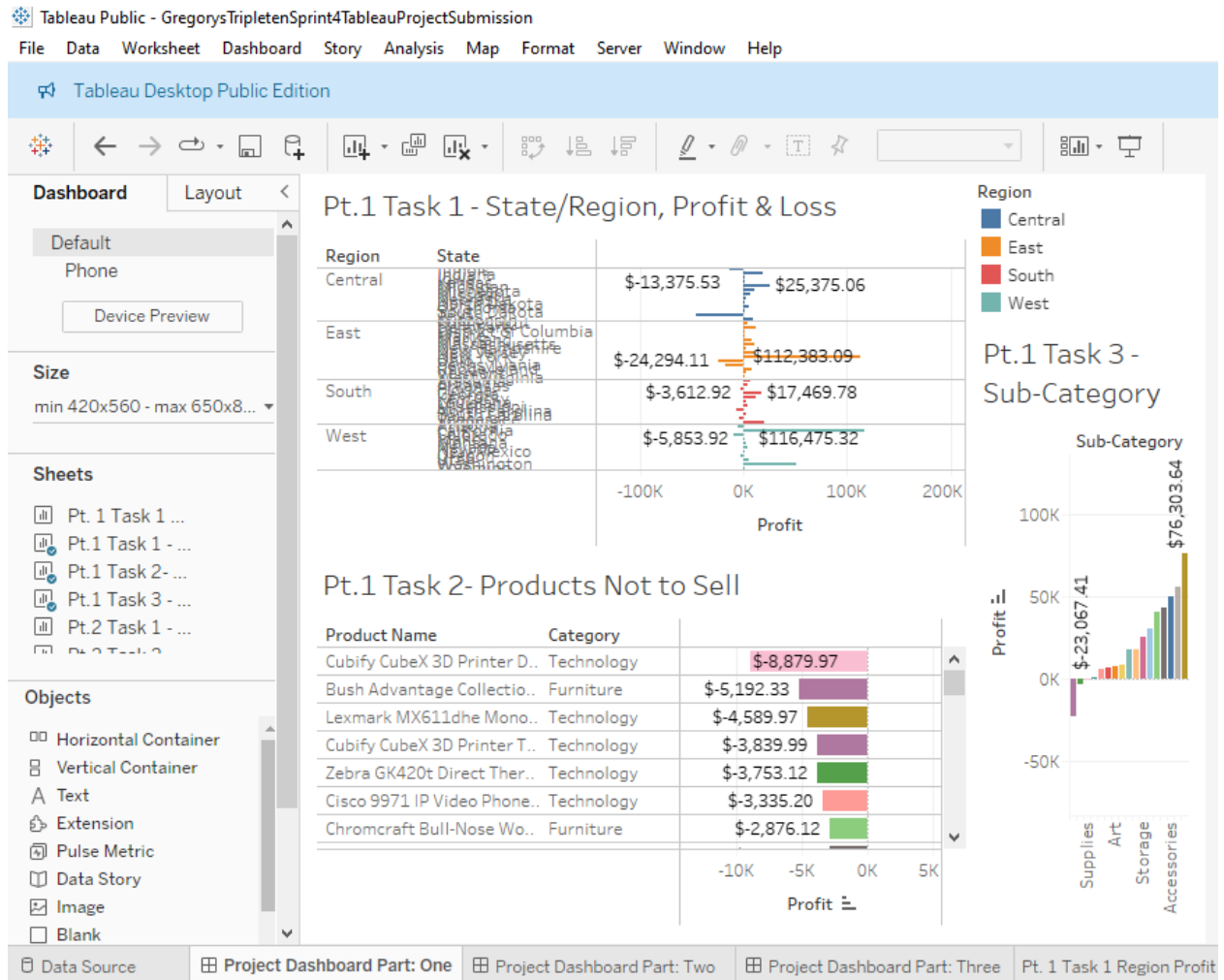


Project 4: Data Visualization with Tableau

Dashboard: Part one

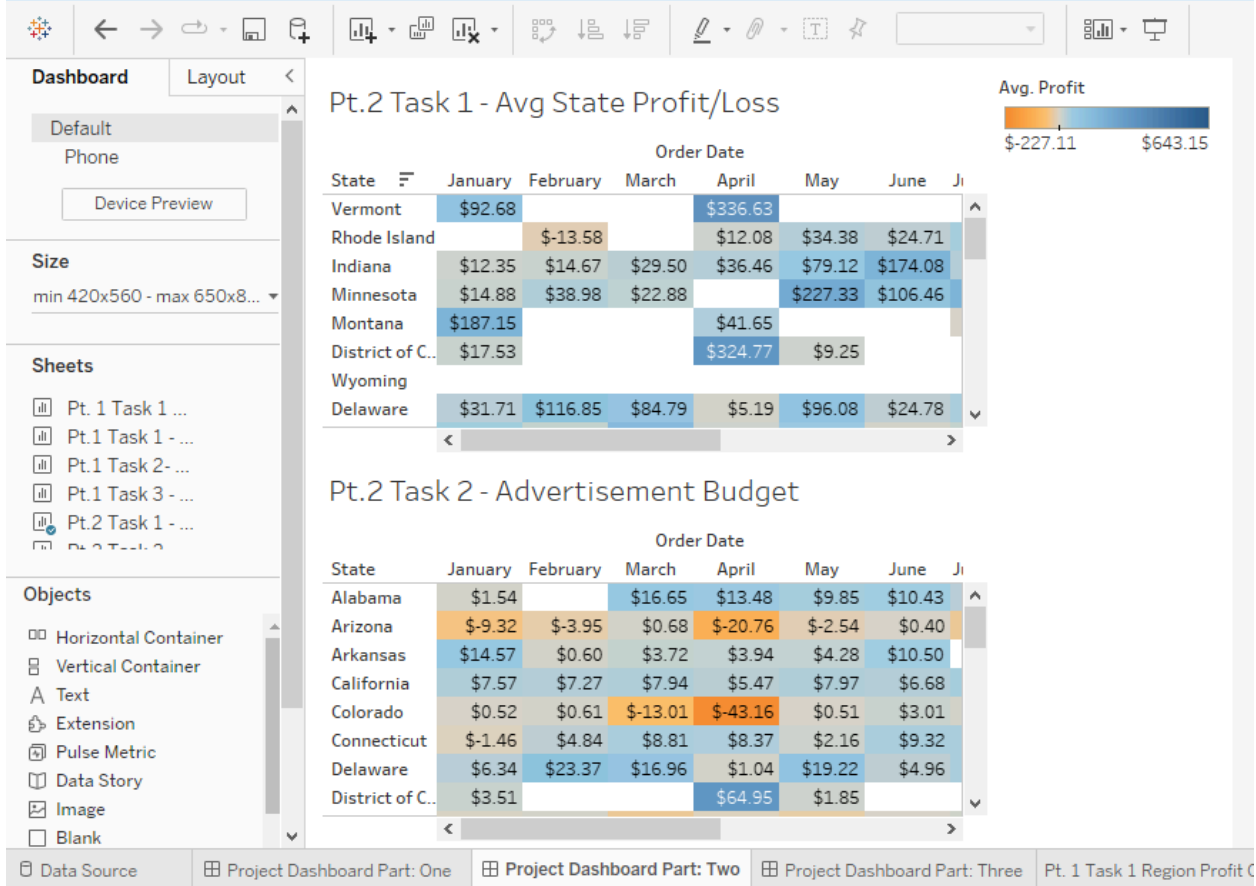


Dashboard: Part Two

Tableau Public - GregorysTripletensPrint4TableauProjectSubmission

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

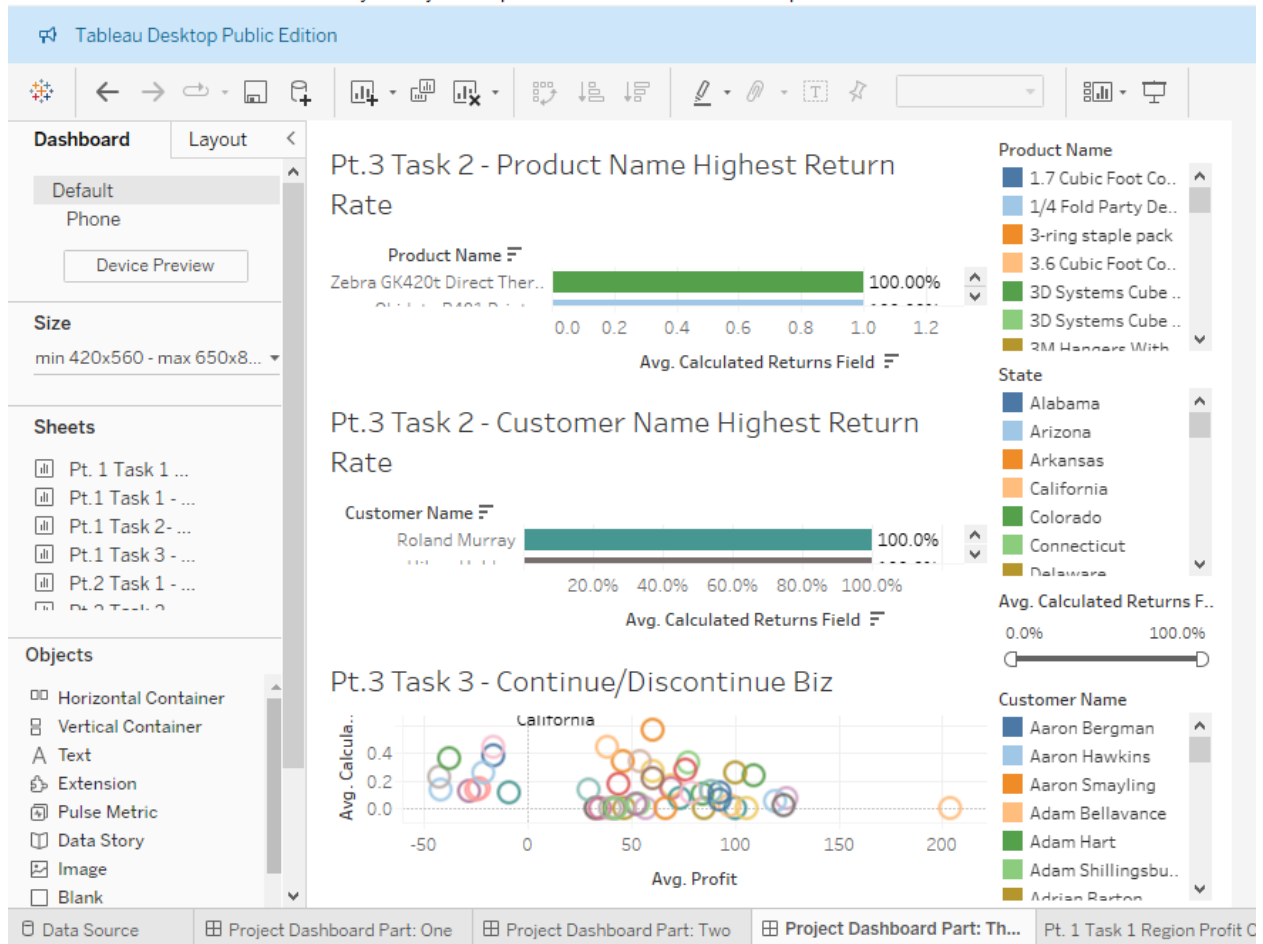
Tableau Desktop Public Edition



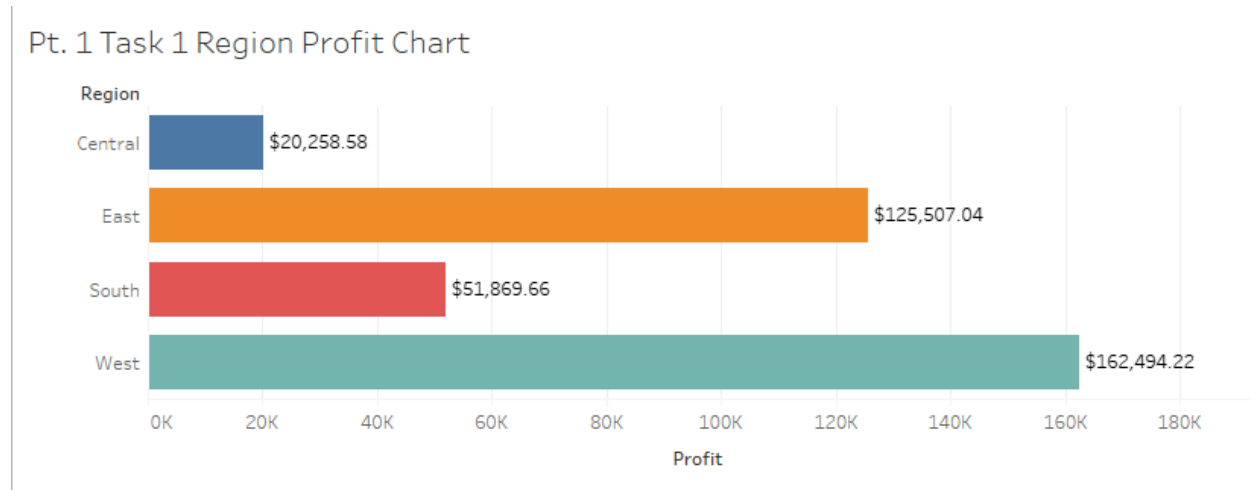
Dashboard: Part Three

Tableau Public - GregorysTriplettenSprint4TableauProjectSubmission

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help



Pt.1 Task 1 Region Profit Chart



PART: ONE - TASK ONE

Among the pairs of dimensions (e.g., subcategory + region, or shipping mode + product ID) which are the two biggest profit centers and two biggest loss-makers? Justify your conclusion with a visualization.

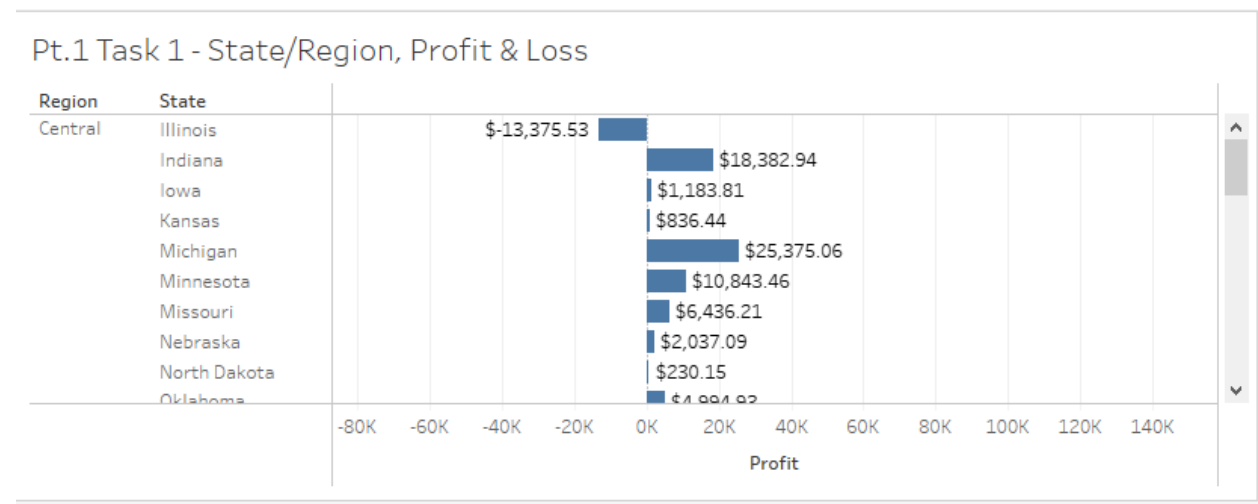
ANSWER

It is clear to see that from this Bar Chart that the West Region is the most profitable Region. This chart highlights a total profit of \$162.494.22, which is greater than the other three regions by comparison

SUMMARY OF CHART

Sum of Profit for each Region. Color shows details about Region. The marks are labeled by sum of Profit.

Pt.1 Task 1 - State/Region, Profit & Loss



PART: ONE - TASK ONE

Among the pairs of dimensions (e.g., subcategory + region, or shipping mode + product ID) which are the two biggest profit centers and two biggest loss-makers? Justify your conclusion with a visualization.

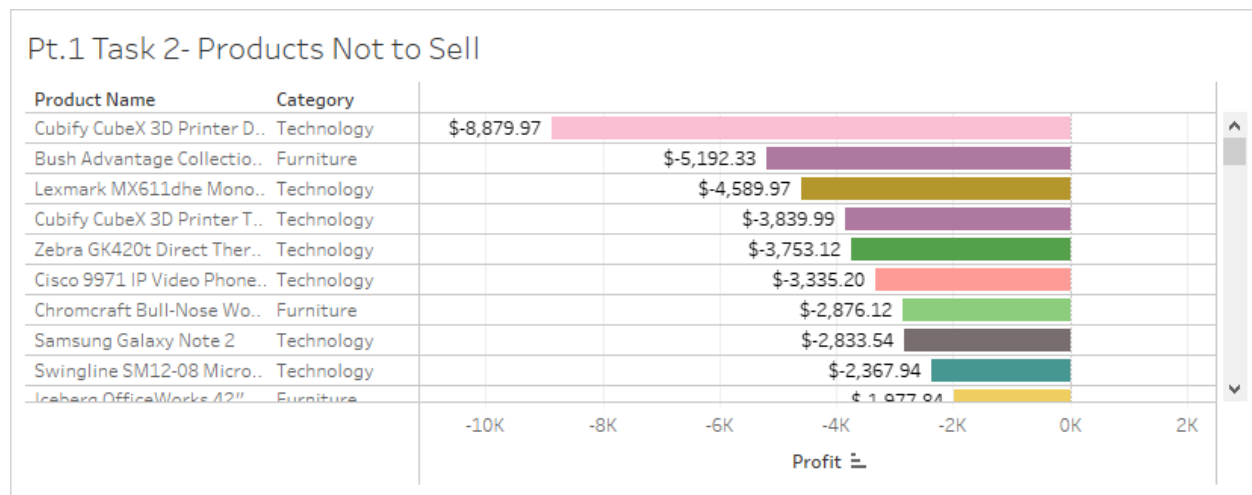
ANSWER

This bar chart highlights that by toggling the SUM(PROFIT) filter we can easily see that the West Region just like the previous chart highlighted is most profitable, and California is the biggest profit state with a total profit of \$116,475.32. Also by using the SUM(PROFIT) filter and toggling it to only show the profit loss, when can see that Central has the largest profit loss, and the State of Texas has the largest profit loss of \$-45,683.17.

SUMMARY OF CHART

Sum of Profit for each State broken down by Region. Color shows details about Region. The marks are labeled by sum of Profit. The view is filtered on sum of Profit and State. The sum of Profit filter includes everything. The State filter keeps 49 of 49 members.

Pt.1 Task 2- Products Not to Sell



Pt.1 Task 2- Products Not to Sell

Which products should the superstore stop selling? Justify your conclusion with a visualization.

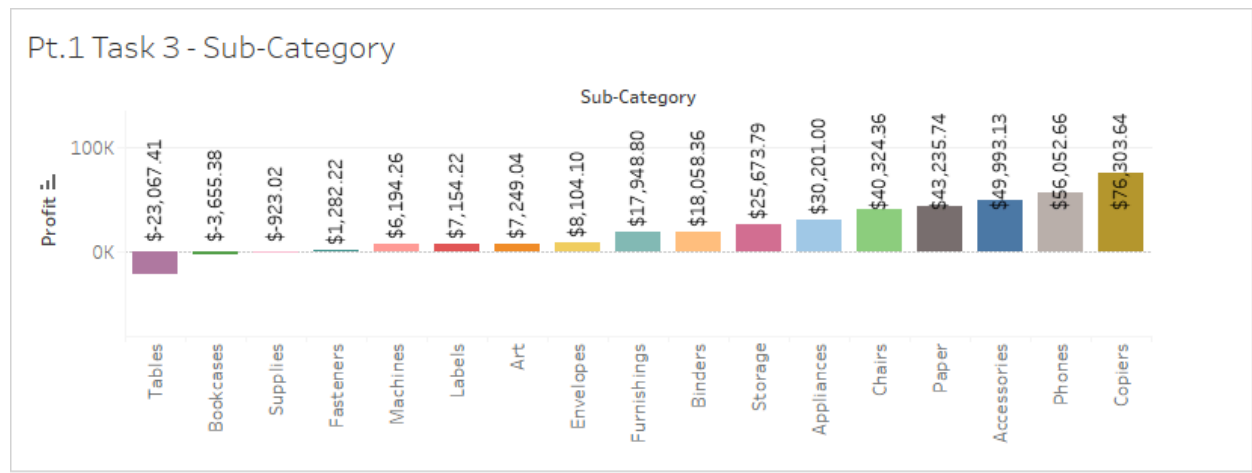
ANSWER

Considering that making revenue is the goal, then based on this chart any product shown to be in the negative should be discontinued as they are generating considerable losses in profit to the company. I toggled the SUM(PROFIT) filter to especially reflect this conclusion.

SUMMARY OF CHART

Sum of Profit for each Category broken down by Product Name. Color shows details about Product Name. The marks are labeled by sum of Profit. The view is filtered on sum of Profit, which includes everything.

Pt.1 Task 3 - Sub Category



Pt.1 Task 3 - Sub-Category

Which product subcategories should the store focus on and which should they stop selling? Choose 3 of each.

ANSWER

Based on this visualization, the three Sub-Categories we should focus on are Copiers, Phones, Accessories.

The three categories we should not focus on are Tables, Bookcases, & Supplies.

SUMMARY OF CHART

Sum of Profit for each Sub-Category. Color shows details about Sub-Category. The marks are labeled by sum of Profit. The view is filtered on sum of Profit, which includes everything.

Pt.2 Task 1 - Avg State Profit/Loss

Pt.2 Task 1 - Avg State Profit/Loss

State	Order Date											
	January	February	March	April	May	June	July	August	Septemb..	October	November	December
Vermont	\$92.68			\$336.63							\$595.96	\$67.66
Rhode Island		\$-13.58		\$12.08	\$34.38	\$24.71	\$49.73	\$26.88	\$94.02	\$162.38	\$20.12	\$249.99
Indiana	\$12.35	\$14.67	\$29.50	\$36.46	\$79.12	\$174.08	\$35.98	\$94.46	\$61.35	\$643.15	\$70.88	\$98.90
Minnesota	\$14.88	\$38.98	\$22.88		\$227.33	\$106.46	\$185.08	\$14.04	\$339.19	\$284.31	\$58.56	\$35.64
Montana	\$187.15			\$41.65			\$2.21	\$2.69	\$10.37		\$32.12	\$152.49
District of Columbia	\$17.53			\$324.77	\$9.25							\$13.23
Wyoming											\$100.20	
Delaware	\$31.71	\$116.85	\$84.79	\$5.19	\$96.08	\$24.78	\$45.56	\$13.82	\$34.38	\$35.58	\$243.23	\$17.07
Missouri	\$51.66	\$17.80	\$146.40	\$12.44	\$59.05	\$4.75	\$17.93	\$50.14	\$80.16	\$486.12	\$54.77	\$372.22
Michigan	\$182.03	\$20.62	\$72.12	\$114.25	\$151.82	\$64.82	\$51.87	\$52.88	\$60.87	\$20.52	\$56.77	\$142.71

Pt.2 Task 1 - Avg State Profit/Loss

Identify the 3 best combinations of states and month of the year to advertise in. Make a visualization of the average profit for each month of the year for those 3 states.

ANSWER

The 3 best combinations of states and month of the year to advertise in are as follows:

1. Indiana & October
2. Vermont & November
3. Washington & March

SUMMARY OF CHART

Average of Profit broken down by Order Date Month vs. State. Color shows average of Profit. The marks are labeled by average of Profit. The view is filtered on State and Order Date Month. The State filter keeps 49 of 49 members. The Order Date Month filter keeps 12 of 12 members.

Pt.2 Task 2 - Advertisement Budget

Pt.2 Task 2 - Advertisement Budget

State	Order Date											
	January	February	March	April	May	June	July	August	Septemb..	October	November	December
Alabama	\$1.54		\$16.65	\$13.48	\$9.85	\$10.43	\$6.39	\$11.82	\$16.63	\$22.41	\$53.31	\$16.9
Arizona	\$-9.32	\$-3.95	\$0.68	\$-20.76	\$-2.54	\$0.40	\$-6.18	\$9.19	\$-0.99	\$-2.16	\$-1.46	\$-6.7
Arkansas	\$14.57	\$0.60	\$3.72	\$3.94	\$4.28	\$10.50		\$14.41	\$45.40	\$8.19	\$3.39	\$12.1
California	\$7.57	\$7.27	\$7.94	\$5.47	\$7.97	\$6.68	\$10.14	\$11.34	\$6.83	\$6.89	\$6.12	\$7.5
Colorado	\$0.52	\$0.61	\$-13.01	\$-43.16	\$0.51	\$3.01	\$1.29	\$-1.67	\$-2.20	\$-28.15	\$0.20	\$-4.7
Connecticut	\$-1.46	\$4.84	\$8.81	\$8.37	\$2.16	\$9.32	\$9.08	\$14.08	\$4.94	\$11.02	\$9.42	\$15.7
Delaware	\$6.34	\$23.37	\$16.96	\$1.04	\$19.22	\$4.96	\$9.11	\$2.76	\$6.88	\$7.12	\$48.65	\$3.4
District of C..	\$3.51			\$64.95	\$1.85							\$2.6
Florida	\$-0.50	\$1.20	\$-6.17	\$-0.88	\$-4.15	\$0.23	\$1.59	\$-0.72	\$1.01	\$-2.27	\$-1.89	\$-3.2
Georgia	\$35.36	\$16.91	\$63.68	\$28.14	\$12.38	\$11.85	\$5.15	\$8.28	\$8.00	\$8.64	\$12.28	\$5.5

Pt.2 Task 2 - Advertisement Budget

Argue how much you would be willing to pay in advertising for those states in those months.

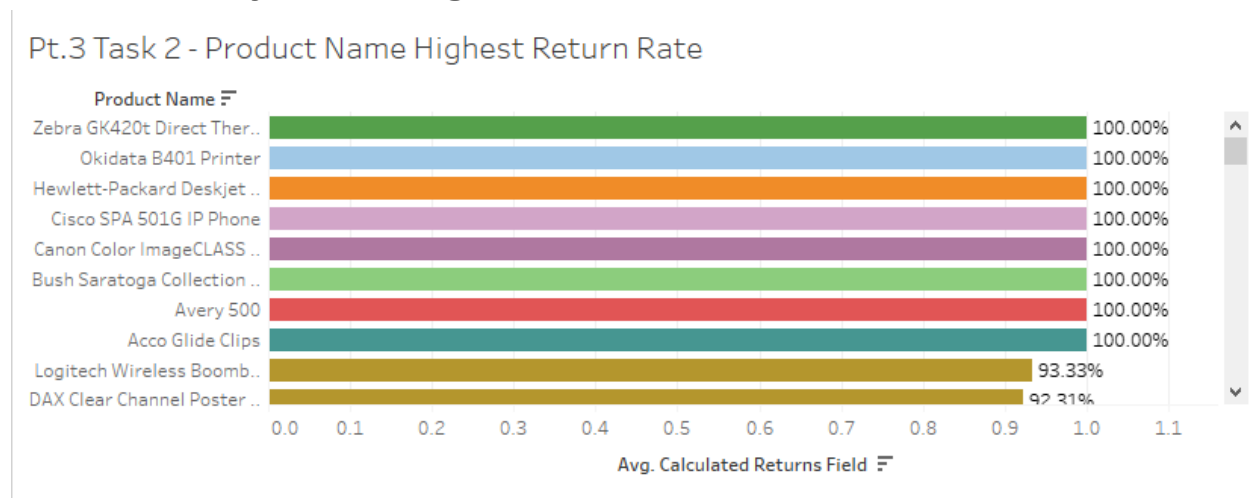
ANSWER

1. Indiana & October = \$128.63
2. Vermont & November = \$119.19
3. Washington & March = \$104.27

SUMMARY OF CHART

Advertising Calculation broken down by Order Date Month vs. State. Color shows Advertising Calculation. The marks are labeled by Advertising Calculation. The view is filtered on State and Order Date Month. The State filter keeps 49 of 49 members. The Order Date Month filter keeps 12 of 12 members.

Pt.3 Task 2 - Project Name Highest Return Rate



Pt.3 Task 2 - Product Name Highest Return Rate

Which products have the highest return rate?

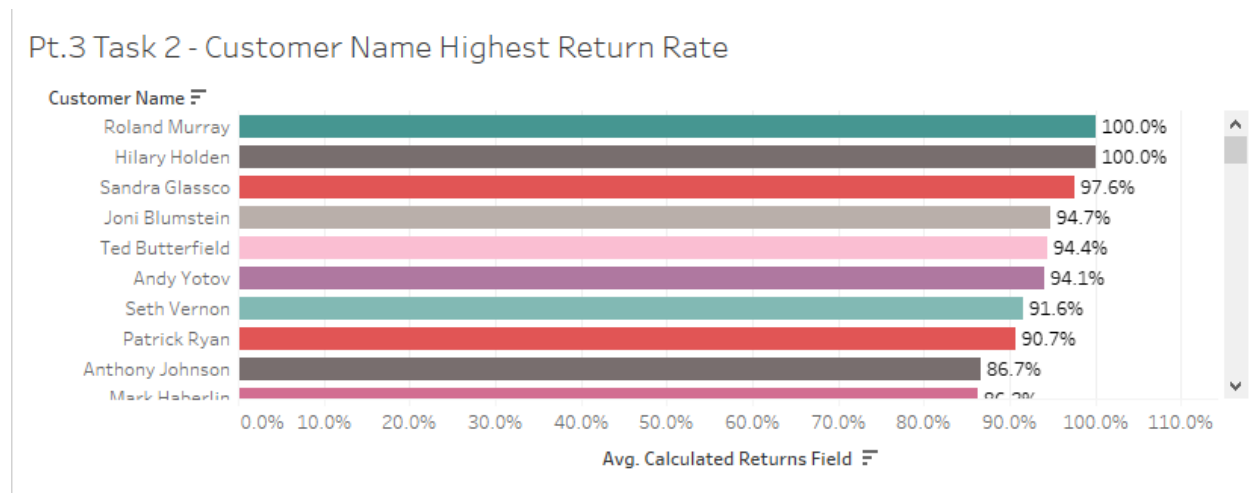
ANSWER

This visualization clearly indicates which products have the highest returns rates in descending order of greatest to least.

SUMMARY OF CHART

Average of Calculated Returns Field for each Product Name. Color shows details about Product Name. The marks are labeled by average of Calculated Returns Field. The view is filtered on average of Calculated Returns Field, which includes everything.

Pt.3 Task 2 - Customer Name Highest Return Rate



Pt.2 Task 2 - Customer Name Highest Return Rate

Which customers have the highest return rate?

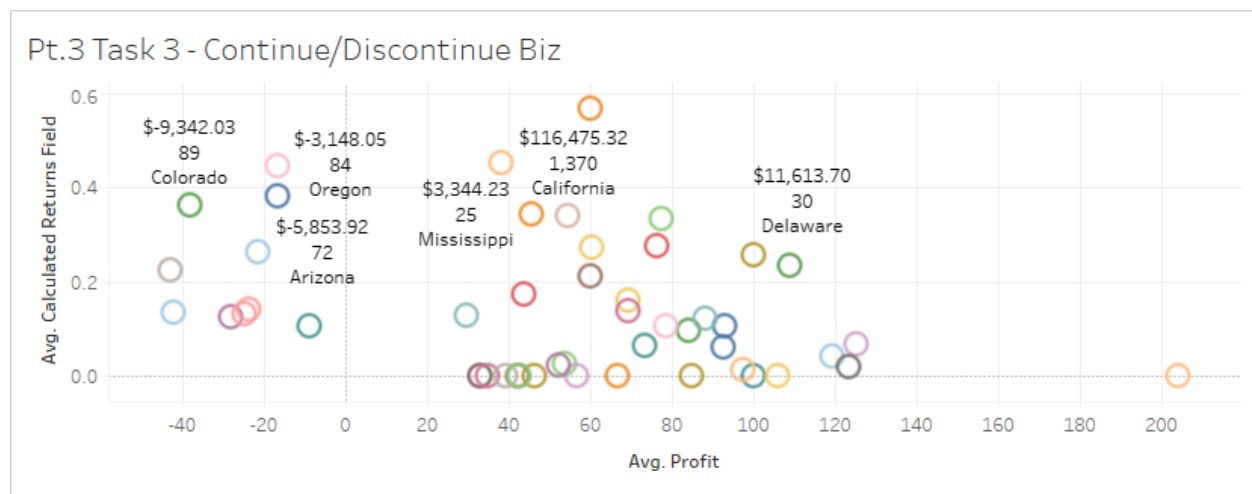
ANSWER

This visualization clearly indicates which customers have the highest returns rates in descending order of greatest to least.

SUMMARY OF CHART

Average of Calculated Returns Field for each Customer Name. Color shows details about Customer Name. The marks are labeled by average of Calculated Returns Field. The view is filtered on average of Calculated Returns Field, which includes everything.

Pt.3 Task 3 - Continue / Discontinue Biz



Pt.3 Task 3 - Continue/Discontinue business

In a separate sheet, make a visualization of the average profit against the average return rate on a dimension of your choice (state, shipping mode, product type, etc.). Present a visual argument why the superstore should do away with or keep doing business on the basis of this dimension.

ANSWER

Based on this state profit/loss & calculated returns visualisation, it is clear to see that business with every state in the negative should be improved or discontinued. Also every state in the positive should be continued with more focus because they are yielding profit proving worthy of business.

Recommendations/Results

- **Product Strategy:**
 - **Focus on:** Office Supplies - Binders, Technology - Copiers
 - **Discontinue:** Furniture - Tables, Office Supplies - Paper
- **Advertising Strategy:**
 - Implement targeted advertising campaigns in California, New York, and Texas during the month of December.
 - Consider a return on ad spend (ROAS) target of 20% for these campaigns.
- **Return Rate Reduction:**
 - Investigate the root causes of high return rates for Furniture - Tables and Office Supplies - Binders.
 - Implement measures to improve product quality and customer satisfaction.

Conclusion

This analysis reveals exciting opportunities for the Superstore to significantly enhance its profitability. We've pinpointed high-growth areas like the West Region and California while identifying regions like Central and Texas that require closer attention.

I recommend focusing on these key strategies:

- **Product Optimization:** Prioritize high-performing subcategories such as Copiers, Phones, and Accessories. Simultaneously, streamline operations by discontinuing underperforming products like Tables, Bookcases, and Supplies.
- **Targeted Advertising:** Implement focused advertising campaigns in Indiana during October, Vermont in November, and Washington in March to capitalize on these promising markets.
- **Return Rate Reduction:** Investigate and address the root causes of high return rates for specific products and customers to improve customer satisfaction and minimize losses.
- **Regional Focus:** Prioritize business growth in profitable regions while implementing strategies to improve performance in underperforming areas like the Central Region and Texas.

By implementing these recommendations, the Superstore can capitalize on its strengths, address its weaknesses, and position itself for sustainable growth and success.