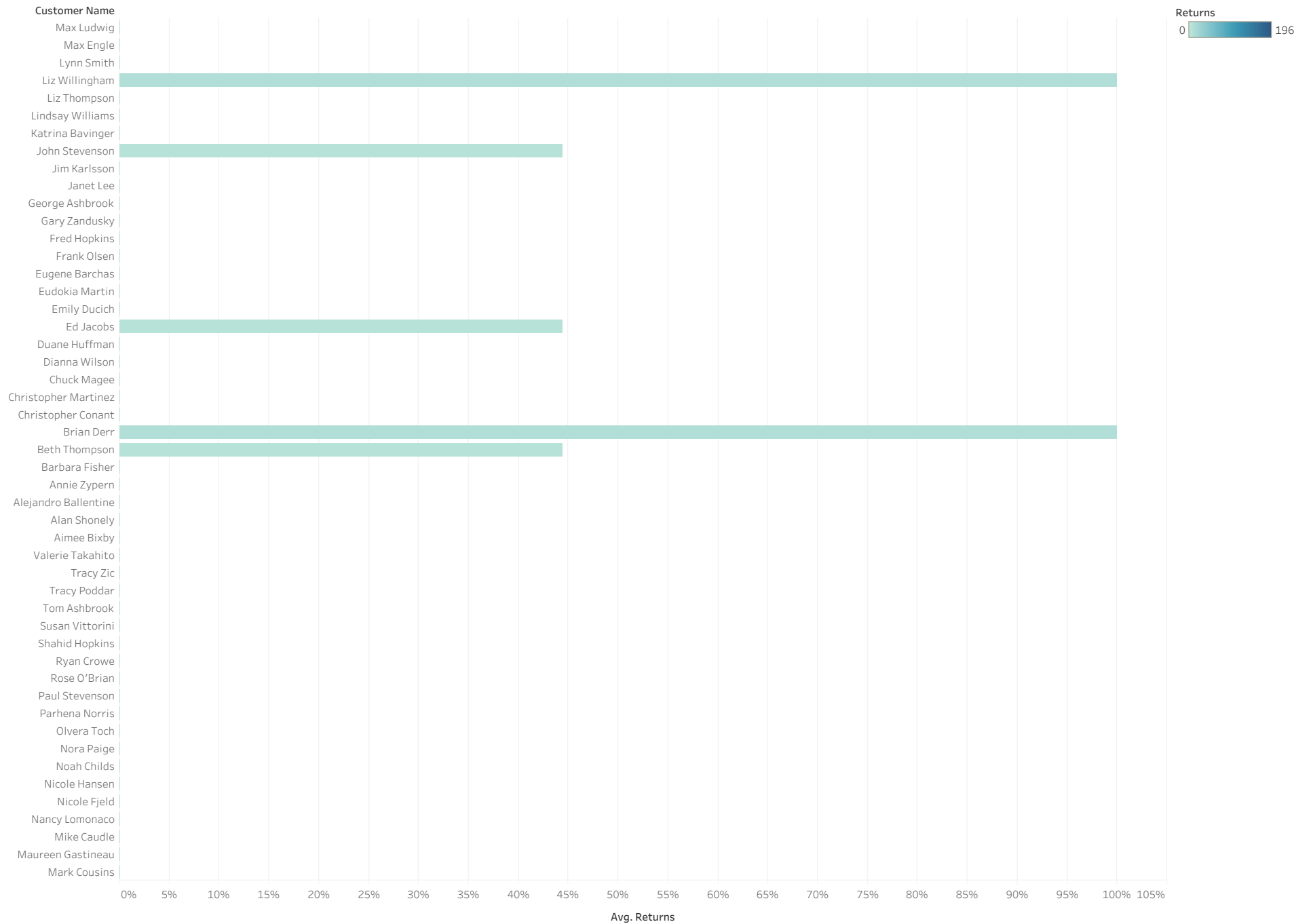
Return Rate by Customer



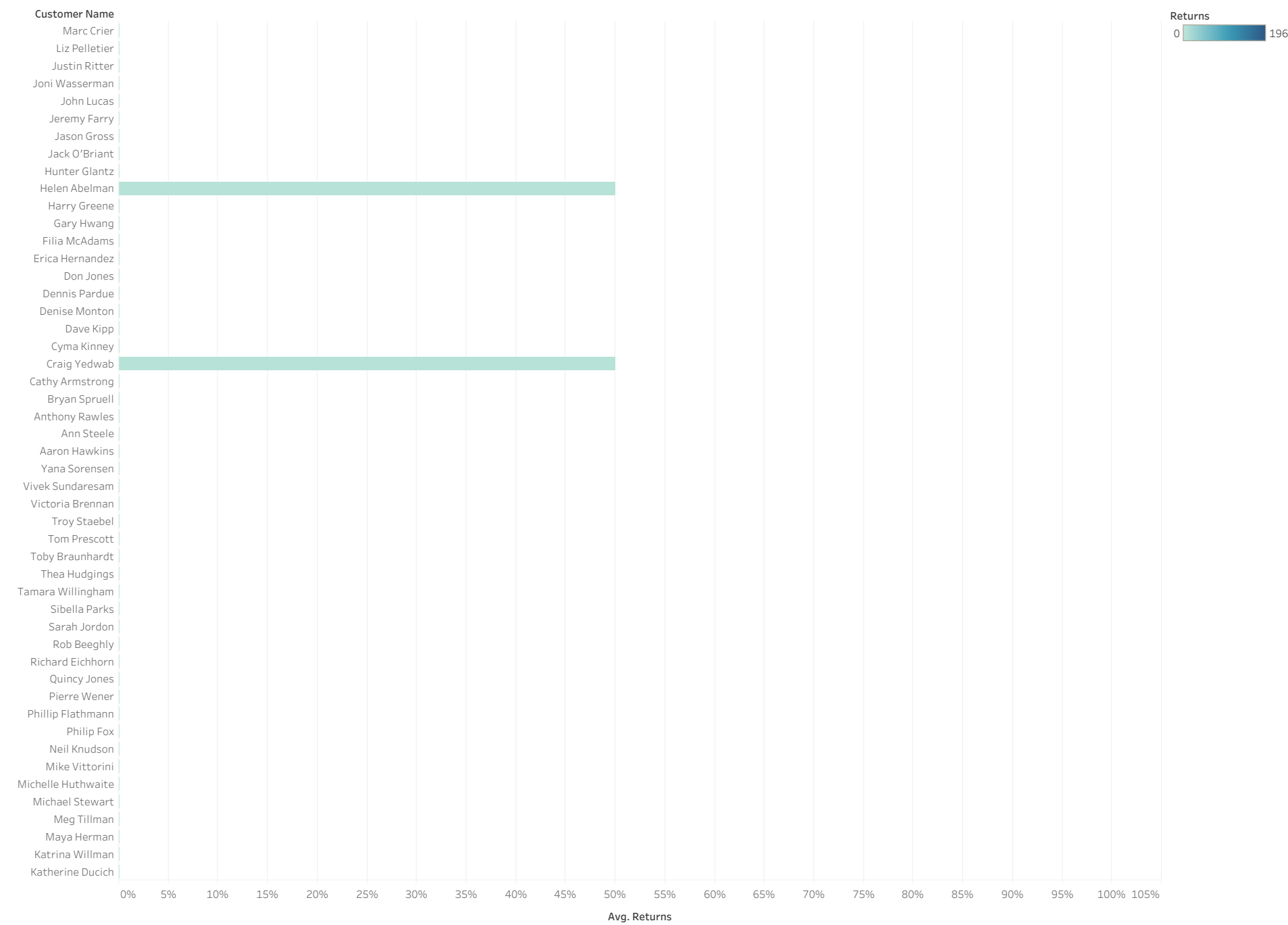
Return Rate by Customer



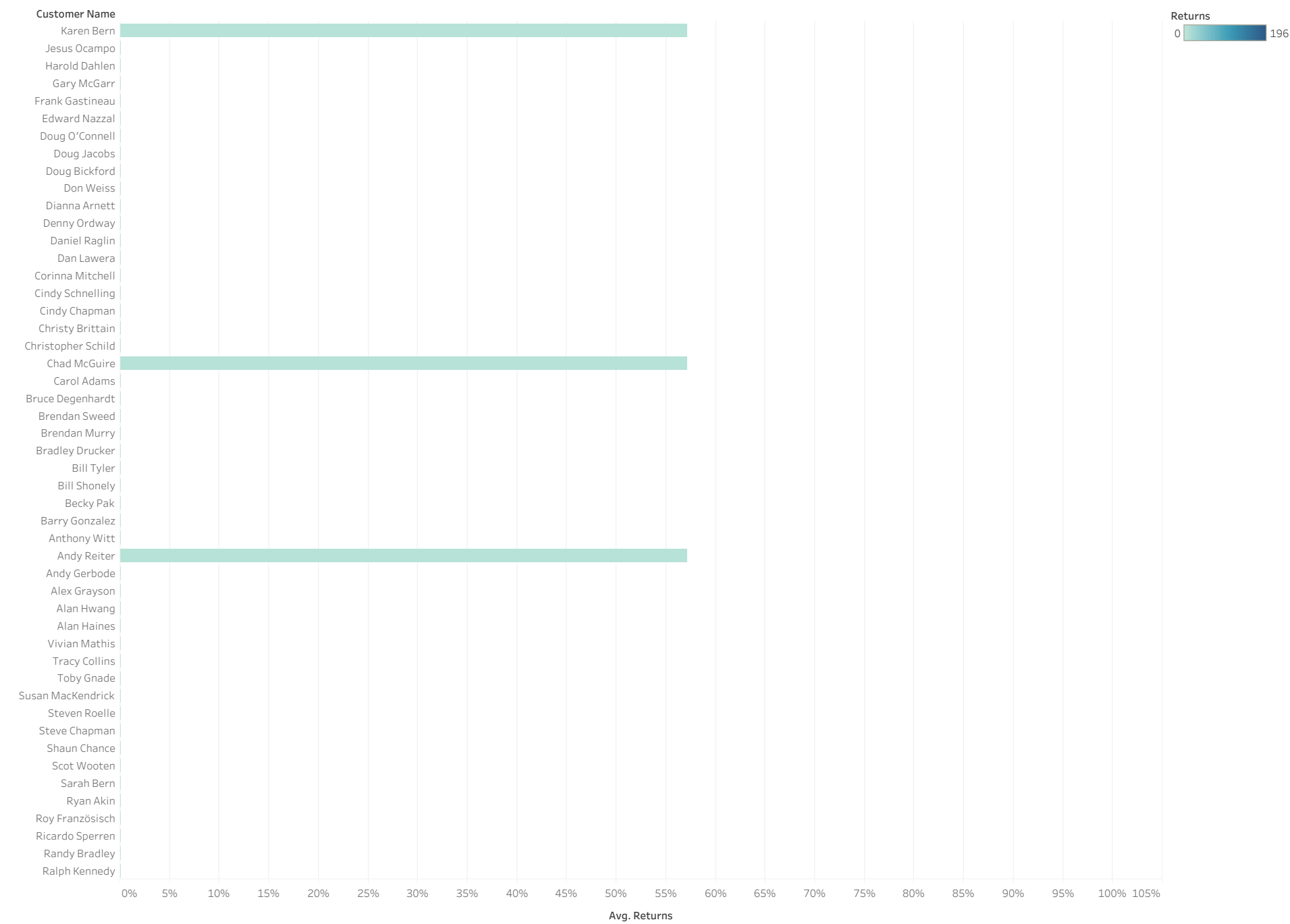
Return Rate by Customer



Return Rate by Customer



Return Rate by Customer



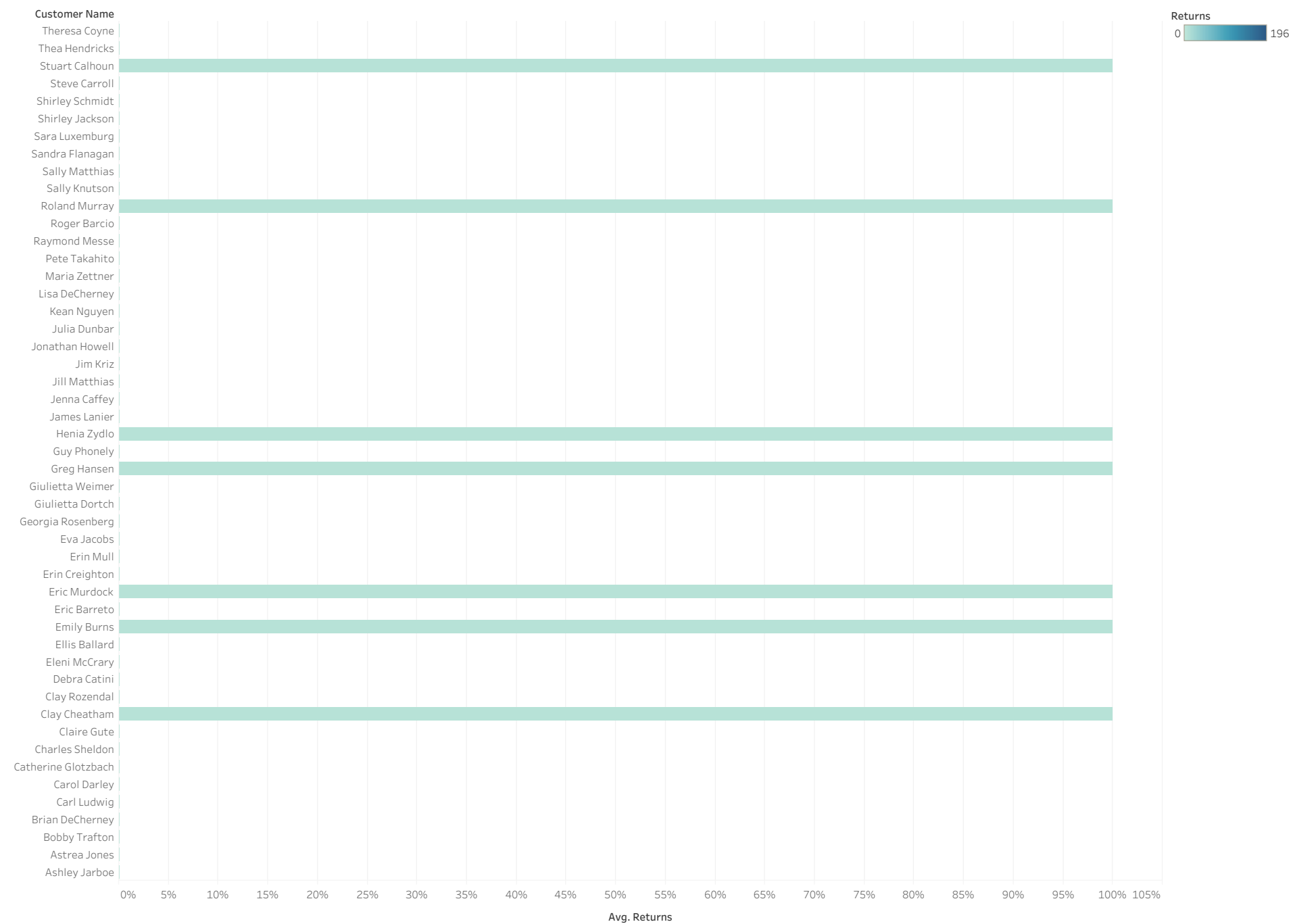
Return Rate by Customer



Return Rate by Customer

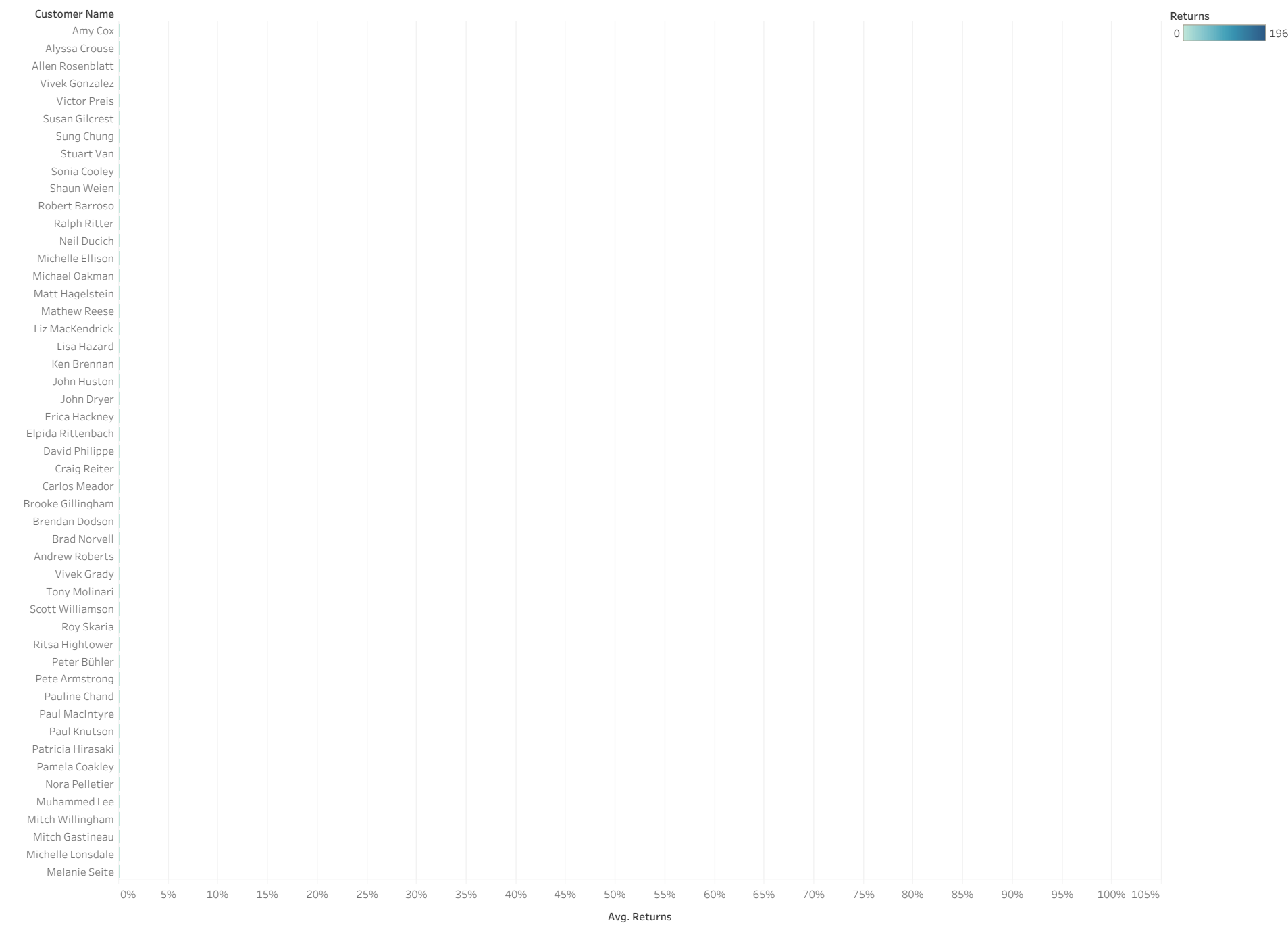


Return Rate by Customer

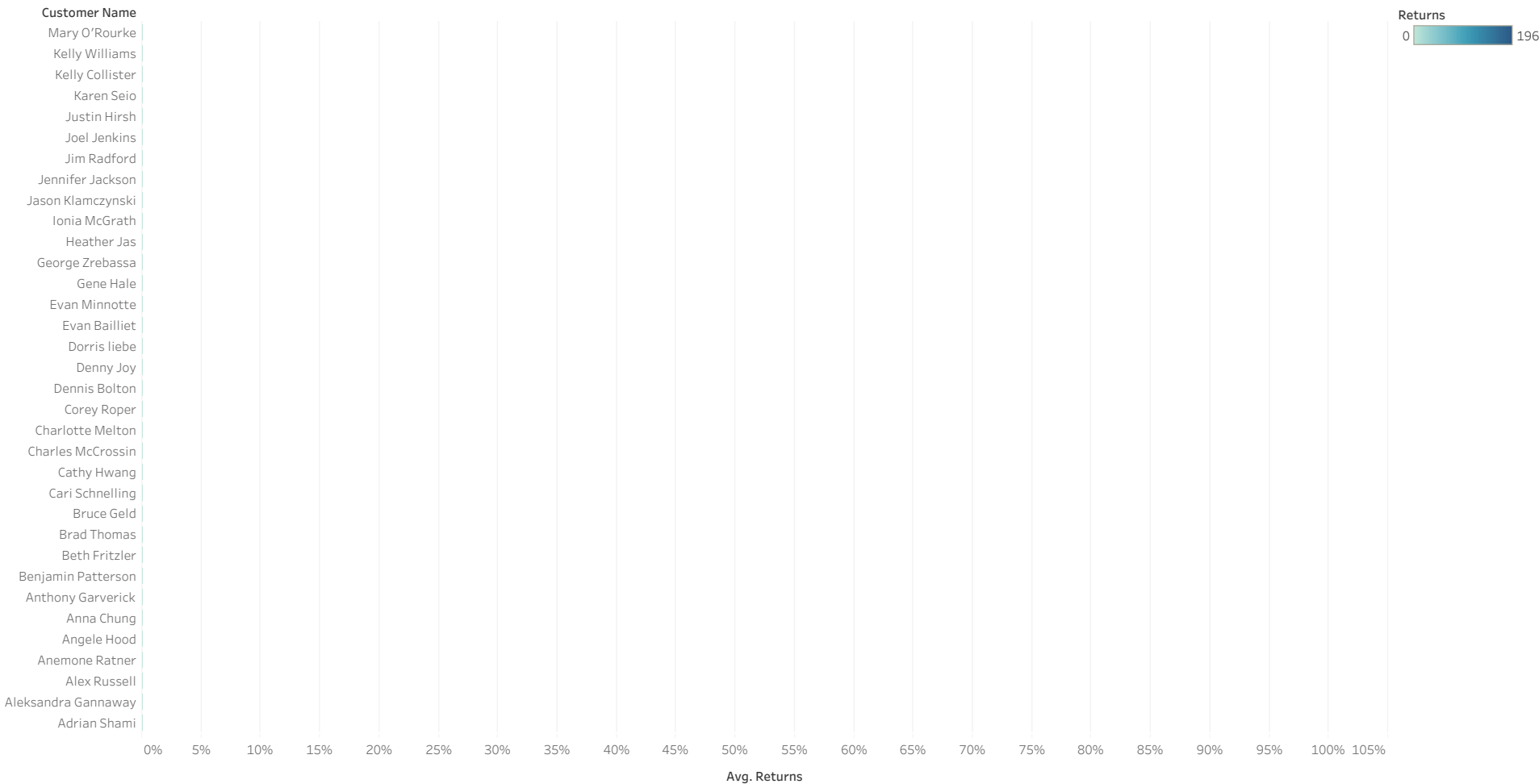




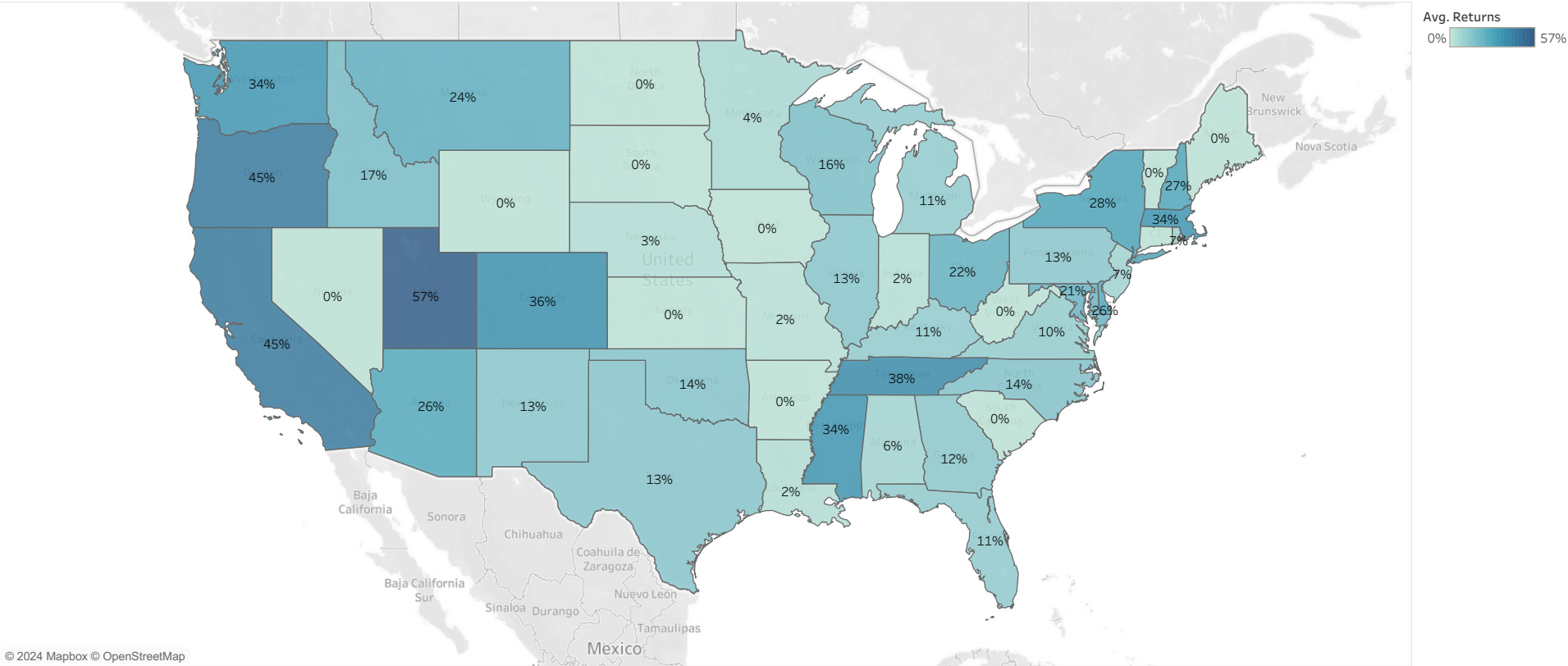
Return Rate by Customer



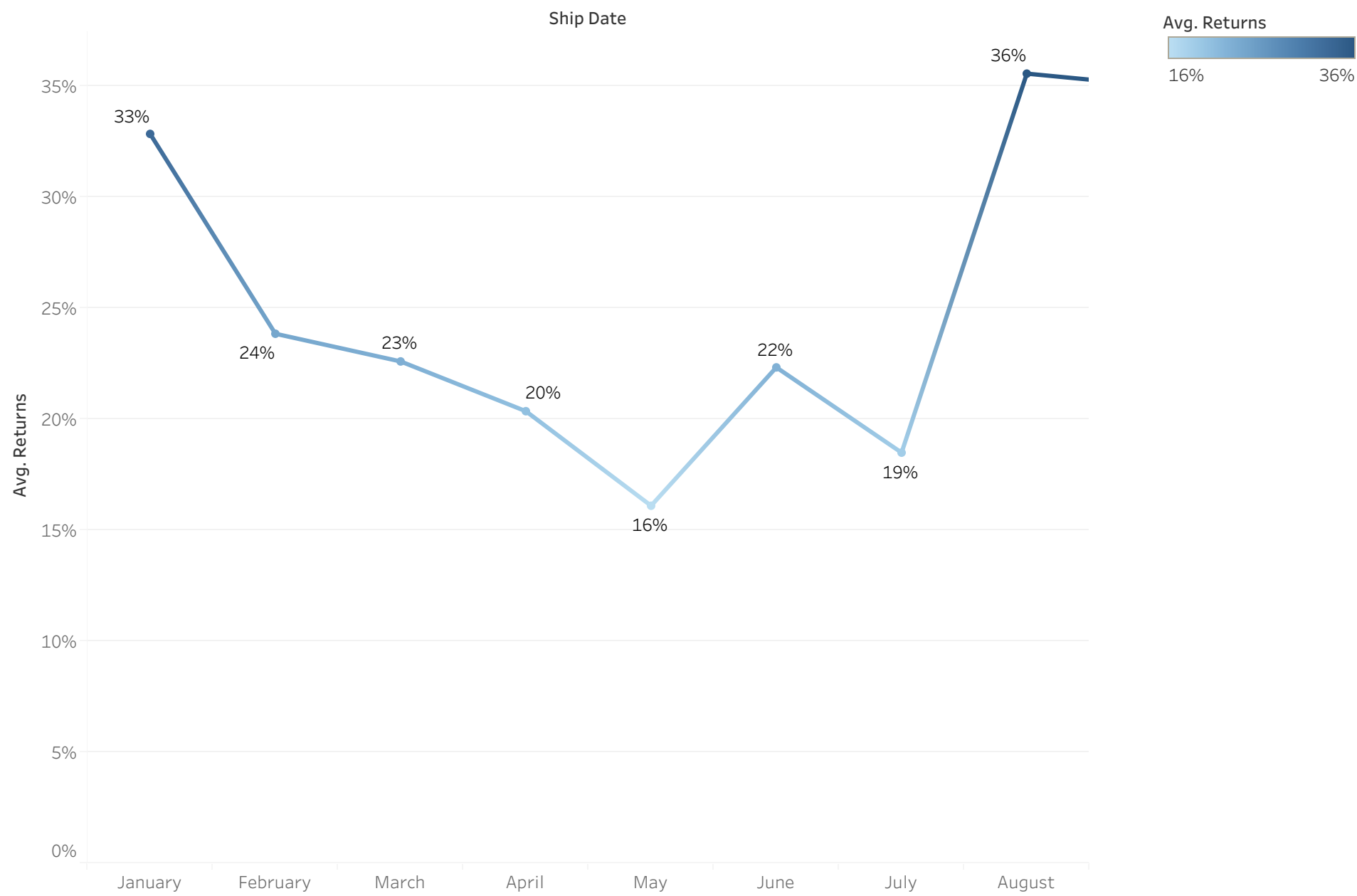
Return Rate by Customer



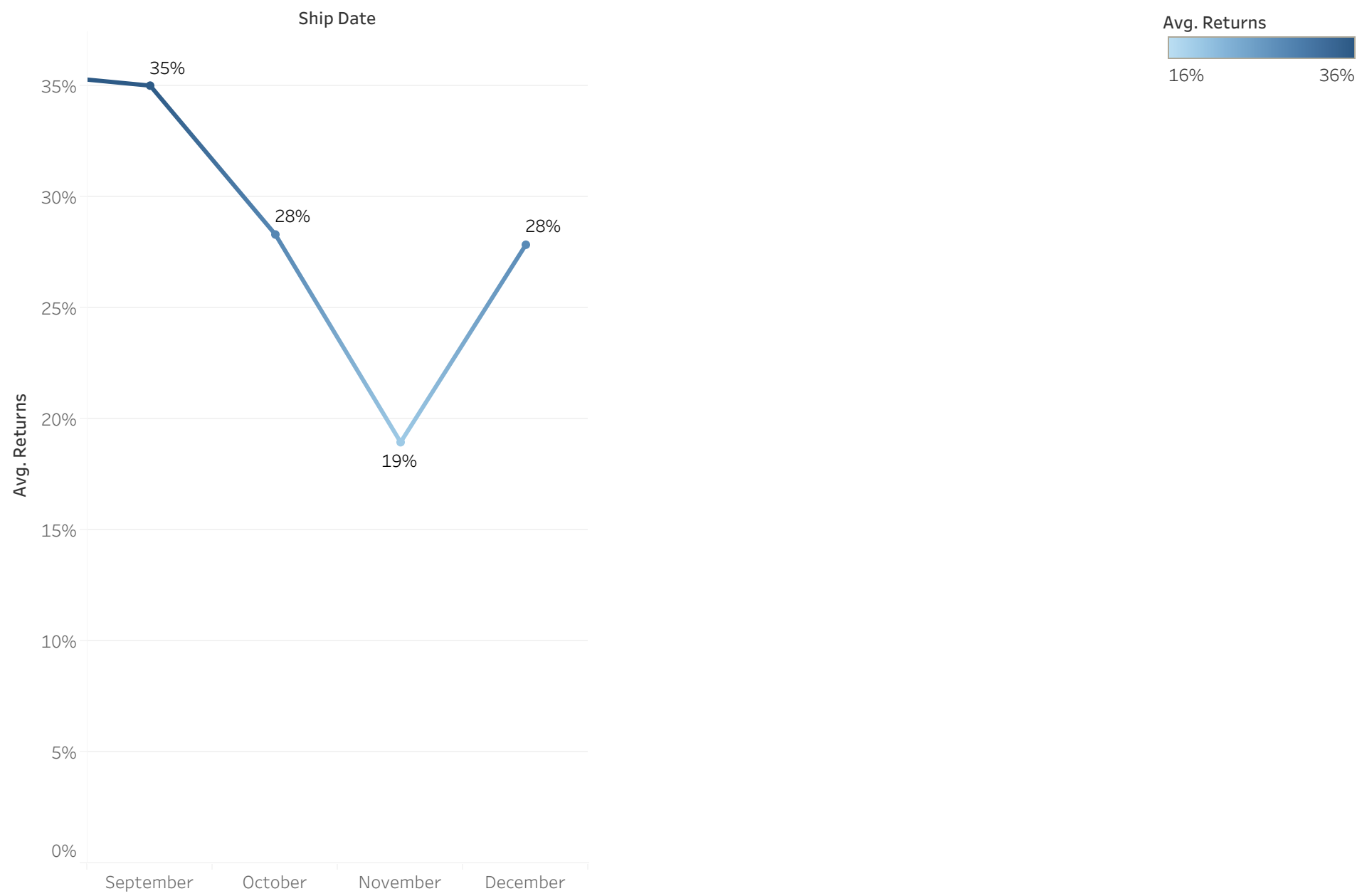
Return Rate by State



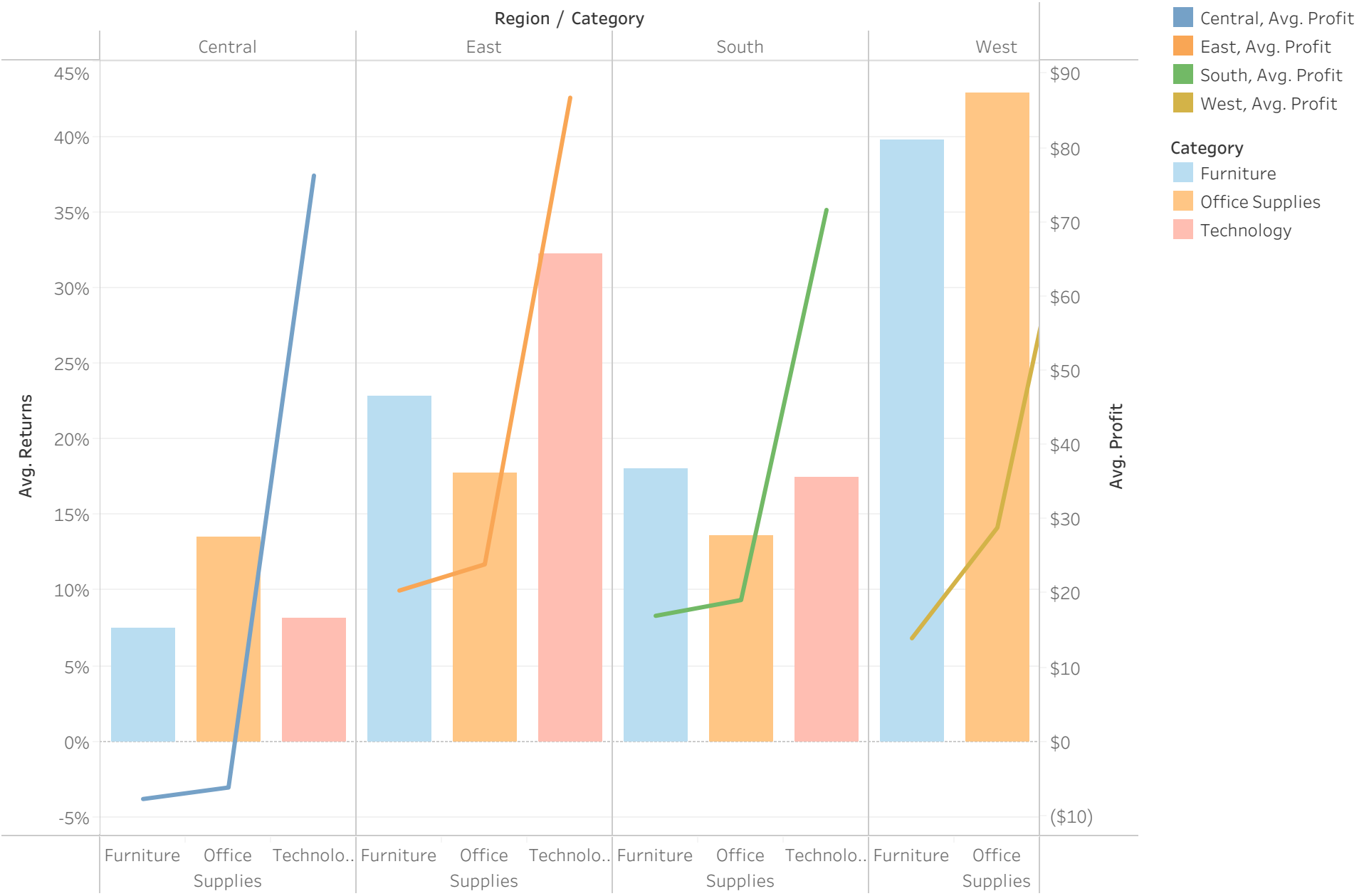
# Seasonal Return Rate



# Seasonal Return Rate



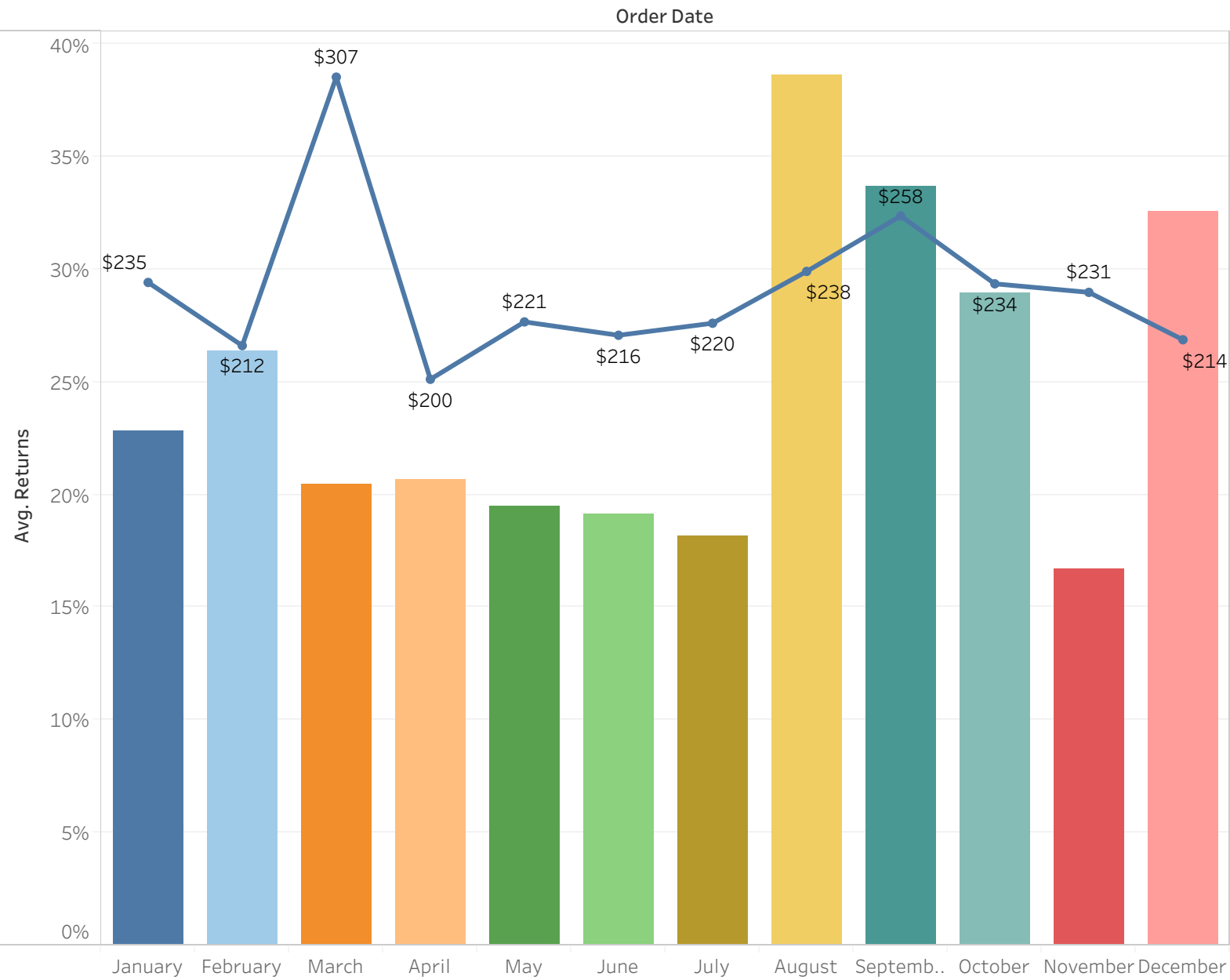
# Return and Profit Trends Across Regions and Categories



# Return and Profit Trends Across Regions and Categories



# Monthly Trends in Return and Sales Rates





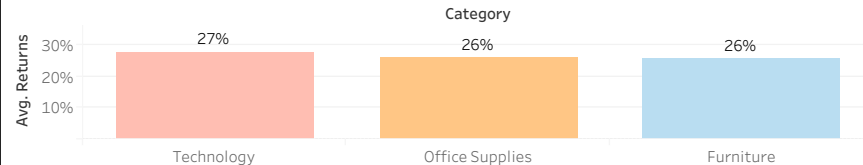
# Return Rates by Multiple Factors

These visualizations aim to help understand various factors contributing to returned orders at the Superstore:

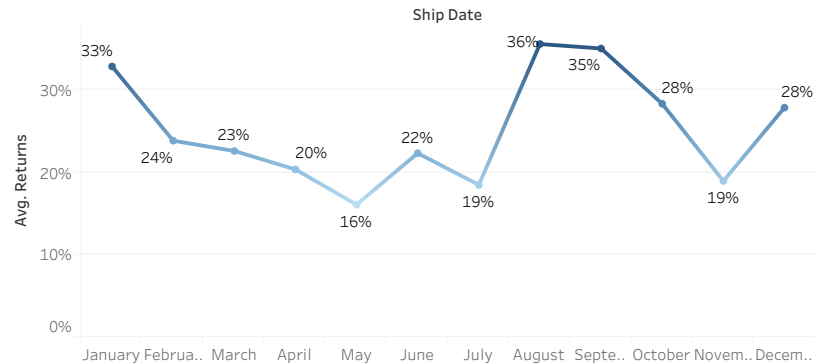
- Return Rate by Product Category (Below)
- Correlation Sales vs Returns (Bottom Left)
- Seasonal Return Rate (Top Center)
- Return and Profit Trends Across REgions and Categories (Bottom Right)

Use the (Top Right) dropdown menus for Year, Region, Category, and Sub-Category to filter by any combination of these dimensions

## Return Rate by Product Category



## Seasonal Return Rate



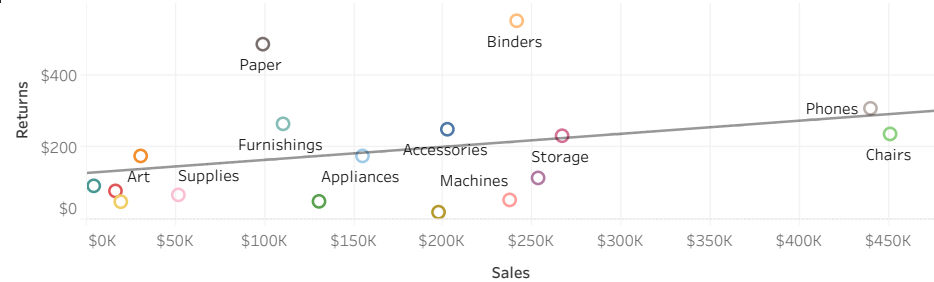
YEAR  
All

Region  
All

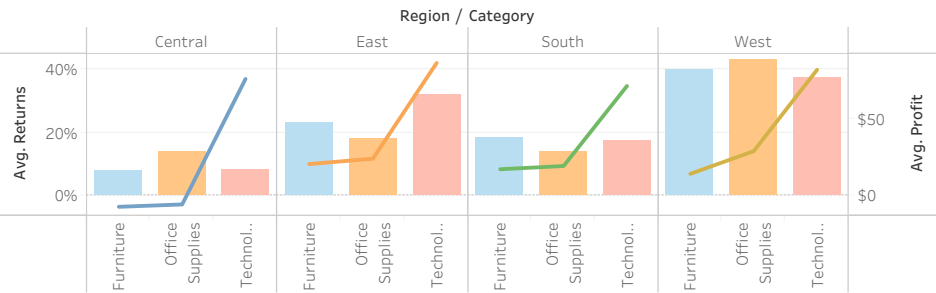
Category  
All

Sub-Category  
All

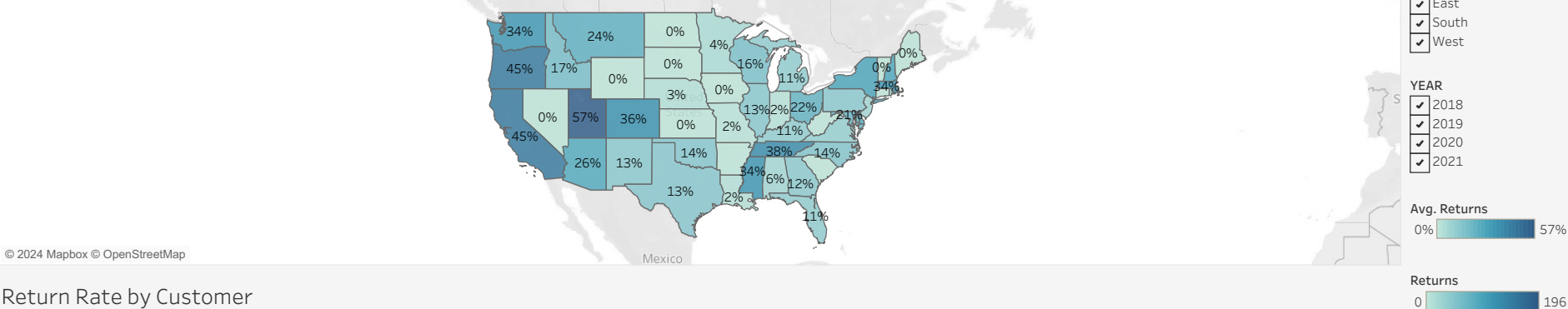
## Correlation Sales vs Returns



## Return and Profit Trends Across Regions and Categories



Return Rate by State



Return Rate by Customer



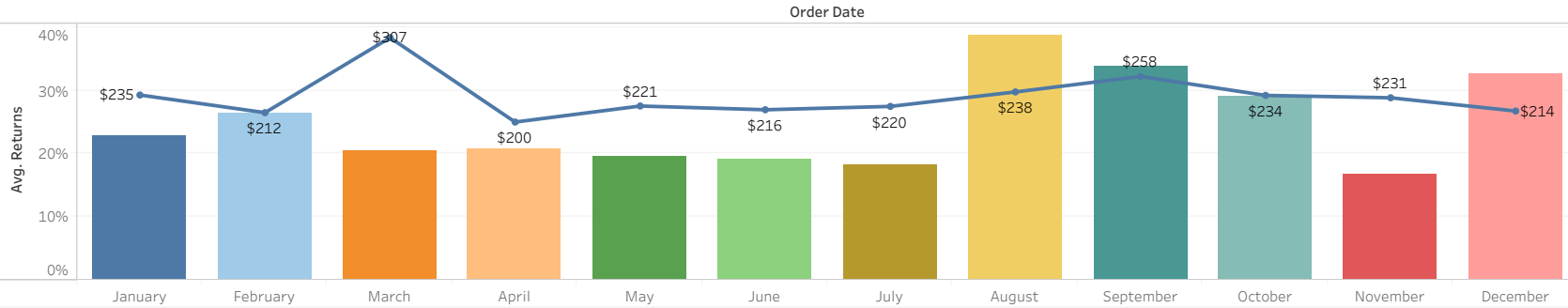
Return by State:

The West Region exhibits notably high return rates, with Utah leading at 57%, followed closely by California and Oregon at 45%. Conversely, the Central Region demonstrates the lowest return rates, with Wisconsin topping at 16%.

Return by Customer:

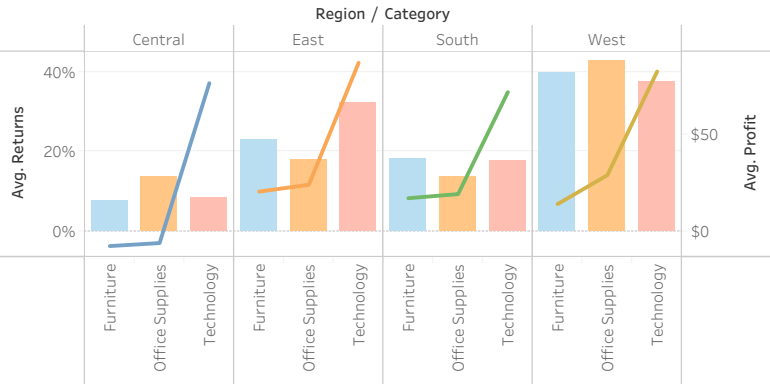
While the Superstore boasts numerous customers with 100% returns, a subset of 10 customers stands out with 50 or more returns. Seth Vernon, with a 93% return rate and a total of 196 returns, holds the highest combination of returns and return rate.

Monthly Trends in Return and Sales Rates



- Year of Order Date
- ☒ 2018
  - ☒ 2019
  - ☒ 2020
  - ☒ 2021
- Category
- ☒ Furniture
  - ☒ Office Supplies
  - ☒ Technology
- Region
- ☒ Central
  - ☒ East
  - ☒ South
  - ☒ West

Return and Profit Trends Across Regions and Categories



Return and Profit Trends Across Regions and Categories:

As previously observed in the map chart, this composite chart reveals that the West Region has the highest return rates across all categories, while the Central Region has the lowest return rates. However the lines representing profit indicate that the Central Region also has the lowest profit. Additionally Furniture and Office Supplies show a negative average profit in the Central region.

Monthly Trends in Return and Sales Rates:

August, September, and December show the highest return rates. This could indicate post-back-to-school returns and post-holiday returns. The highest average sales in March could be influenced by seasonal promotions, while August and September align with back-to-school shopping peaks.

Story Draft

|       |                              |                        |                                    |                      |  |                    |           |                                    |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
| Intro | Correlation Sales vs Returns | Return Rate by Product | Return Rates by State and Customer | Seasonal Return Rate | Trends in Returns; by Sale Rates Monthly, and Across Regions & Categories. | Dashboard Overview | Dashboard | Conclusion and Proposed Next Steps |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|

Story Draft

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Superstore Story Arc

|       |                              |                        |                                    |                      |  |                    |           |                                    |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
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The high number of returned orders at the Superstore has become a significant concern. Understanding the Underlying causes of these returns is crucial for developing strategies to mitigate this issue. This in-depth analysis for the CEO aims to provide insights into why the customers are returning their orders and offering actionalbe recommendations to reduce the return rate.

**Problem Statement**

The Superstore is experienceing an unusually high volume of returned orders. This trend not only leads to increased operational costs but also affects customer loyalty and satisfaction. Identifying and addressing the root causes of these returns is essential to improve overall efficiency and enhance the customer experience.

**Key Objectives**

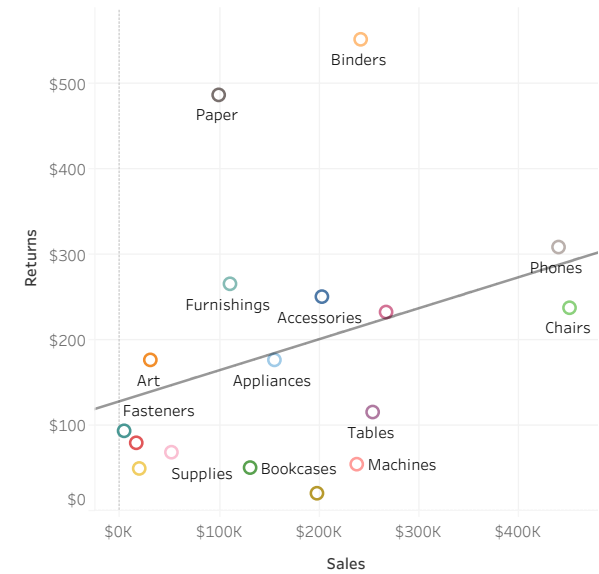
*Identify Patterns and Trends* - Analyze the data to uncover any patterns or trends related to the returned orders.

*Determine Root Causes* - Investigate potential factors contributing to the high return rate.

*Recommend Solutions* - Develop targeted strategies and recommendations to reduce the number of returned orders.

Superstore Story Arc

|       |                              |                        |                                    |                      |  |                    |           |                                    |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
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An analysis of sales and returns by product category reveals a noteworthy finding: a positive correlation between sales and returns. However, it's important to note that this correlation appears to be weak, as evidenced by the slope of the Trend Line.

Year of Order Date

☒ 2018

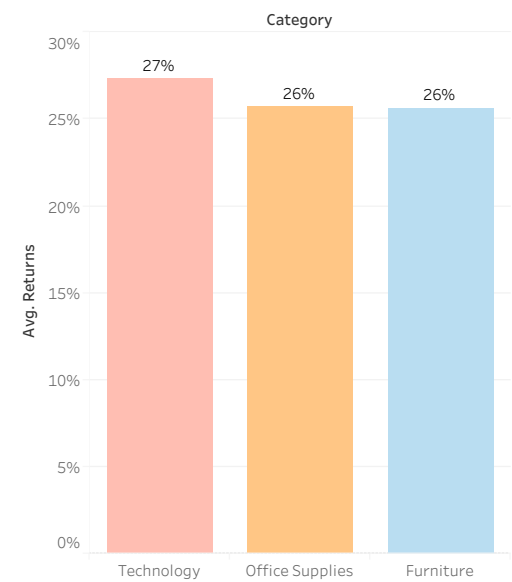
☒ 2019

☒ 2020

☒ 2021

Superstore Story Arc

|       |                              |                        |                                    |                      |  |                    |           |                                    |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
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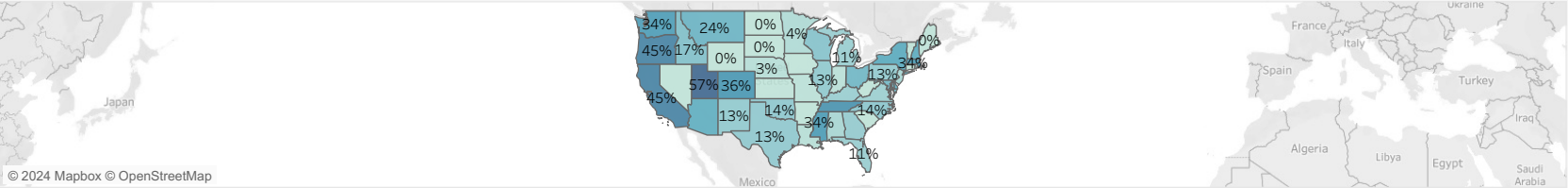
Further analysis of return rates reveals a 26% - 27% rate across product categories, notably high for Office Supplies and Furniture. Industry standards within the Technology category typically range between 10% to 20%. It's evident that return rates are exceptionally elevated across all categories. Additionally, there is a way to view the metrics by Region and Sub-Category filters.

- Region
- ☒ Central
  - ☒ East
  - ☒ South
  - ☒ West
- Sub-Category
- All

Superstore Story Arc

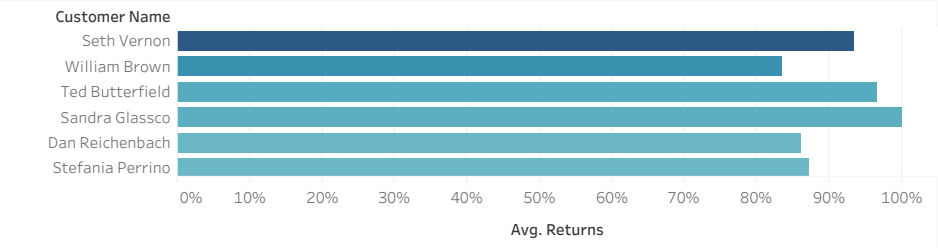
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Return Rate by State



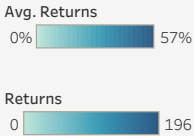
- Region
- ☒ Central
  - ☒ East
  - ☒ South
  - ☒ West
- YEAR
- ☒ 2018
  - ☒ 2019
  - ☒ 2020
  - ☒ 2021

Return Rate by Customer



Return by State:

The West Region exhibits notably high return rates, with Utah leading at 57%, followed closely by California and Oregon at 45%. Conversely, the Central Region demonstrates the lowest return rates, with Wisconsin topping at 16%.



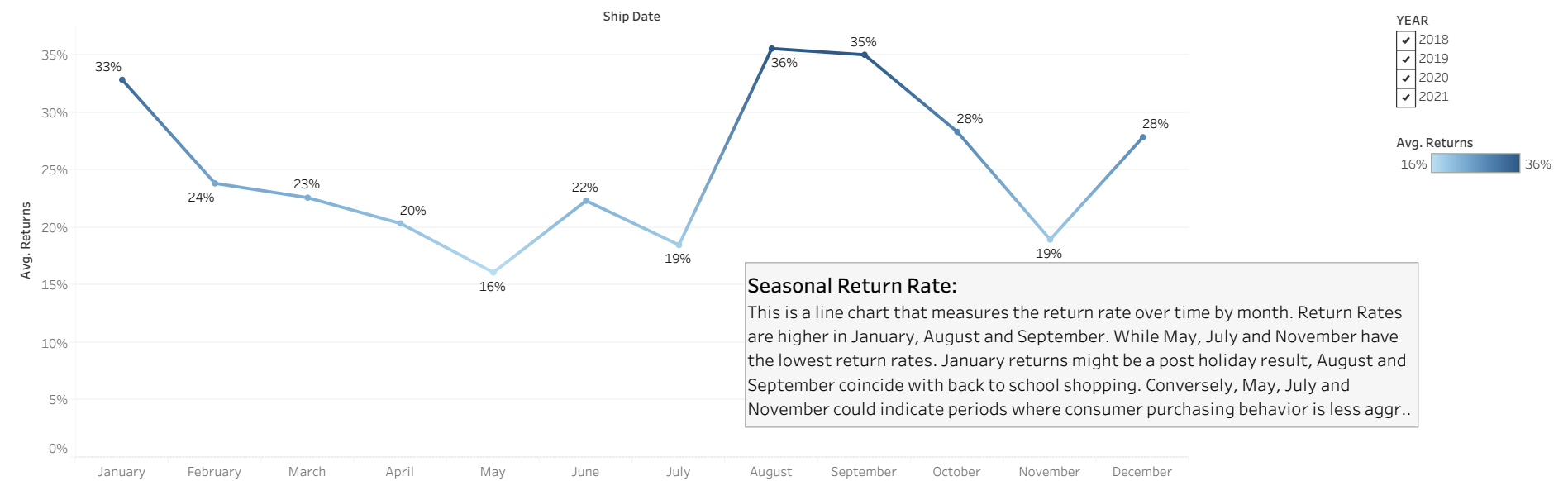
Return by Customer:

While the Superstore boasts numerous customers with 100% returns, a subset of 10 customers stands out with 50 or more returns. Seth Vern..



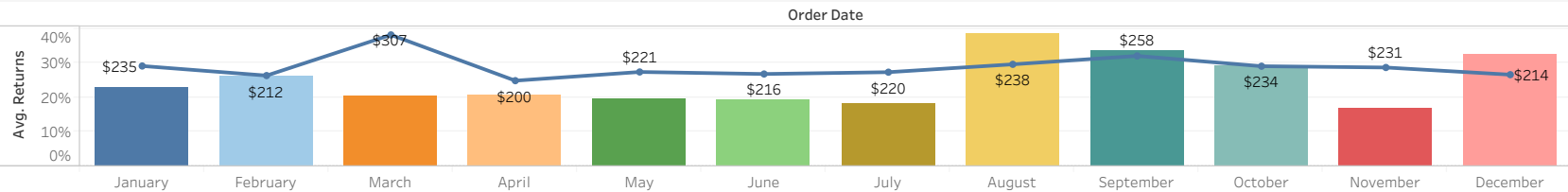
Superstore Story Arc

|       |                              |                        |                                    |                      |  |                    |           |                                    |
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Monthly Trends in Return and Sales Rates



Year of Order Date

- ☒ 2018
- ☒ 2019
- ☒ 2020
- ☒ 2021

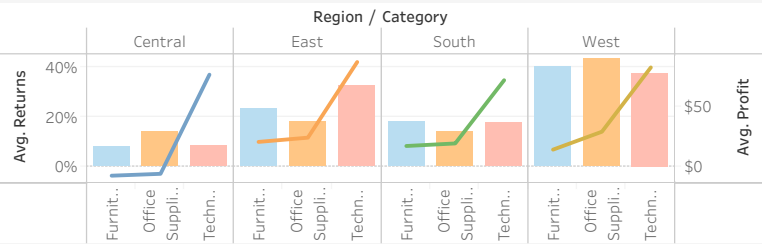
Category

- ☒ Furniture
- ☒ Office Supplies
- ☒ Technology

Region

- ☒ Central
- ☒ East
- ☒ South
- ☒ West

Return and Profit Trends Across Regions and Categories



Return and Profit Trends Across Regions and Categories:

As previously observed in the map chart, this composite chart reveals that the West Region has the highest return rates across all categories, while the Central Region has the lowest return rates. However the lines representing profit indicate that the Central Region also has the lowest profit. Additionally Furniture and Office Supplies show a negative average profit in the Central region.

Monthly Trends in Return and Sales Rates:

August, September, and December show the highest return rates. This could indicate post-back-to-school returns and post-holiday returns. The highest average sales in March c..

## Superstore Story Arc

| Intro   | Correlation Sales vs Returns | Return Rate by Product | Return Rates by State and Customer | Seasonal Return Rate | Trends in Returns; by Sale Rates Monthly, and Across Regions & Categories. | Dashboard Overview | Dashboard | Conclusion and Proposed Next Steps |
|---|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
| <p>This dashboard offers a holistic view to enhance business strategies and operational efficiency with a detailed exploration of return rates and their impact, structured into four key sections:</p> <ol style="list-style-type: none"><li><b>Return Rates by Product Category:</b> This section breaks down return rates across different product categories, highlighting which categories experience the highest and lowest return rates.</li><li><b>Seasonal Return Rate Trends:</b> Here, we analyze the return rates on a monthly basis to identify seasonal trends. This helps in understanding peak return periods, allowing for better forecasting and resource allocation.</li><li><b>Correlation Between Sales and Returns:</b> This section explores the relationship between sales and returns. By examining how sales figures relate to return rates, we can identify trends and potential areas for intervention to reduce returns while maintaining sales volumes.</li><li><b>Return Profit Trends Across Regions and Categories:</b> This final section provides a geographic and categorical breakdown of returns and their impact on profit. It shows how different regions and product categories affect overall profitability, with insights into regions and categories that may need strategic adjustments to optimize returns and profits.</li></ol> <p>Additionally, the dashboard includes interactive filters for stakeholders to tailor the analysis to specific needs:</p> <ul style="list-style-type: none"><li><b>Year:</b> Allows stakeholders to view data for specific years or compare across multiple years.</li><li><b>Region:</b> Enables filtering by geographic region to understand regional differences in return rates and profitability.</li><li><b>Category:</b> Facilitates the analysis of return rates and profitability within broader product categories.</li><li><b>Sub-Category:</b> Provides a more granular view by allowing filtering within specific sub-categories of products.</li></ul> <p>These filters empower stakeholders to customize the data visualization according to their specific interests and needs, making the dashboard a versatile tool for decision-making.</p> |                              |                        |                                    |                      |  |                    |           |                                    |

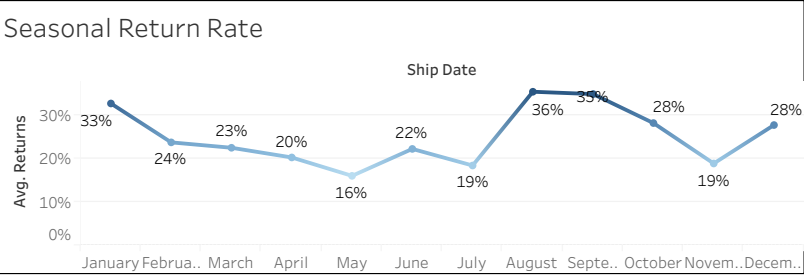
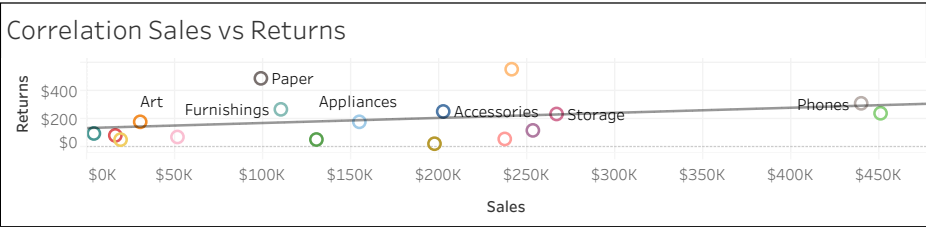
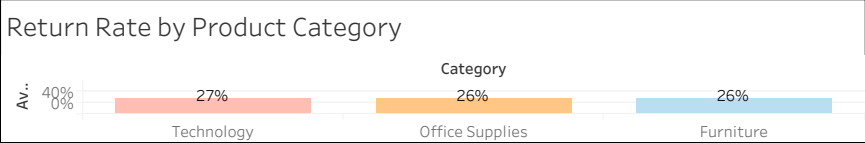
Superstore Story Arc

|       |                              |                        |                                    |                      |  |                    |           |                                    |
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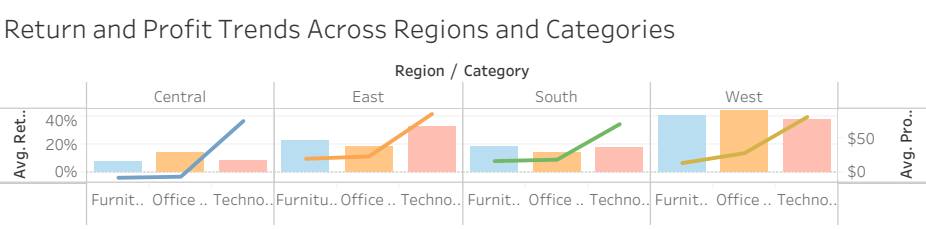
Return Rates by Multiple Factors

These visualizations aim to help understand various factors contributing to returned orders at the Superstore:

- Return Rate by Product Category (Below)
- Correlation Sales vs Returns (Bottom Left)
- Seasonal Return Rate (Top Center)
- Return and Profit Trends Across REgions and Categories (Bottom Right)..



|              |     |
|--------------|-----|
| YEAR         | All |
| Region       | All |
| Category     | All |
| Sub-Category | All |



|       |                              |                        |                                    |                      |  |                    |           |                                    |
|-------|------------------------------|------------------------|------------------------------------|----------------------|--|--------------------|-----------|------------------------------------|
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**Conclusion**

Our comprehensive store analysis has unveiled several critical insights. Firstly, while there is a weak positive correlation between sales and returns, the overall return rates are notably high across all product categories, with Office Supplies and Furniture exhibiting the highest rates. These return rates significantly surpass industry standards, especially in the Technology category. Furthermore, regional analysis reveals that the West Region, particularly states like Utah, California, and Oregon, has the highest return rates, whereas the Central Region has the lowest but also the lowest profit margins. Customer behavior analysis highlights individuals with exceptionally high return rates, notably Seth Vernon with a 93% return rate. Seasonal trends indicate peaks in returns post-holiday and during back-to-school periods, with the highest sales in March due to seasonal promotions.

**Proposed Next Steps**

- \* Investigate and enhance the quality of products in categories with high return rates, particularly Office Supplies and Furniture.
- \* Reassess and possibly tighten return policies to reduce the high return rates, especially in the West Region.
- \* Engage with customers who have high return rates to understand their issues and provide solutions or incentives to reduce returns.
- \* Offer personalized support and possibly loyalty rewards to customers with low return rates to encourage repeat purchases.
- \* Develop strategies to boost profitability in the Central Region, such as targeted marketing campaigns or promotions.
- \* Tailor promotional strategies to align with regional behaviors, focusing on reducing return rates in the West Region.
- \* Implement pre-season marketing campaigns to manage and balance sales peaks, particularly before January and the back-to-school season.
- \* Plan post-season strategies to handle higher returns efficiently, offering extended customer support and return processing capabilities.
- \* Regularly analyze monthly sales and return trends to adjust strategies promptly, ensuring agility in responding to changing consumer behaviors.

By implementing these steps, we aim to improve product quality, customer satisfaction, and regional performance, thereby driving profitability and reducing the overall return rates.