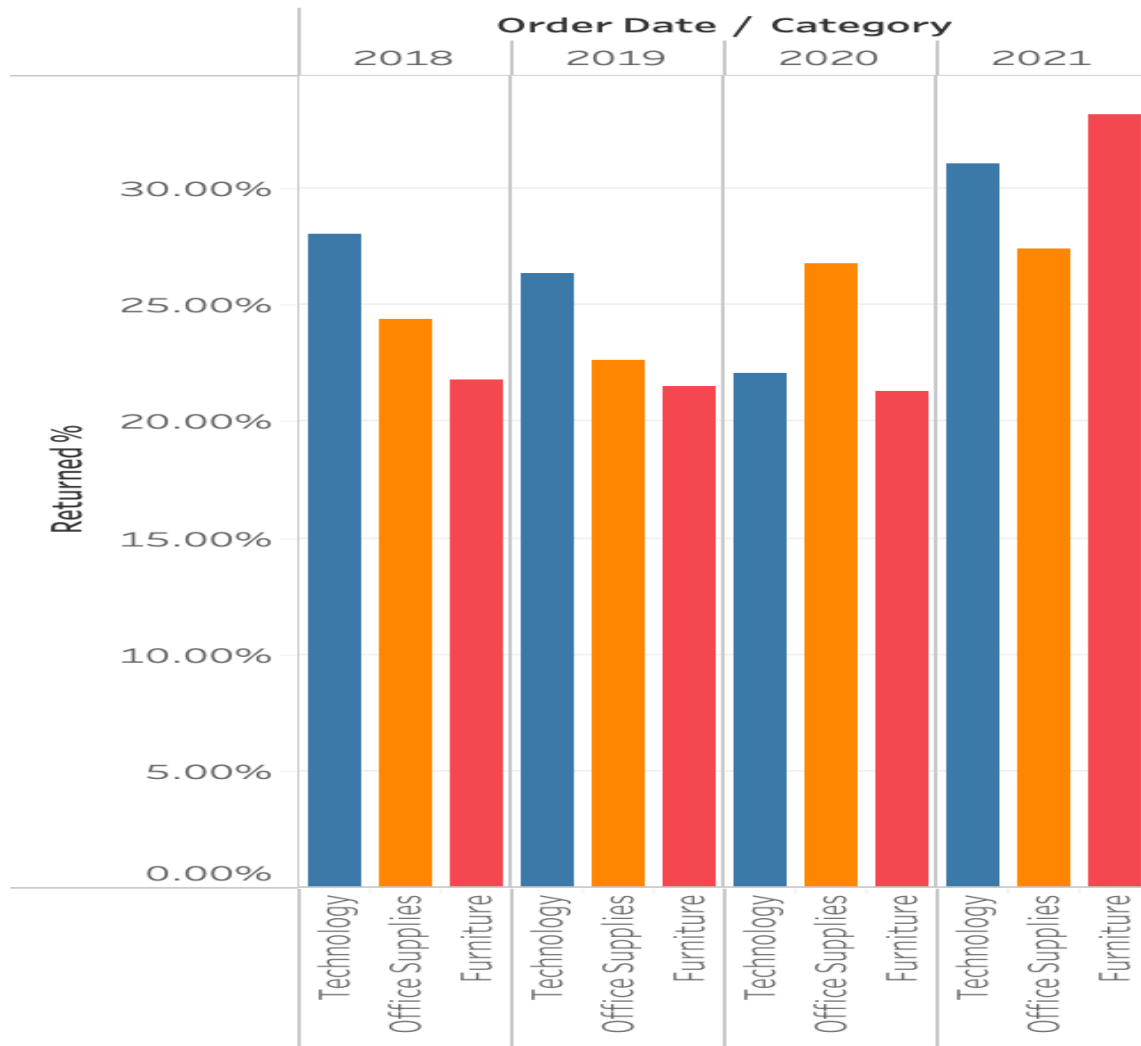
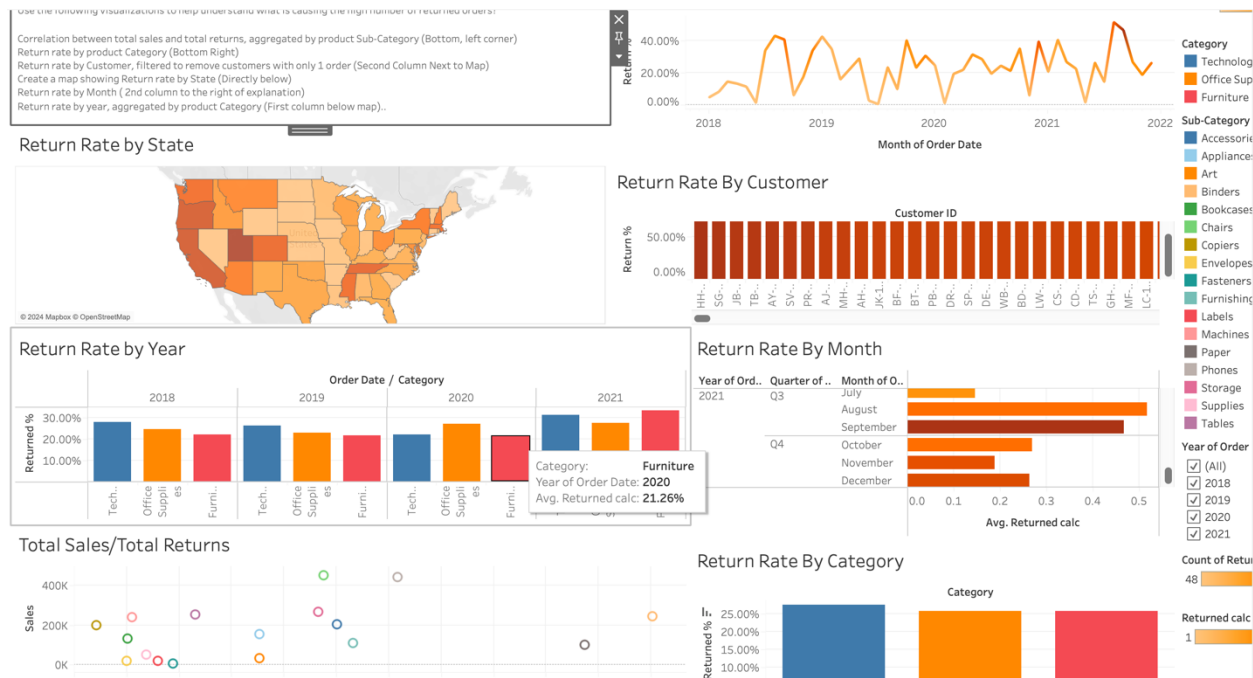


Return Rate by Year

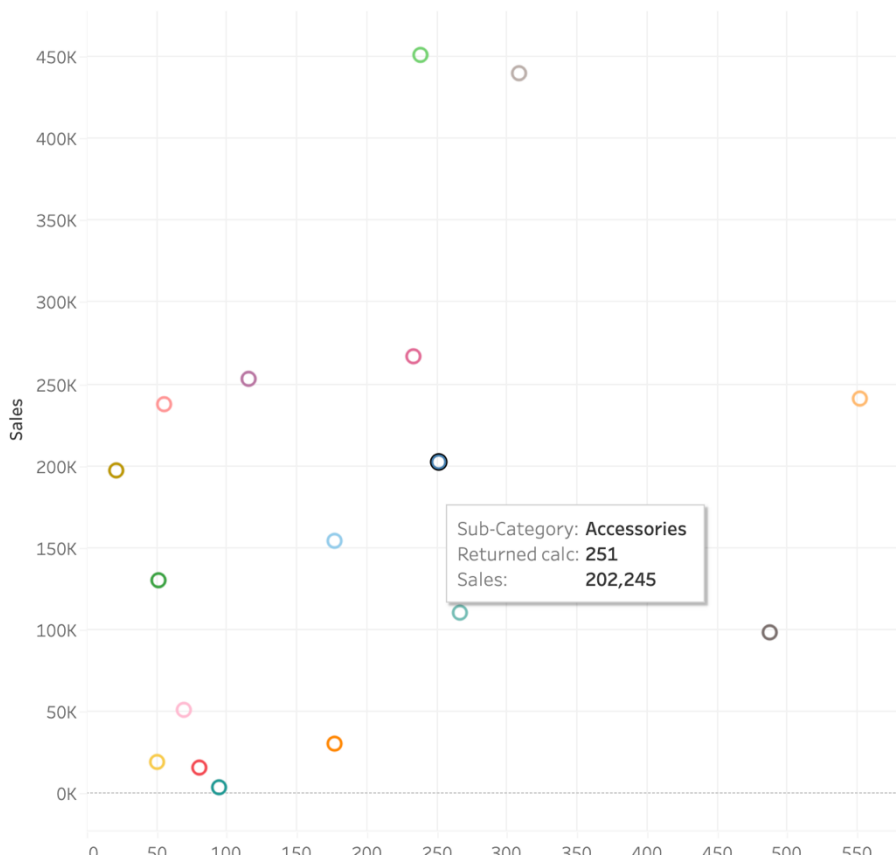


When taking a dive into the return Rate of the superstore I figured the most basic way to start to see the picture would be to display the return rate by the three major categories that are sold. While looking at this data it gave me an understanding of our trends and I quickly realized that something very impactful happened between the year of 2020-2021 to increase returned products. Sighting a substantial 13% increase in furniture and 9% in technology. What is the underlying reason behind this?



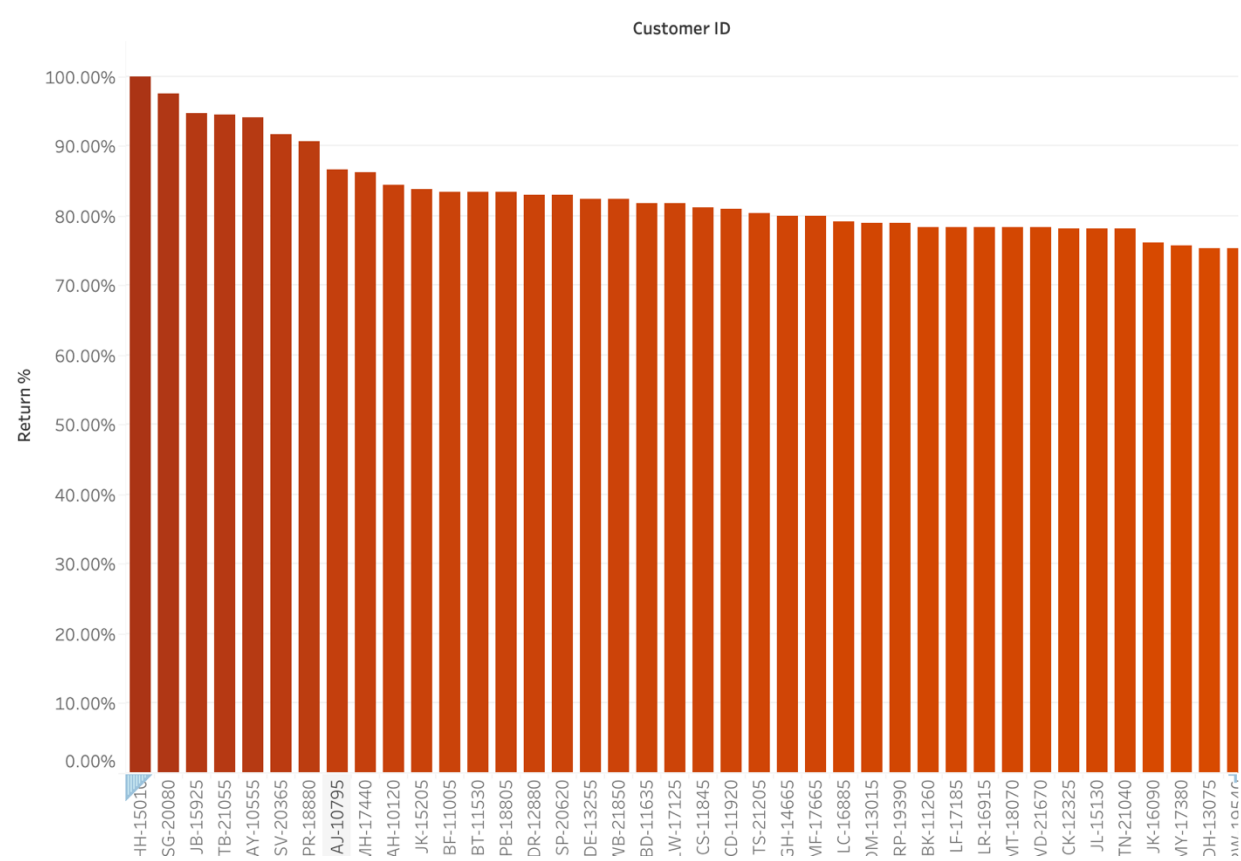
Here is all the data that was compiled and transformed into visuals for you all on one dashboard. All the different charts are interactive giving you the opportunity to hover over them with your cursor for a more advanced view of the data. Looking at the total sales and total returns of the subcategories first.

Total Sales/Total Returns



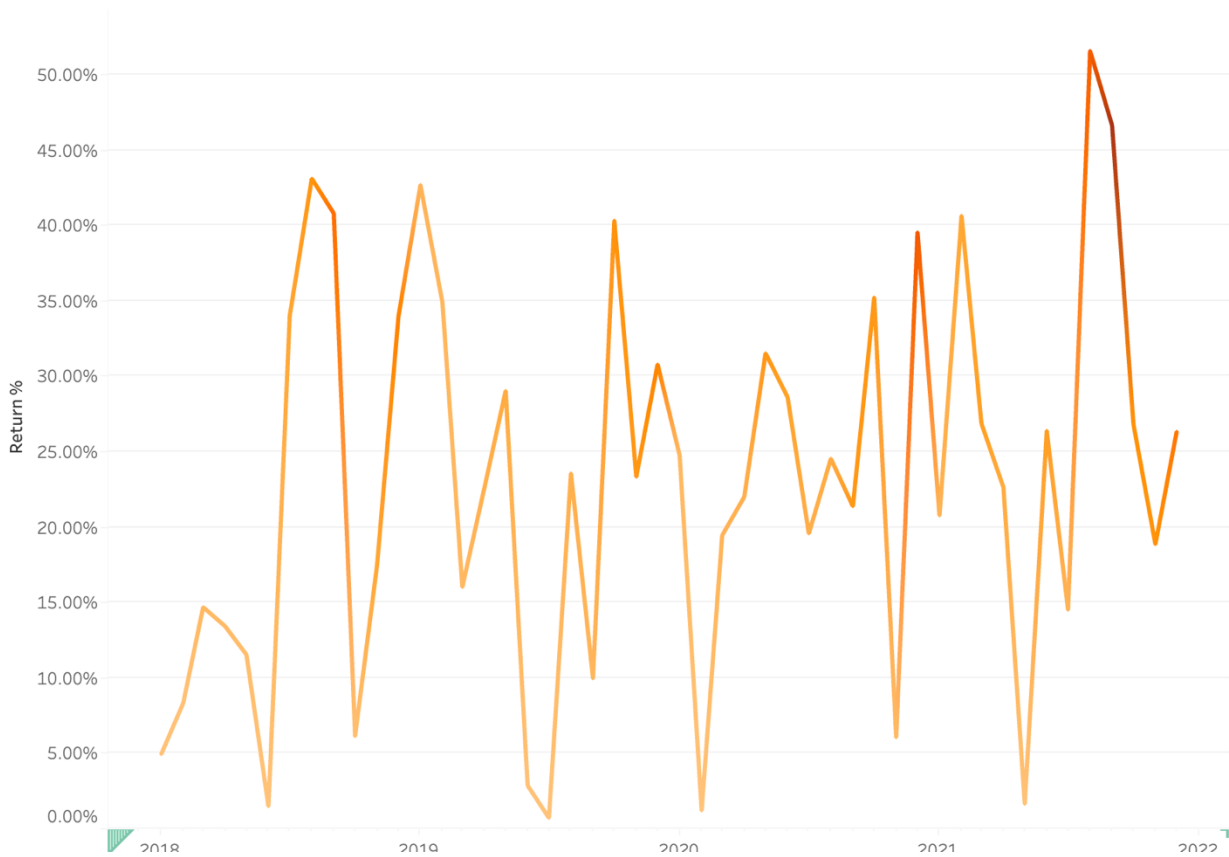
This gives us an understanding on what products are selling well as well as what ones are being returned most frequently for us. For example paper and binders are the highest returned items while chairs and phones are the most sold. We want to bring the products on the far right back to the left to help our profitability.

Return Rate By Customer



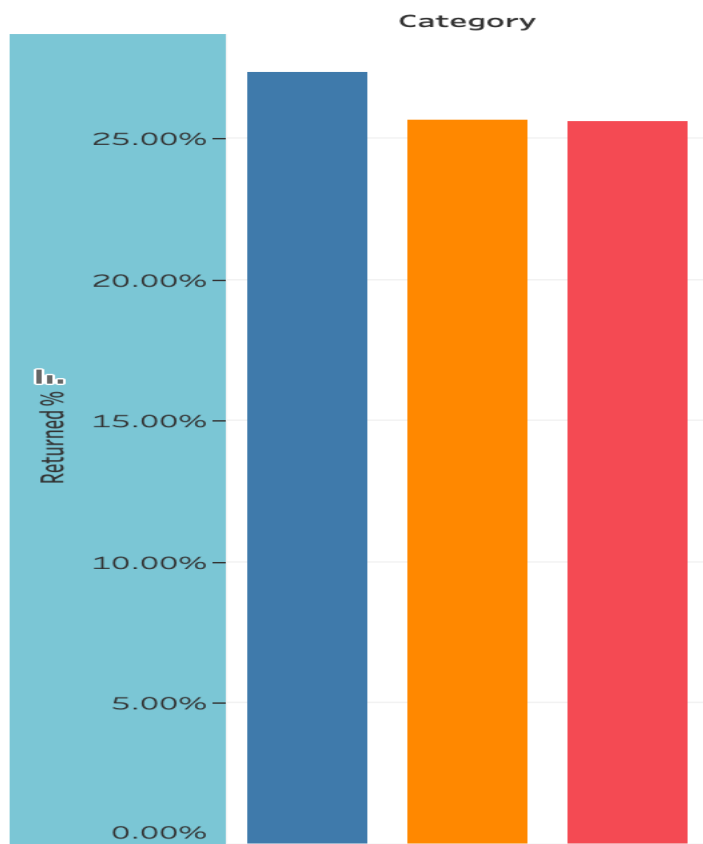
Here is the return rates by customer ID's. Rather than the name the ID allows us to pull up the unique information for each customer. These are the ones who return the majority of what they buy. Reaching out to them to see what was wrong with the product or why they returned it could help us eliminate some future losses,

Monthly Return Rate



This line graph shows us the monthly return rate by year and month subsequently. You can see that our return rates spike during the early part of the school year in quarter 3. But as of late our rates have spiked a substantial amount in 2021.

Return Rate By Category



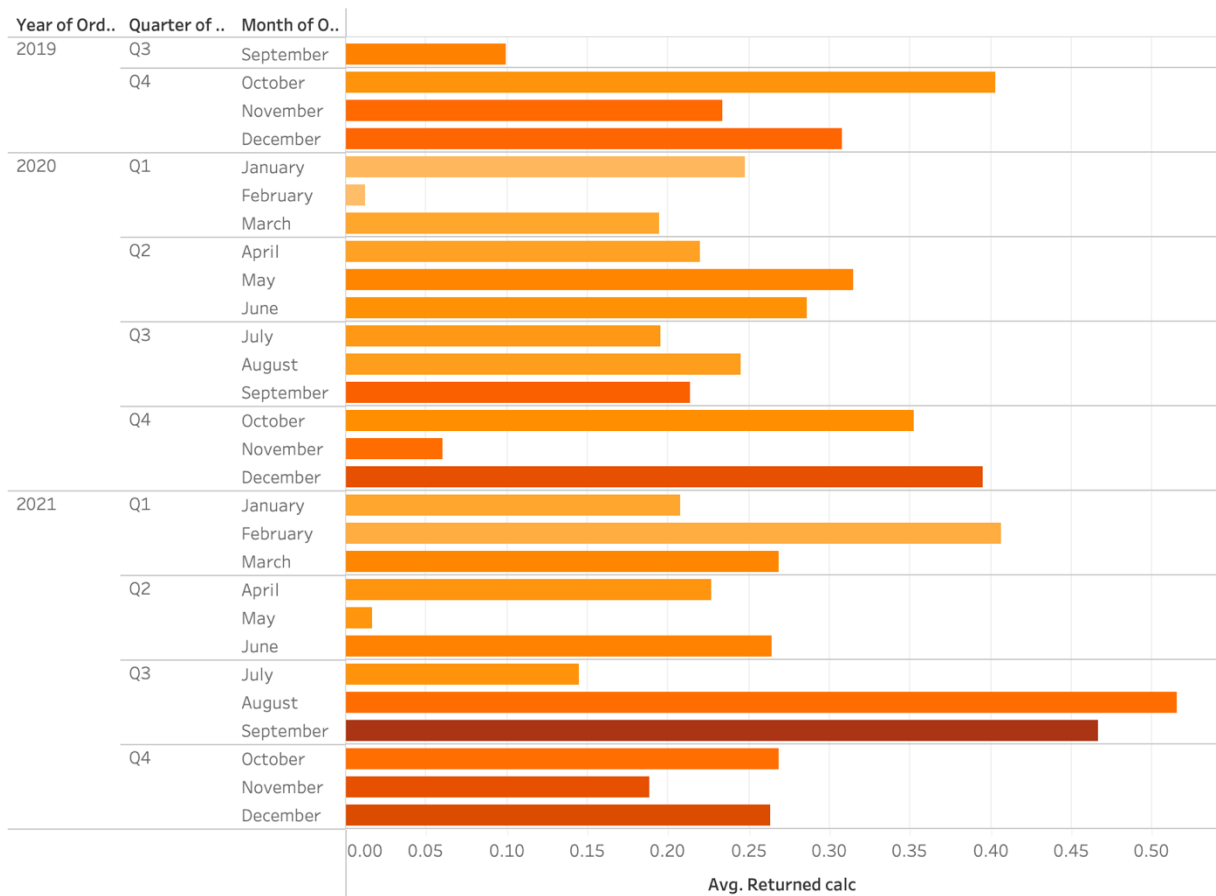
This graph illustrates to us that the return rate for all 3 major categories is very similar. This data tells me that we have our issues in each individual category and need to take a deeper look at what we need to eliminate from our shelves.

The map displays the following data series based on the color scale:

Color	Percentage Range	States
Dark Brown	80% and over	California, Nevada, Arizona, New Mexico, Texas, Oklahoma, Kansas, Nebraska, South Dakota, North Dakota, Minnesota, Iowa, Missouri, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.
Dark Orange	70% and over	Washington, Oregon, Idaho, Utah, Wyoming, Colorado, Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.
Light Orange	60% and over	Washington, Oregon, Idaho, Utah, Wyoming, Colorado, Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.
Yellow	50% and over	Washington, Oregon, Idaho, Utah, Wyoming, Colorado, Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.
Light Yellow	40% and over	Washington, Oregon, Idaho, Utah, Wyoming, Colorado, Montana, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, Louisiana, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, Massachusetts, Vermont, New Hampshire, Maine, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.

After looking at the data it is obvious that we have an issue with returns specifically on the west coast with the three highest return rates per state located there. If we take out Nevada the states on the western half of the United States have a much higher return rate. What are the reasons for this specifically? Is there another superstore on the west coast with cheaper prices?

Return Rate By Month

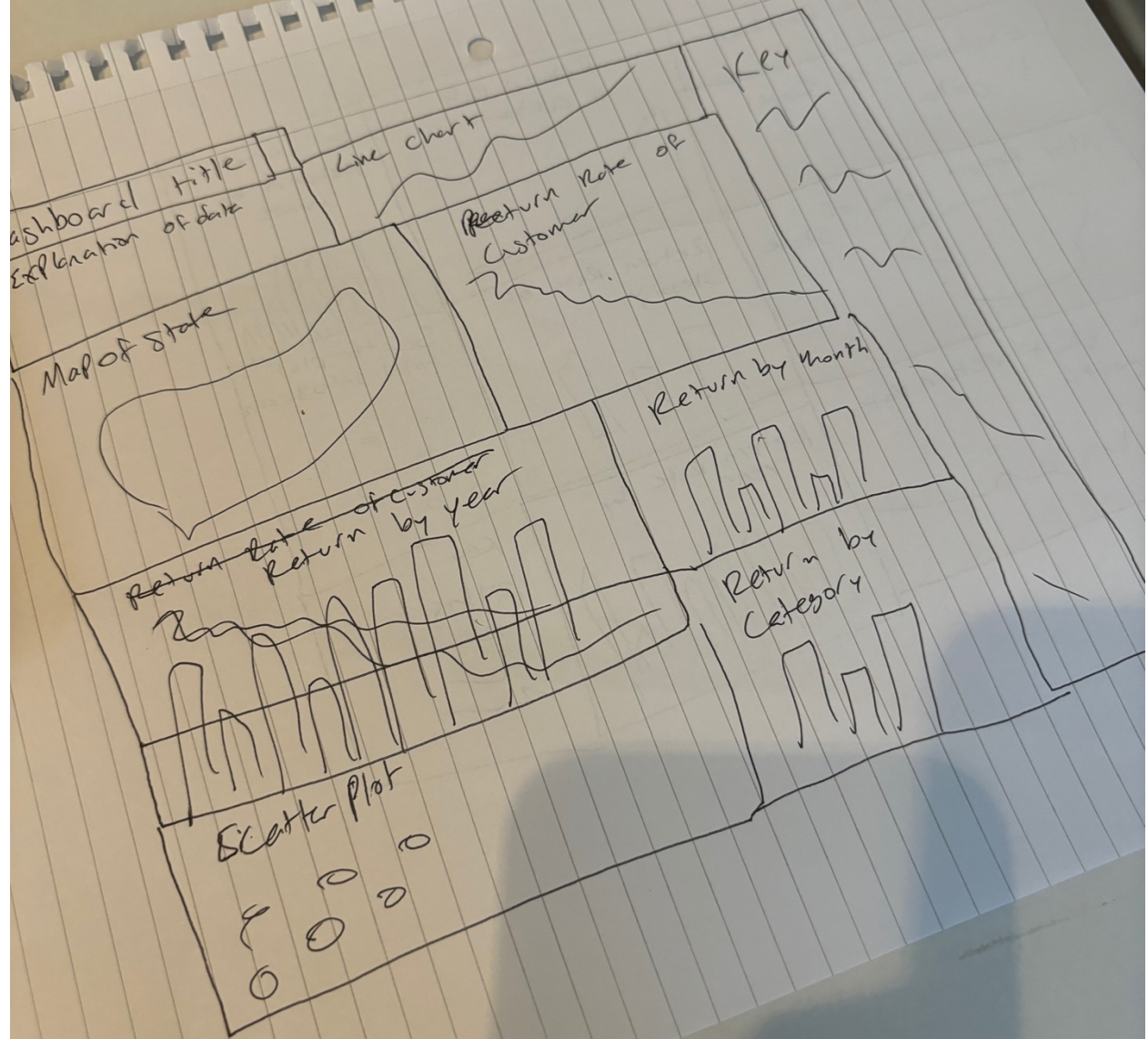


Quarter 3 is where the return rates spike. Due to students going back to school that seems to be a time of high returns. Quarter 3 in 2021 showed substantial growth in the return rates. While examining these results that is an area that needs to be looked at with the potential to increase the yearly. Revenue substantially.

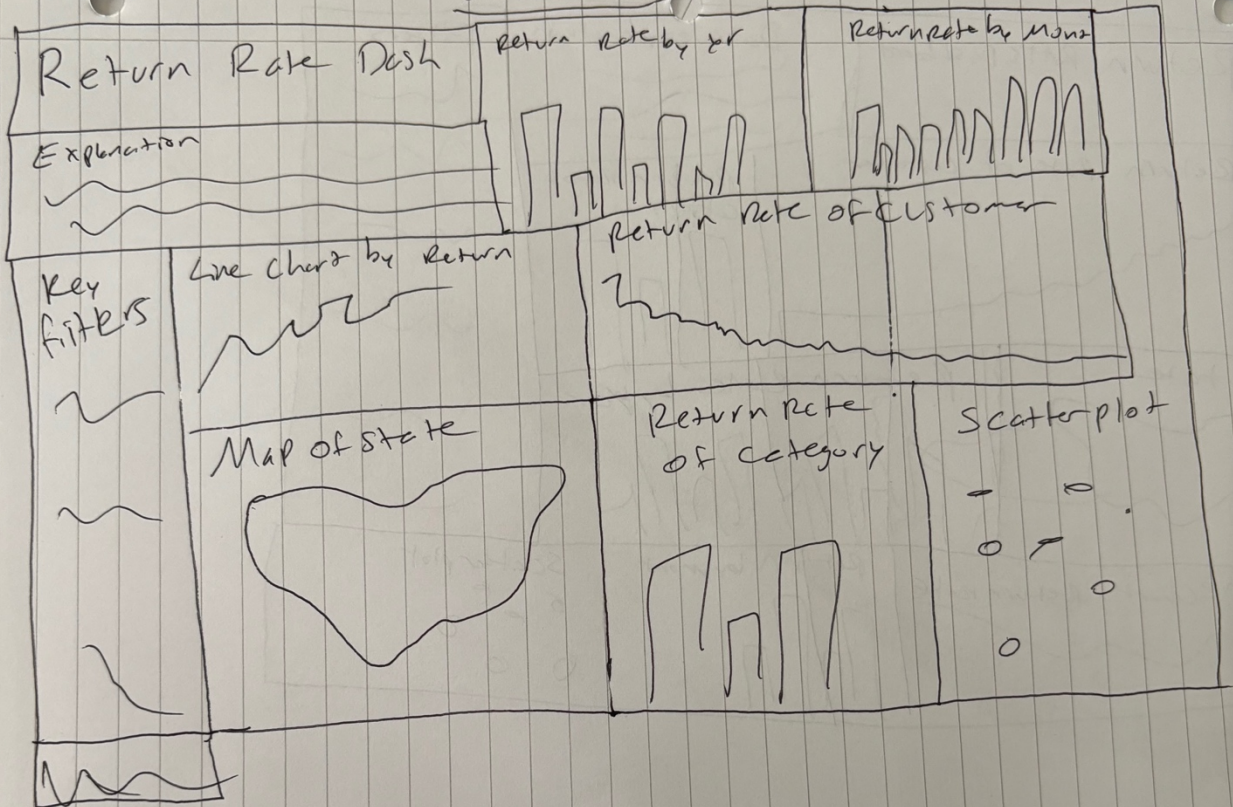
Conclusion:

With the data presented I suggest we first take a look at the states on the west coast, get in touch with the managers and leaders over there and find out what the reasoning is behind the influx in returns. With the data on the yearly and monthly returns I believe we need to create a survey for our customers and find out why they are returning these items. Are we outdated? Is there a new and cheaper product that we do not have in our selection? If we find out the issues in these specific areas It will make the company more profitable.

MOCK DATA PART 2:



Better proportions

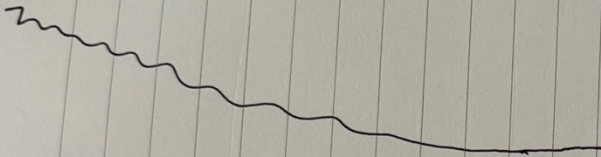


Return RATE Dashboard

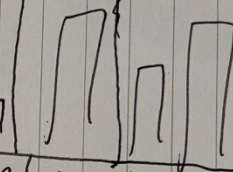
Data exploration

Filters

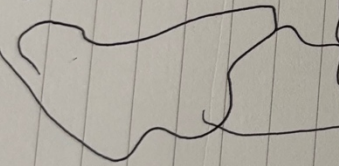
Return Rate of Customer



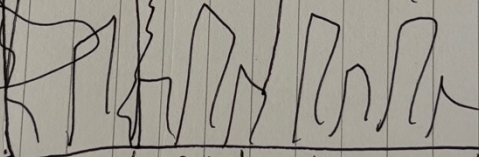
Return Rate by Category



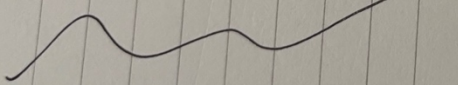
State



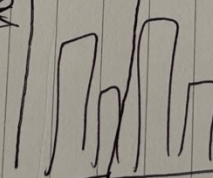
Return Rate by Year



Line chart Return rate



Return by month



Scatter plot

