

Good morning, everyone. Today, I will be presenting an analysis of our sales and returns data from January 2018 through the end of 2021, focusing on key insights and recommendations to improve our business strategy and effectiveness. This analysis was performed using data visualization and analytical tools in Tableau, and I'll be walking you through the most significant findings and their implications.

Analysis of Sales and Returns by Customer, Location, and Product

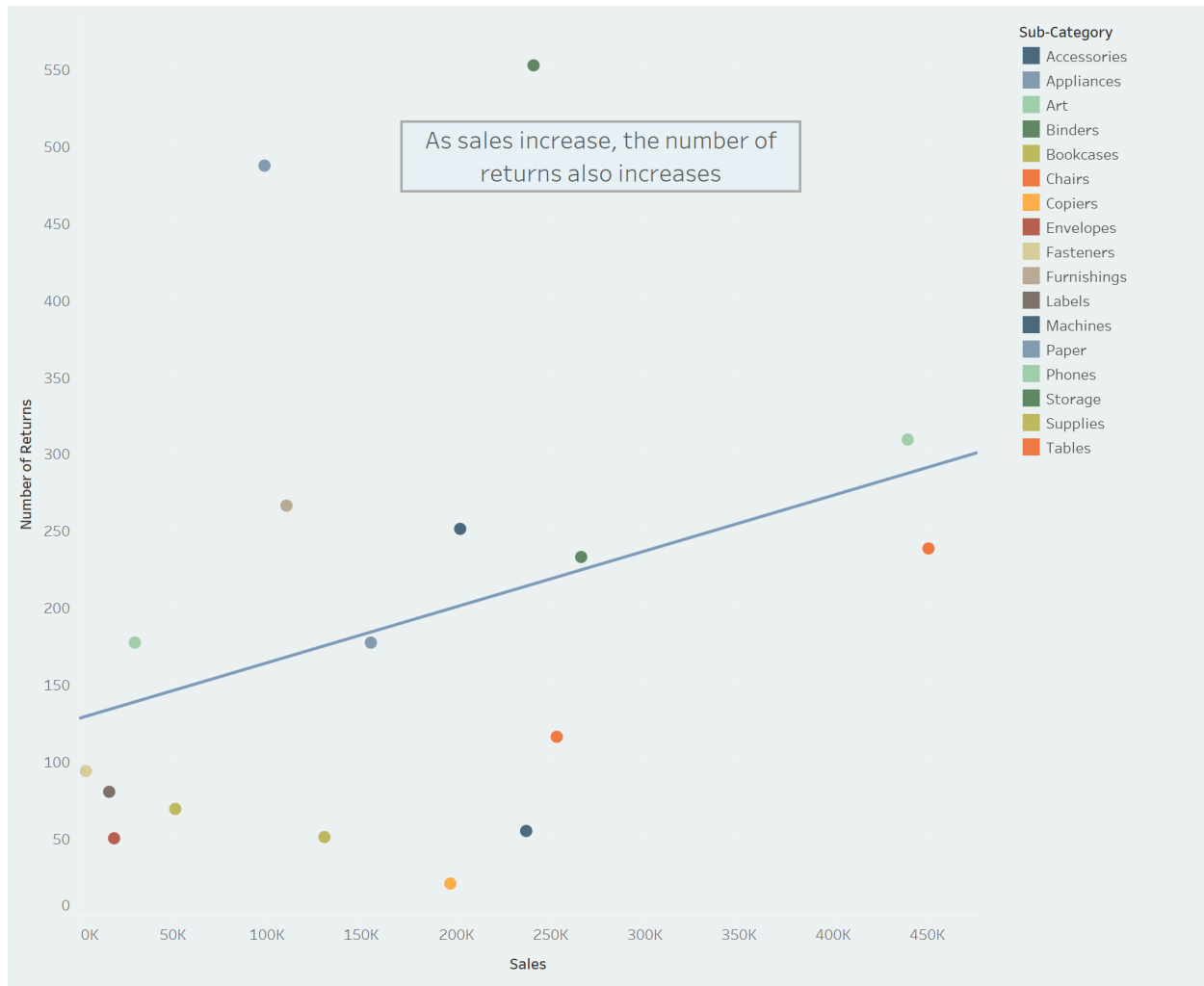
Summary:

This story explores the relationship between sales and returns across different customers, locations, and products to provide actionable insights.

Objectives:

- Understand overall sales and returns trends.
- Identify key customer segments and locations.
- Analyze product performance.

Let's begin with an overview of the sales and returns trends throughout the data cycle. First, a simple chart showing the direct correlation between sales and returns, with a few outliers with higher than expected return rates, which we'll look at in more depth later. The positive correlation suggests that managing return rates is crucial during periods of high sales. It also reinforces the need for robust return management strategies, particularly during peak sales periods.

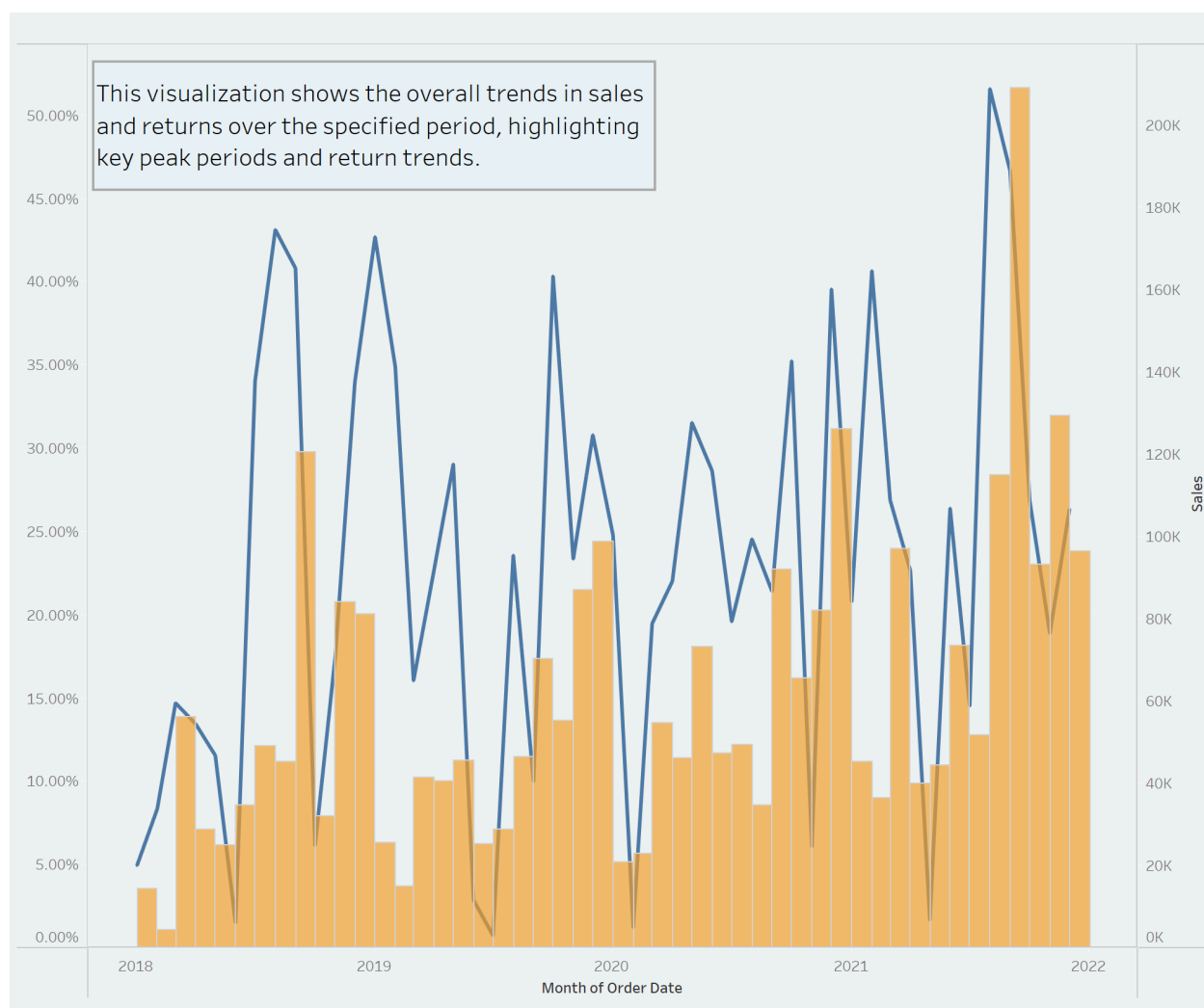


On this slide, you can see a bar chart representing sales and a line chart indicating return rates over time.

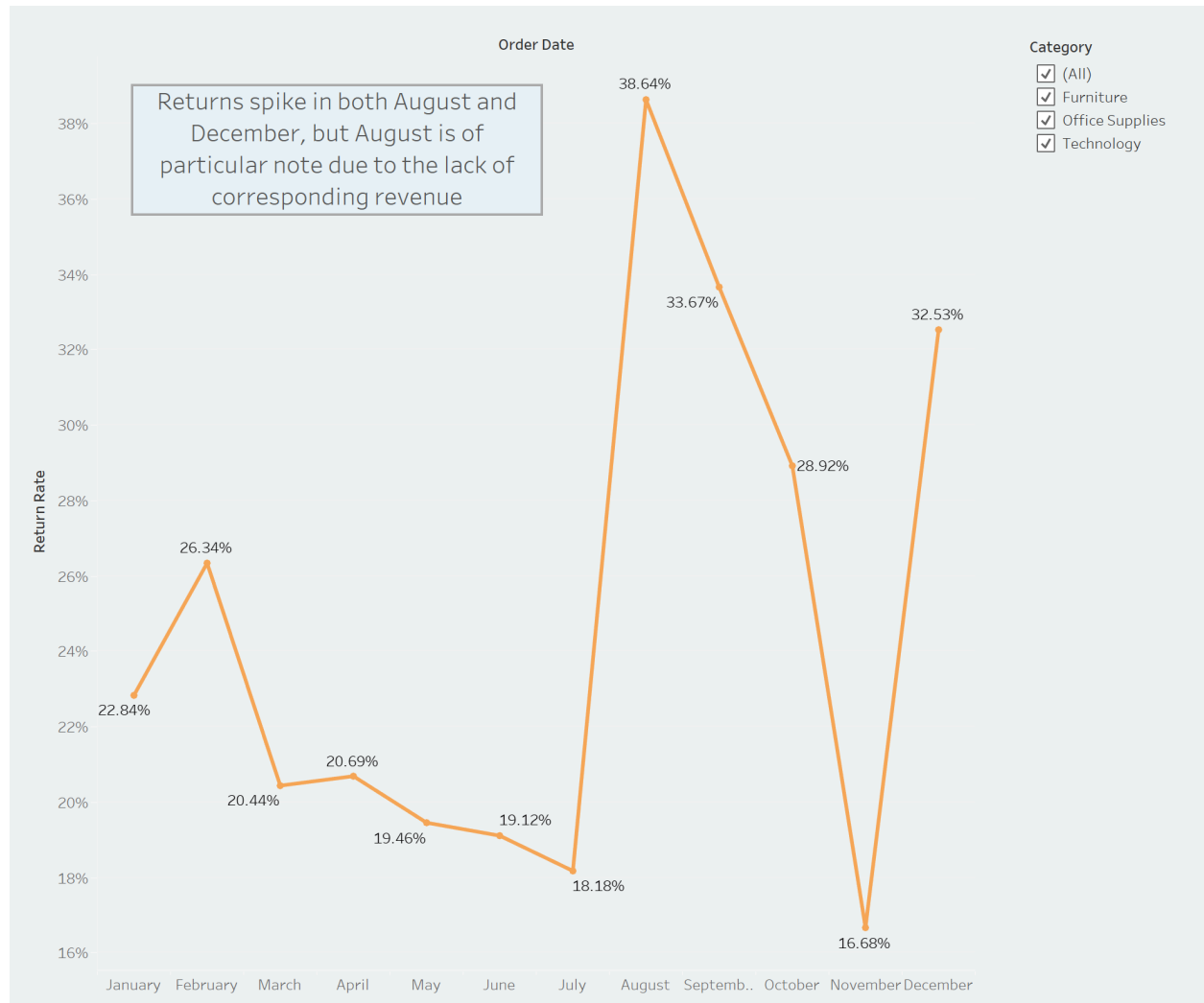
As you can see again, there is a noticeable relationship between sales and returns. Higher sales volumes generally correlate with higher return rates, particularly during peak periods such as the holiday season.

This trend suggests that during times of increased sales, we should anticipate and prepare for an increase in returns as well.

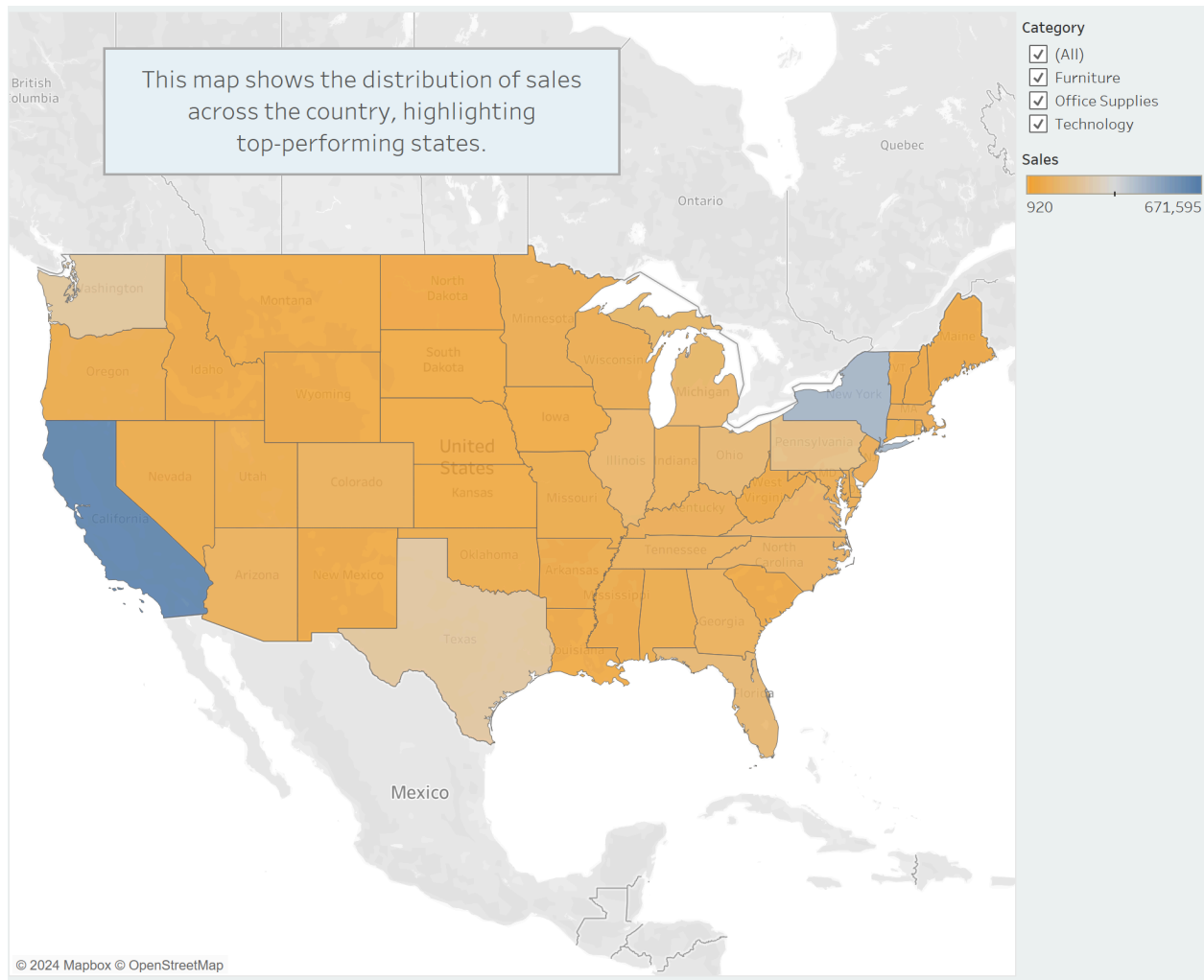
To address this, it could be beneficial to enhance our quality control measures and customer support during these peak sales periods. This will help us quickly address any issues and potentially reduce the number of returns.



The last one had a lot going on, but here we can see much more clearly the average return rate for each month throughout 2018 through 2021. The increased returns during the holiday months reflects the increased volume in sales, but the peak returns in August has considerably lower correlating sales. This might suggest that many of these returns belong to the office supply category, which is responsible for the lowest numbers in both sales and profits, as we'll see later.

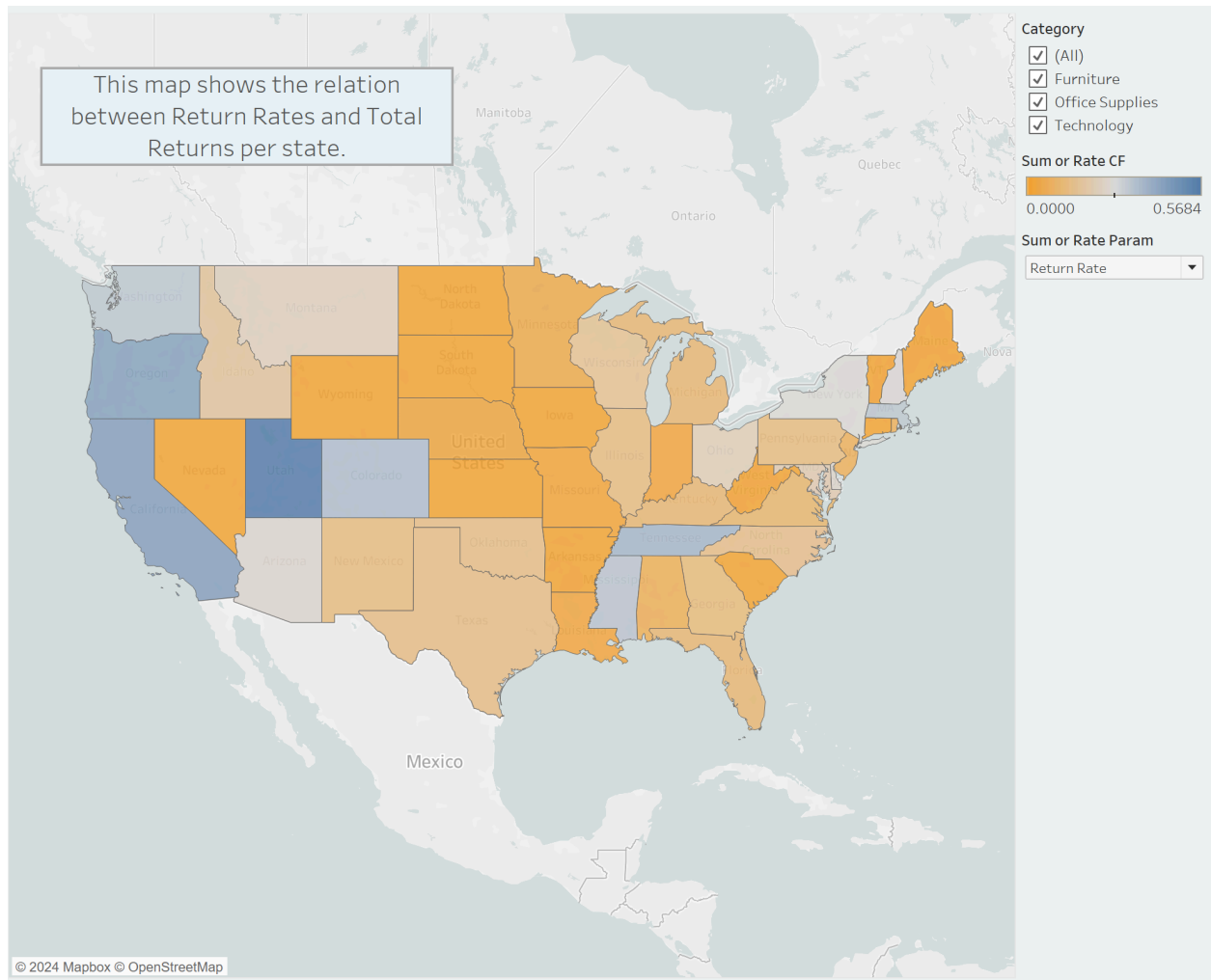


Next, we look at sales distribution across the United States. This map highlights overall sales by state, with California leading in sales by approximately 45% more than New York, which is our second highest performing state. This indicates a strong market presence in California, but it also brings challenges in the form of a correlating return rate that needs addressing.

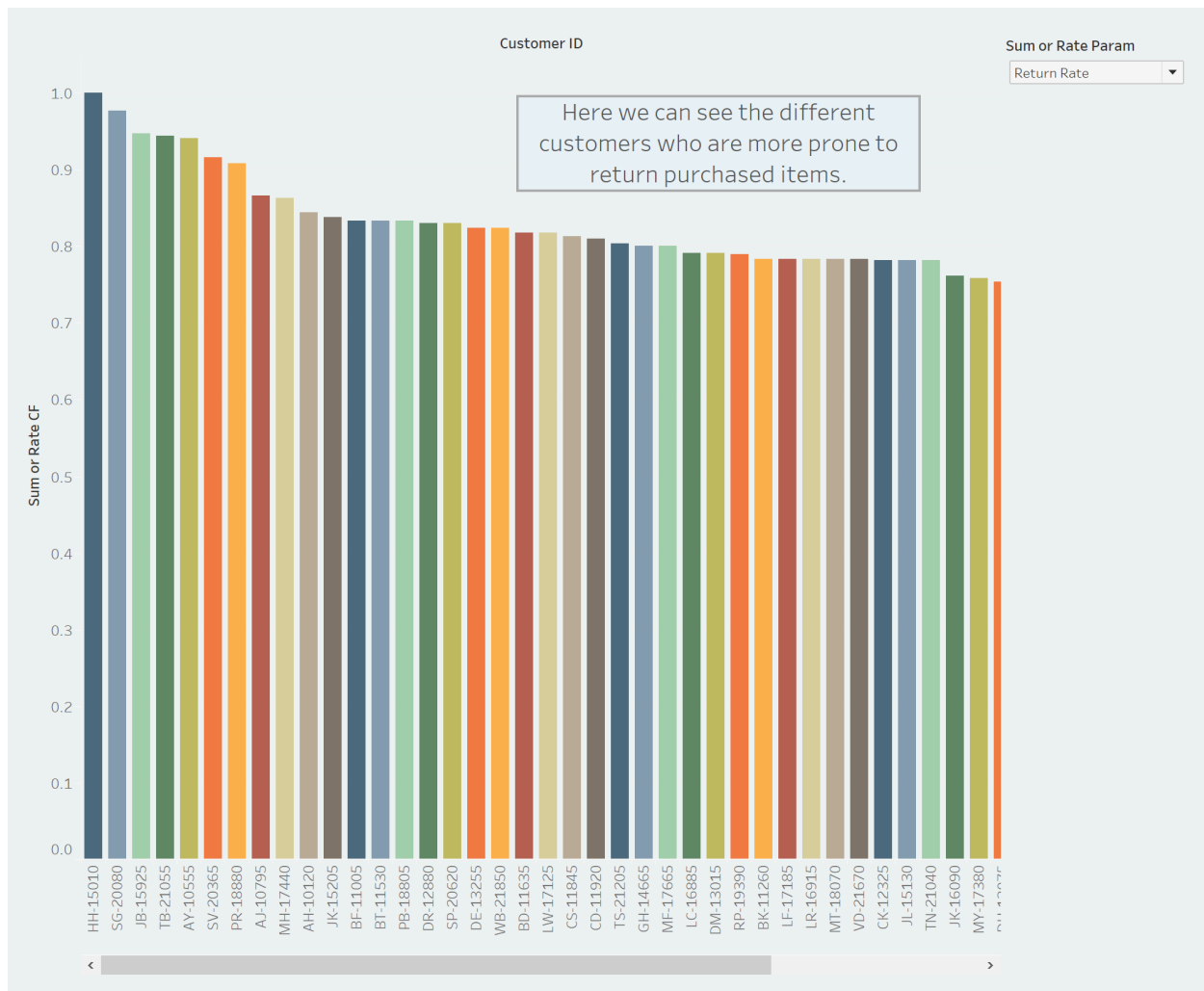


This map displays both the return rates and the sum of returns by state. Despite high sales, California also experiences a significantly higher return rate, three times more than New York. This disparity suggests there might be underlying issues specific to this region, whether it be product-related or service-related.

It's essential to investigate the causes of the high return rate in California. By understanding and addressing these issues, we can work to mitigate the high return rate and increase sales further.



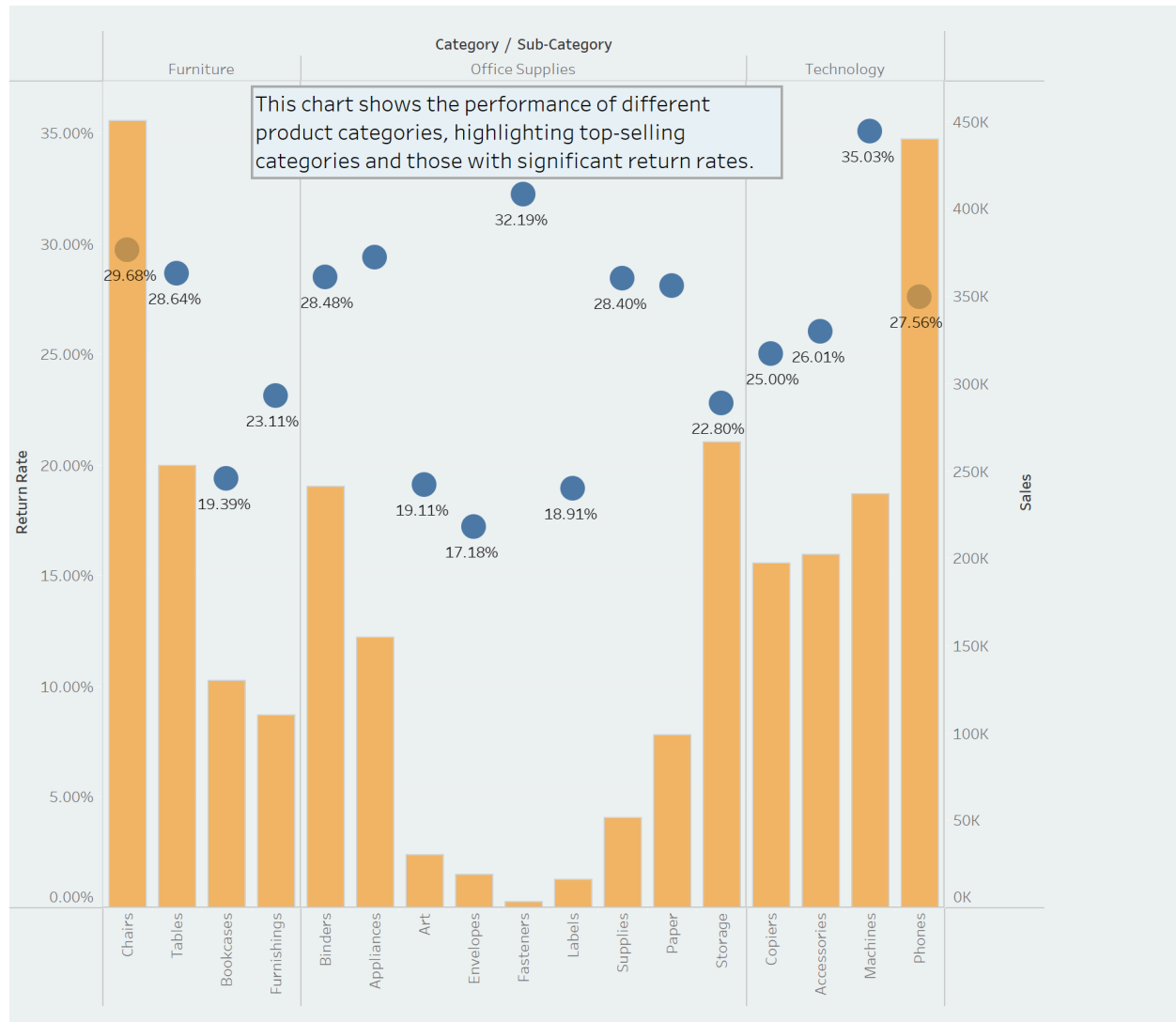
Here, we see a chart showing the customers with the fifty highest return rates and the number of returns. We observe that a small portion of customers are responsible for a majority of returns. This is a critical insight for addressing returns effectively. Identifying and analyzing the behavior of these high-return customers, along with implementing tailored interventions, could help in reducing their return rates.



Lastly, this chart shows sales and return rates by product category and sub-category, with bars representing sales and a scatter plot showing return rates. Return rates are consistent across all product categories and sub-categories, 25-27% based on the data, but sales on average in Technology and Furniture are significantly higher than in Office Supplies. Nearly \$1.1 million in tech, just under \$1 million in furniture, and just under \$900,000 in office supplies.

Focusing our marketing efforts on the Technology and Furniture categories has the potential to drive sales higher.

Additionally, exploring ways to boost Office Supplies sales through targeted promotions or product enhancements while assessing what can be done to reduce returns within the poorer performing sub-categories can help balance the product portfolio and increase revenue overall.



To wrap up, here are my general recommendations based on the insights gained from this analysis:

- **Quality Control:** Implement a comprehensive review process for returned products to identify common issues.
- **Customer Support:** Enhance customer service and support during peak sales periods to reduce returns.
- **Data-Driven Marketing:** Utilize data-driven insights to tailor marketing strategies for different regions, focusing on high sales areas and addressing regions with high return rates.
- **Customer Insights:** Develop targeted interventions for high-return customers to reduce their return rates.

By addressing these insights and implementing the recommendations, we can optimize our sales strategies, reduce return rates, and improve overall customer satisfaction.

Thank you for your time and attention. I'm happy to answer any questions you might have.