Understanding superstore

Although Superstore has been doing well in business for a few years, there has been an increase in the numbers of returned orders at the Superstore.

The analysis conducted is to help the CEO of the Superstore to understand what is causing customers to return their orders and suggested steps to reduce the volume of returned orders.

Superstore Data

To conduct the analysis we have used the data collected from superstore.

More specifically we have used the sales and returns data and have compared them over multiple factors which will be presented.

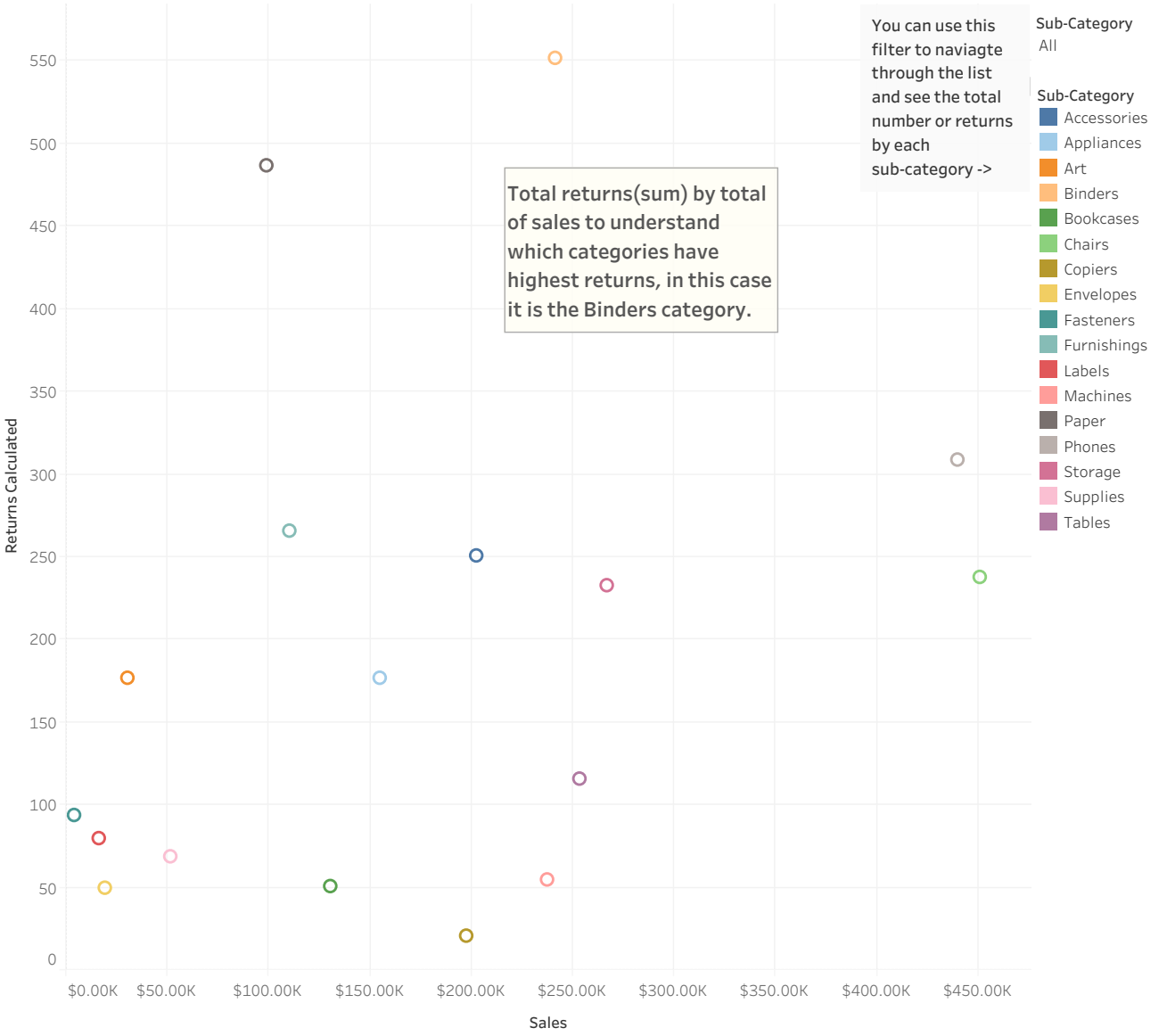
What the data means and how was it used

To carry out the study we have compared data in different ways.

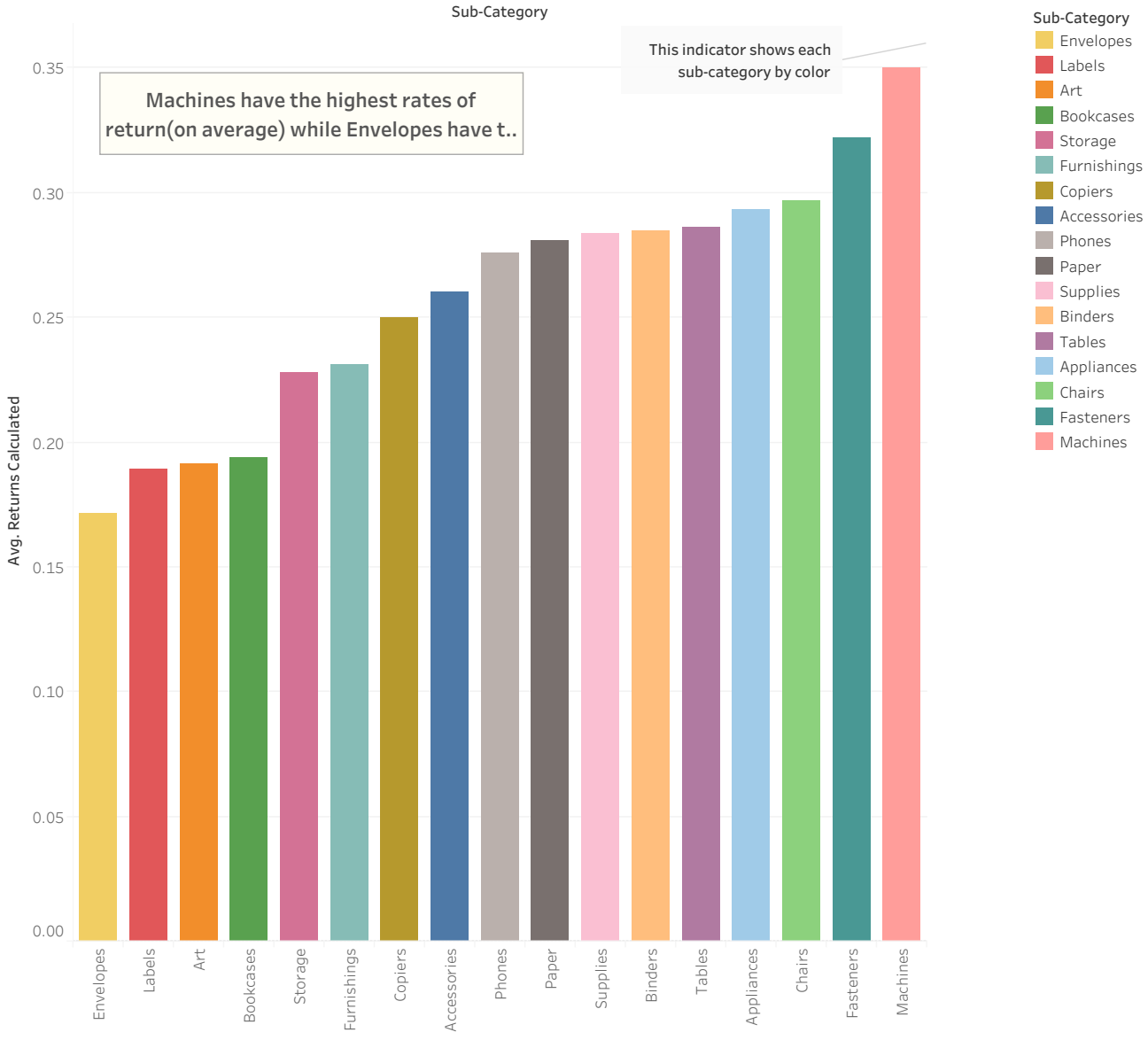
In the first chart demonstrated, the total returns of the total sales was measured using the sum.

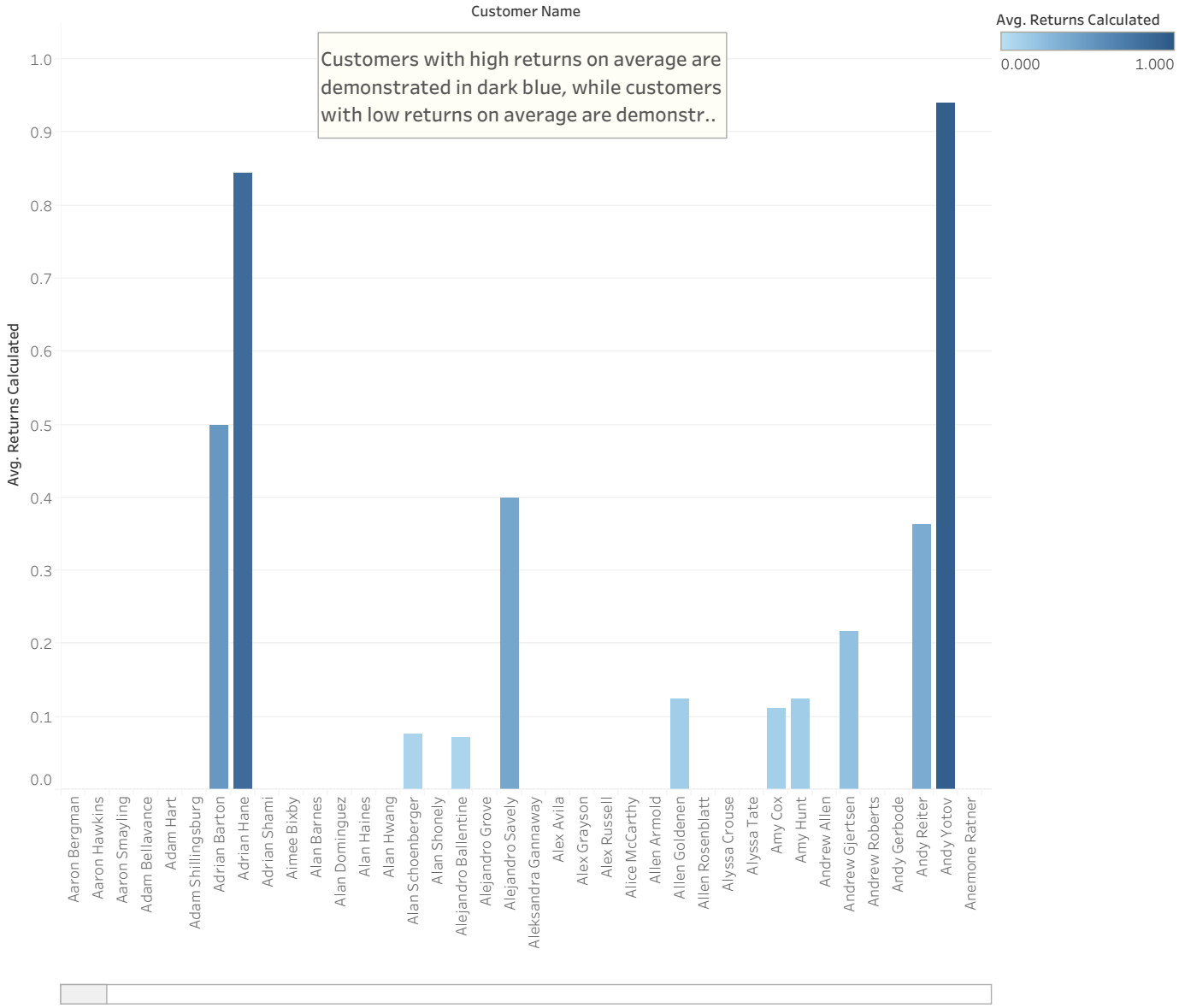
In the following slides and charts, we have used the Average to understand average returns by products, customers, location, month, and even regions.

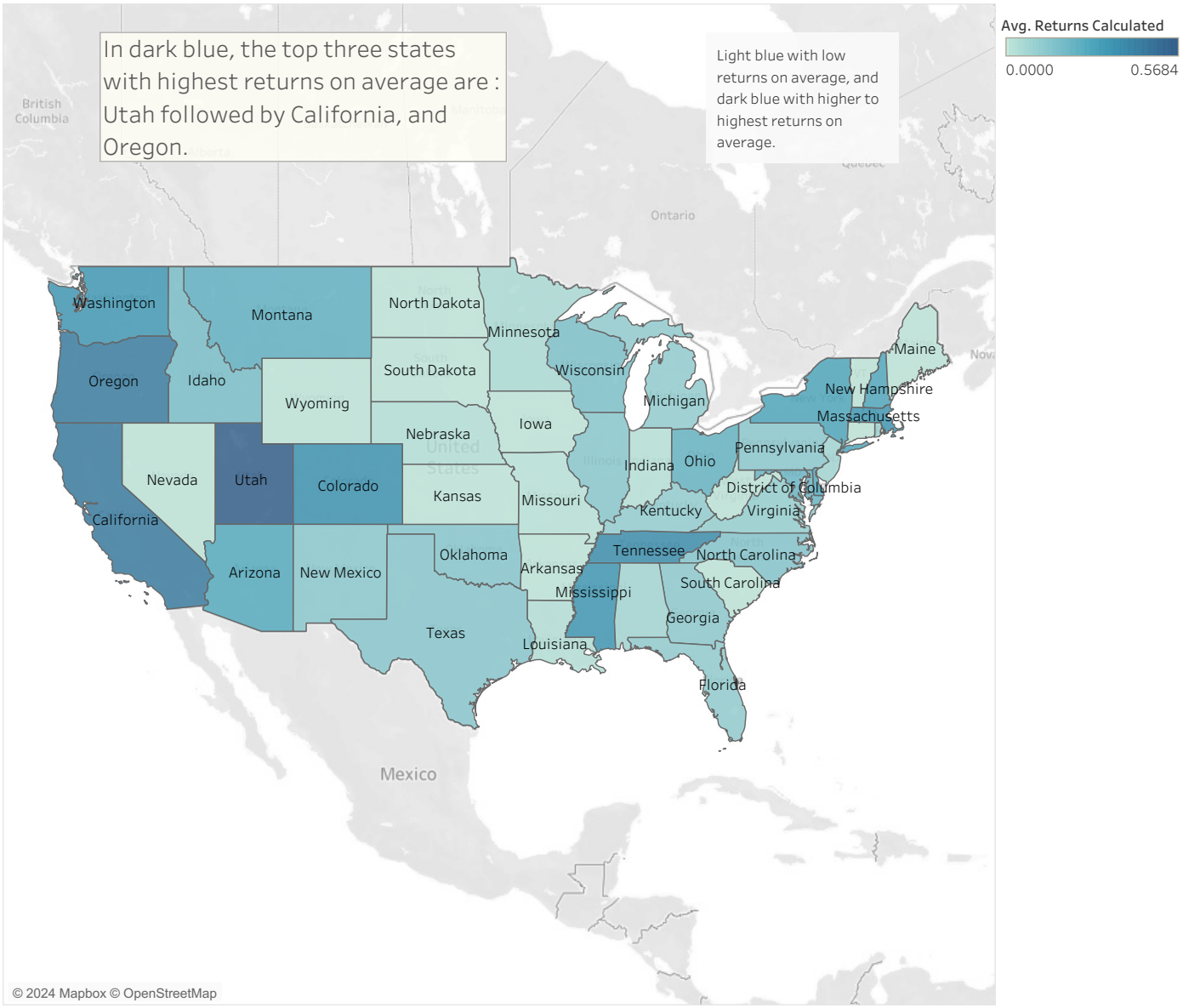
As we dive into the presentation, it will be easier to understand what this all means so lets jump right in!


You can use this filter to naviagte through the list and see the total number or returns by each sub-category ->
Total returns(sum) by total of sales to understand which categories have highest returns, in this case it is the Binders category.
Sub-Category
All
Sub-Category
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
Returns Calculated
550
500
450
400
350
300
250
200
150
100
50
0
$0.00K
$50.00K
$100.00K
$150.00K
$200.00K
$250.00K
$300.00K
$350.00K
$400.00K
$450.00K
Sales

Data Used	Methodology	Comparing total sales vs total returns	Return rate by Category	Average returns per customer	Average returns per location	Average returns per month




Customer Name
Avg. Returns Calculated
0.000
1.000
Customers with high returns on average are demonstrated in dark blue, while customers with low returns on average are demonstr..
Avg. Returns Calculated
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
Aaron Bergman
Aaron Hawkins
Aaron Smayling
Adam Bellavance
Adam Hart
Adam Shillingsburg
Adrian Barton
Adrian Hane
Adrian Shami
Aimee Bixby
Alan Barnes
Alan Dominguez
Alan Haines
Alan Hwang
Alan Schoenberger
Alan Shonely
Alejandro Ballentine
Alejandro Grove
Alejandro Savely
Aleksandra Gannaway
Alex Avila
Alex Grayson
Alex Russell
Alice McCarthy
Allen Armold
Allen Goldenen
Allen Rosenblatt
Alyssa Crouse
Alyssa Tate
Amy Cox
Amy Hunt
Andrew Allen
Andrew Gjertsen
Andrew Roberts
Andy Gerbode
Andy Reiter
Andy Yotov
Anemone Ratner


In dark blue, the top three states with highest returns on average are : Utah followed by California, and Oregon.
Light blue with low returns on average, and dark blue with higher to highest returns on average.
Avg. Returns Calculated
0.0000
0.5684
British Columbia
Ontario
Washington
Montana
North Dakota
Minnesota
Oregon
Idaho
South Dakota
Wisconsin
Michigan
Maine
New Hampshire
Massachusetts
Wyoming
Iowa
Nebraska
Pennsylvania
Nevada
Utah
Colorado
Kansas
Indiana
Ohio
District of Columbia
Missouri
Kentucky
Virginia
California
Oklahoma
Tennessee
North Carolina
Arizona
New Mexico
Arkansas
South Carolina
Mississippi
Georgia
Texas
Louisiana
Florida
Mexico
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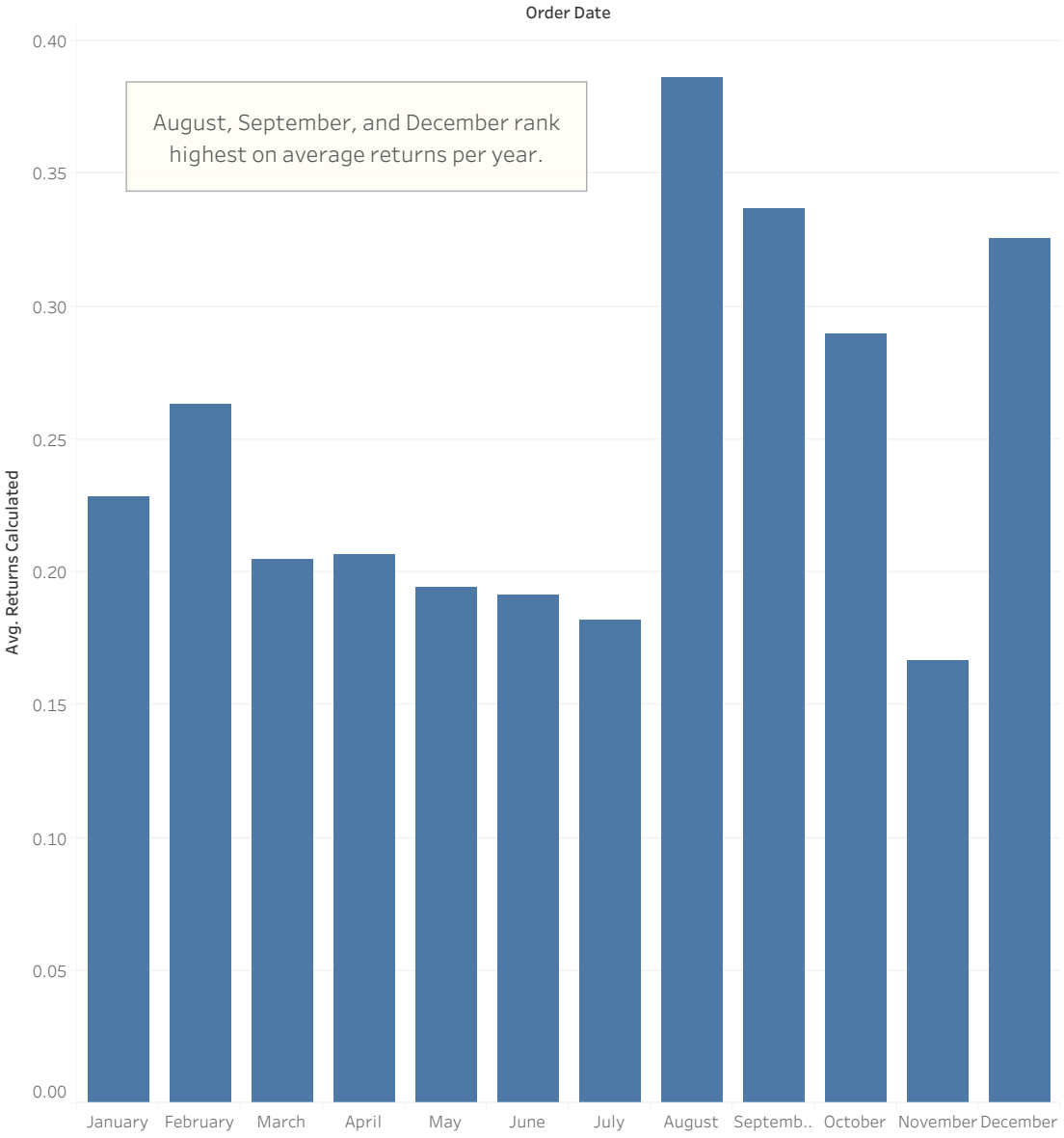
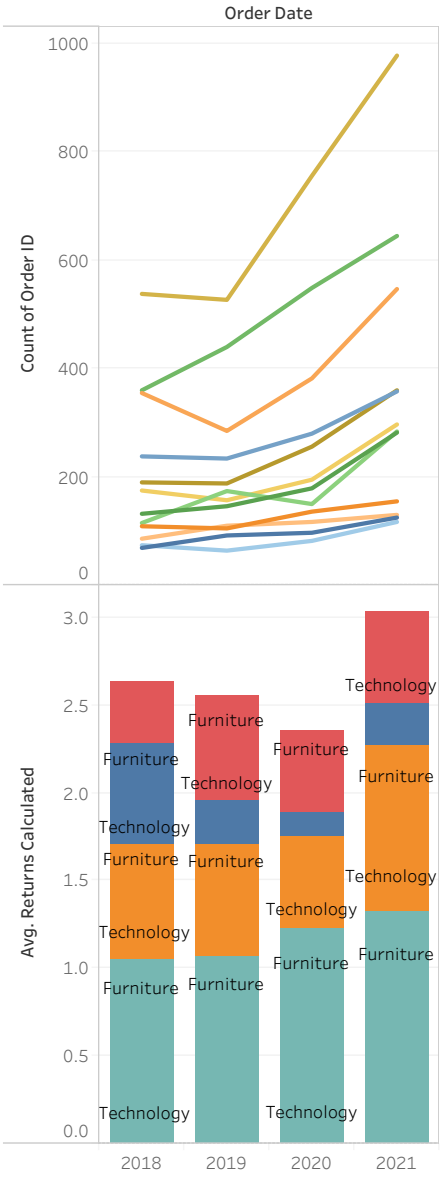

Order Date
August, September, and December rank highest on average returns per year.
Avg. Returns Calculated
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
January
February
March
April
May
June
July
August
Septemb..
October
November
December



Average returns per customer, category, by year:
Office supplies in the West region with the highest average return in the year 2021.

Region, Category
- South, Furniture
- South, Office Supplies
- South, Technology
- Central, Furniture
- Central, Office Suppli..
- Central, Technology
- East, Furniture
- East, Office Supplies
- East, Technology
- West, Furniture
- West, Office Supplies
- West, Technology

Region
- South
- Central
- East
- West

Average returns by product as well as region.
2021 has the highest on average returns in the west and East regions

Summary

Returns should be measured by the return rate (average) instead of Total returns(sum) as it gives a clear understanding of the average return per category/customer.

Three states have the highest on average returns: Utah, California, and Oregon.

Returns have been demonstrated higher in 2021 in the West and East regions.

The highest three months for returns were August, September and December.

Proposed next steps

Recommended next steps would be:

Contact customers with higher returns (especially those in Utah, California, and Oregon) (e.g via e-mail) and ask for a review of the returned products to get a better understanding for the cause of return and how to improve returned products.

Encourage customers to review with a free gift or a small discount on the next purchase.

For regions, and states we can conduct a study to determine which marketing strategy would increase sales.

For products with higher returns, we can improve quality of products, sell at a discounted pric..