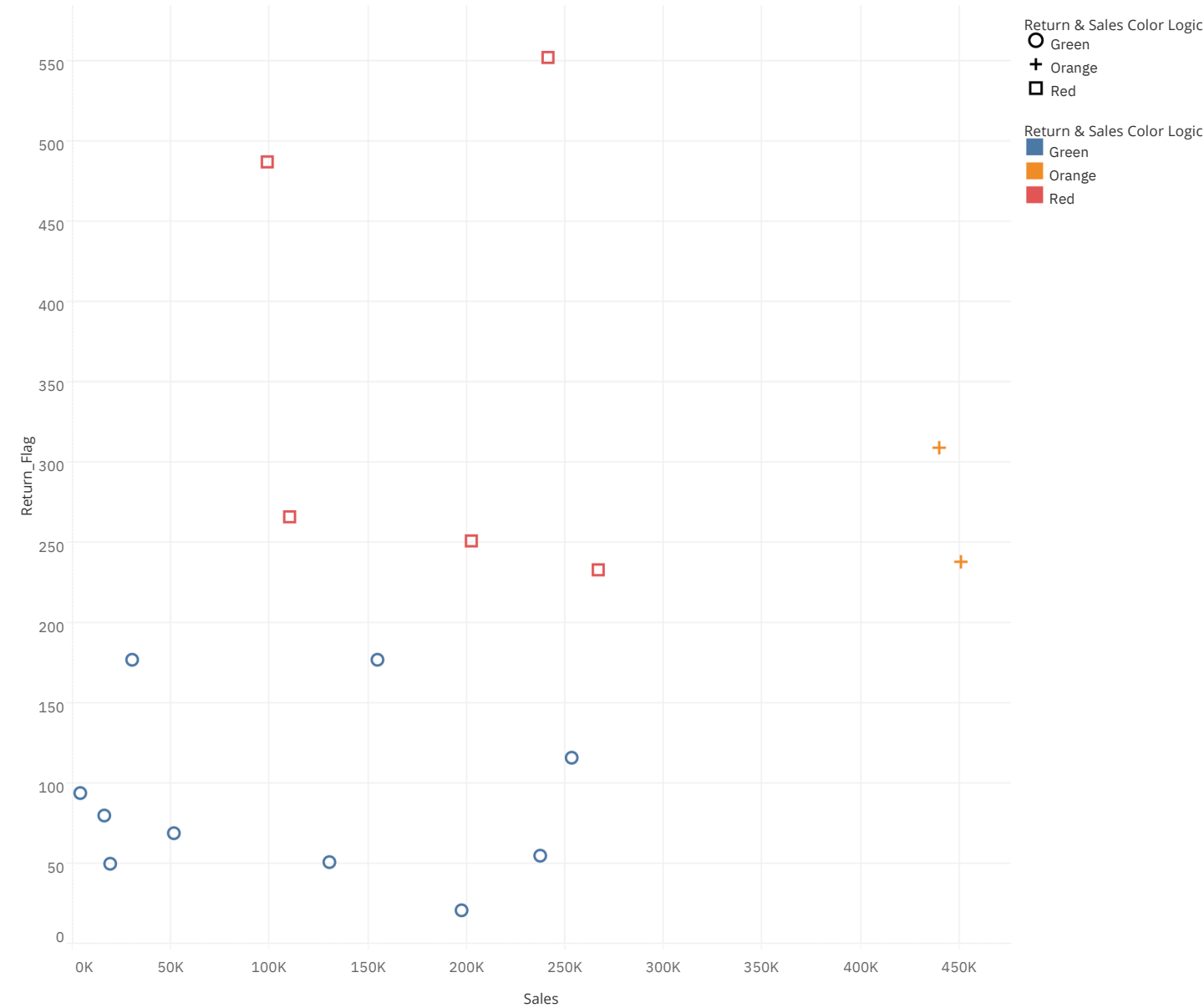


Scatterplot — Sales vs. Returns by Sub-Category



Key Insight: High return rates don’t always correlate with high sales.

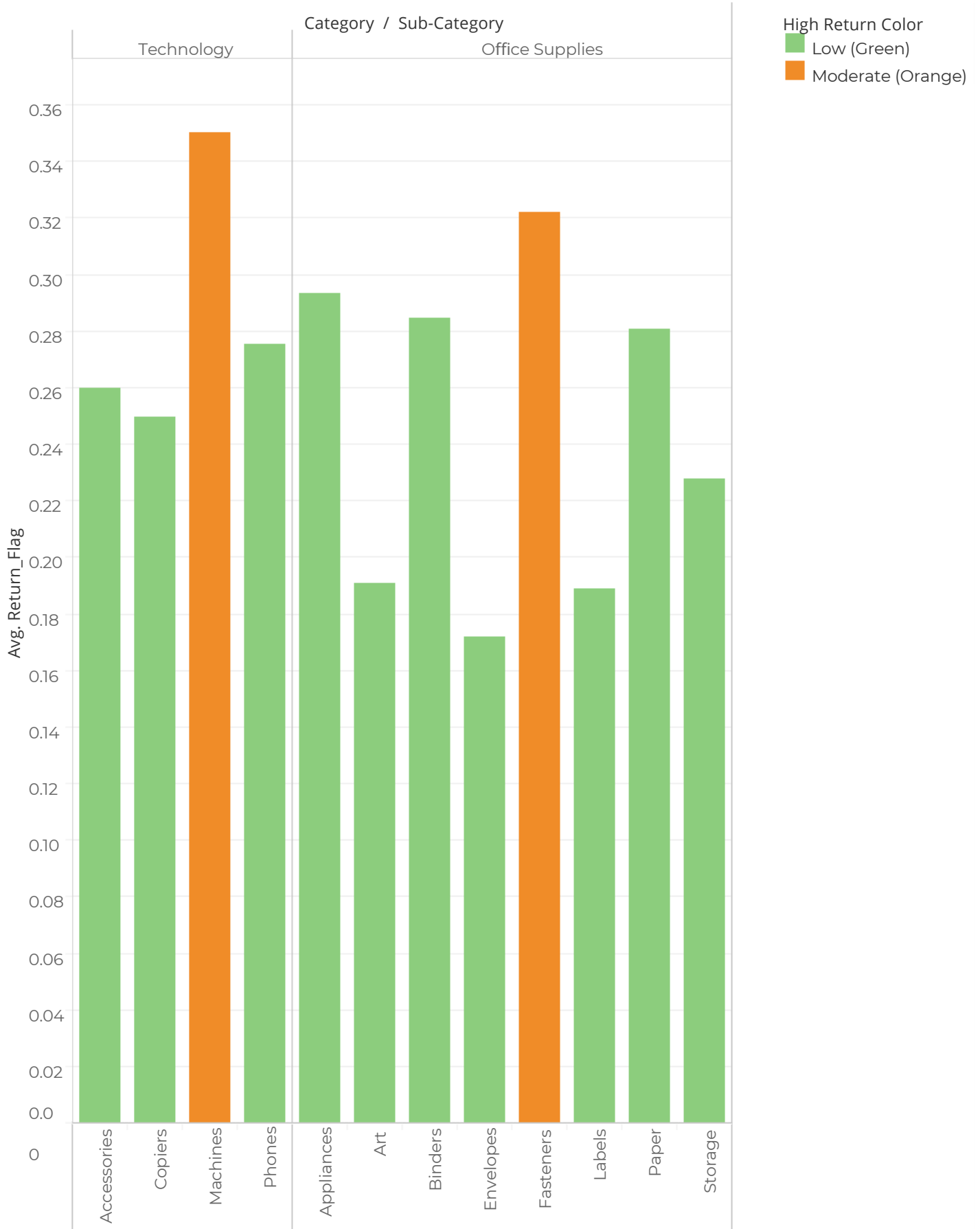
Paper: This category stands out as an outlier, with a high return rate (~28%) despite low sales. This could point to order fulfillment issues or mismatches between customer expectations and the product.

Chairs & Phones: These categories show both high sales and high return rates, suggesting quality or sizing concerns.

Binders: With moderate sales and high returns, this could indicate bulk orders or quality problems.

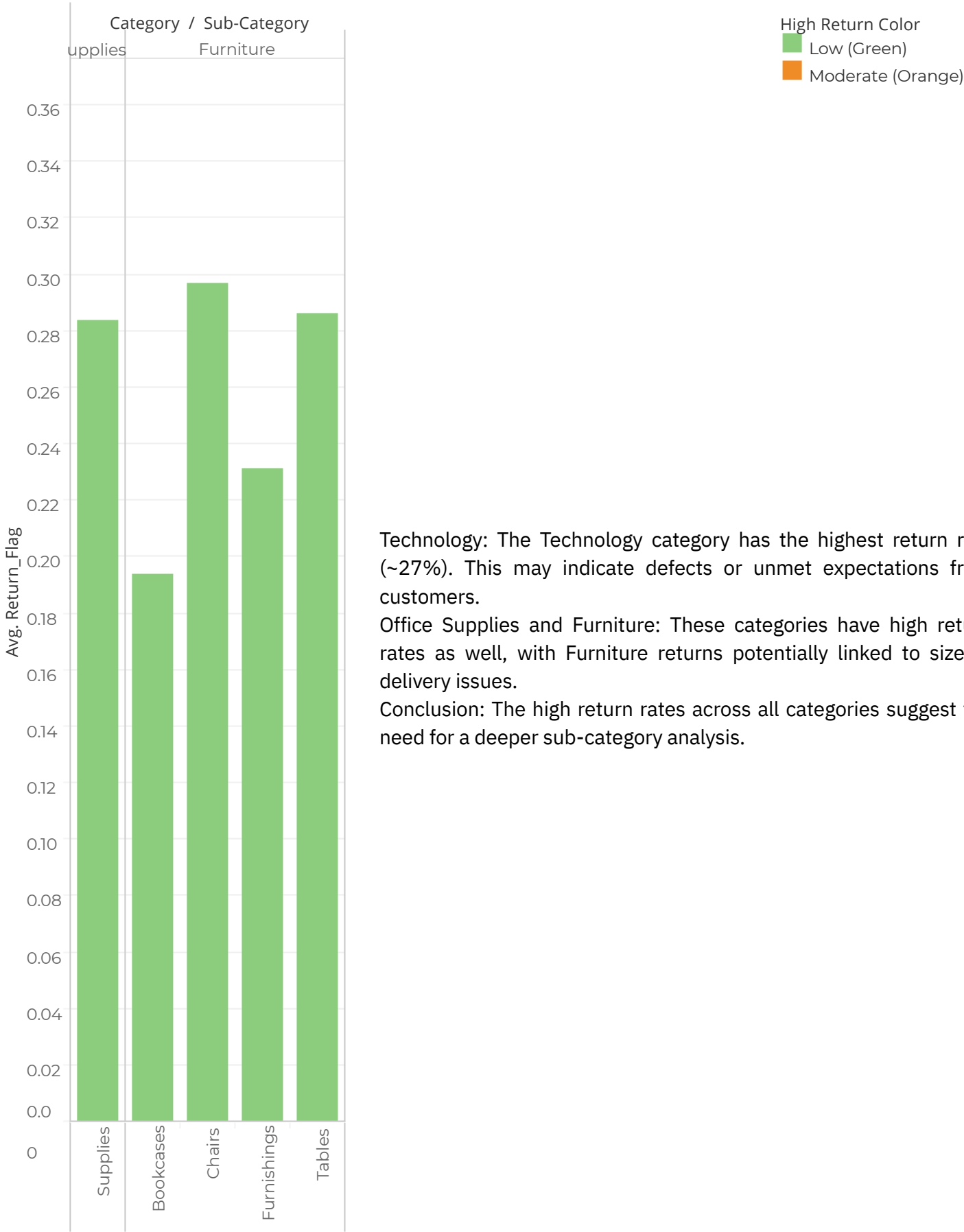
## Returns by Category

Technology has the highest return rate (~27%), mainly driven by defects or setup issues.



# Returns by Category

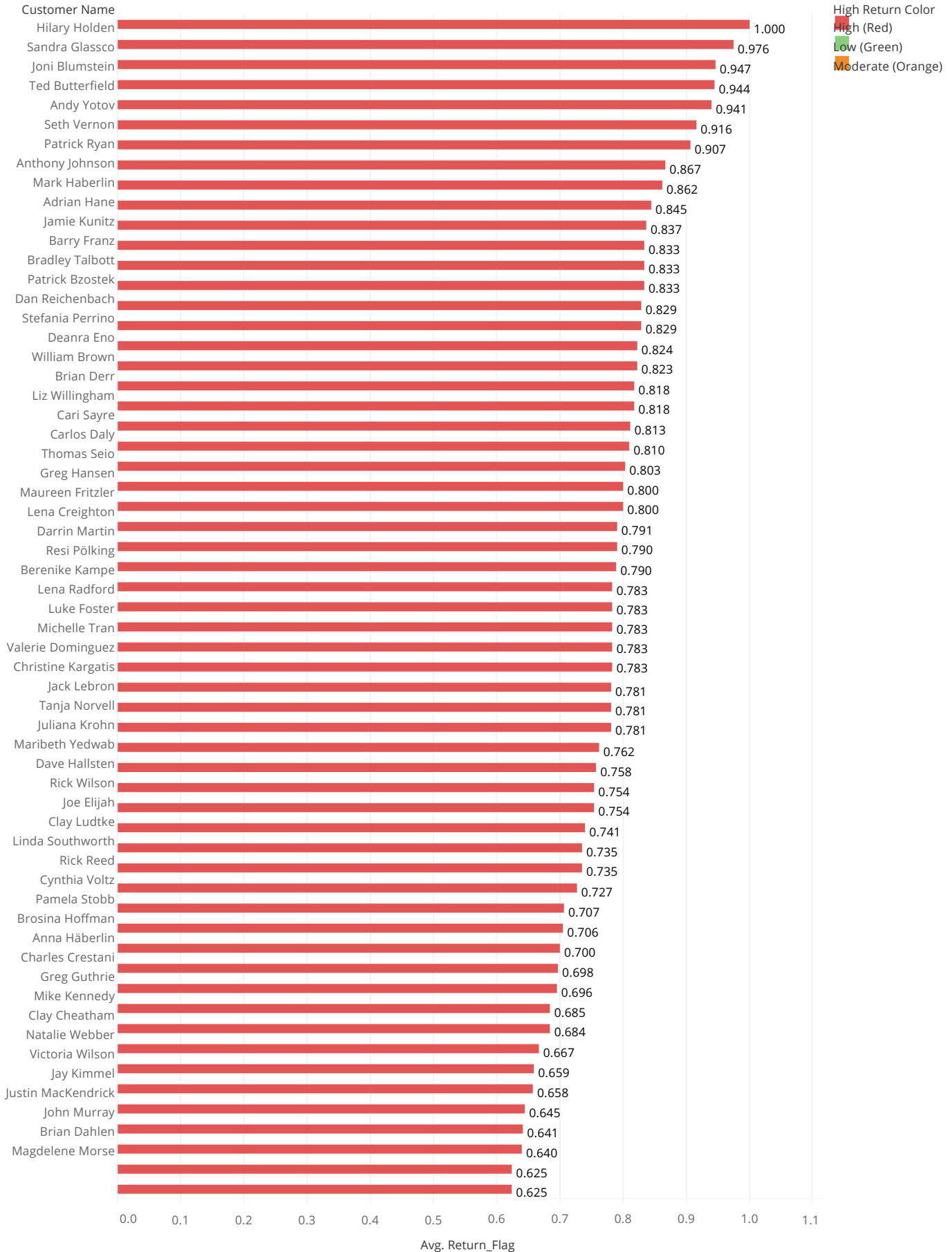
Technology has the highest return rate (~27%), mainly driven by defects or setup issues.



## Page 3: Repeat Customers with High Return Rates

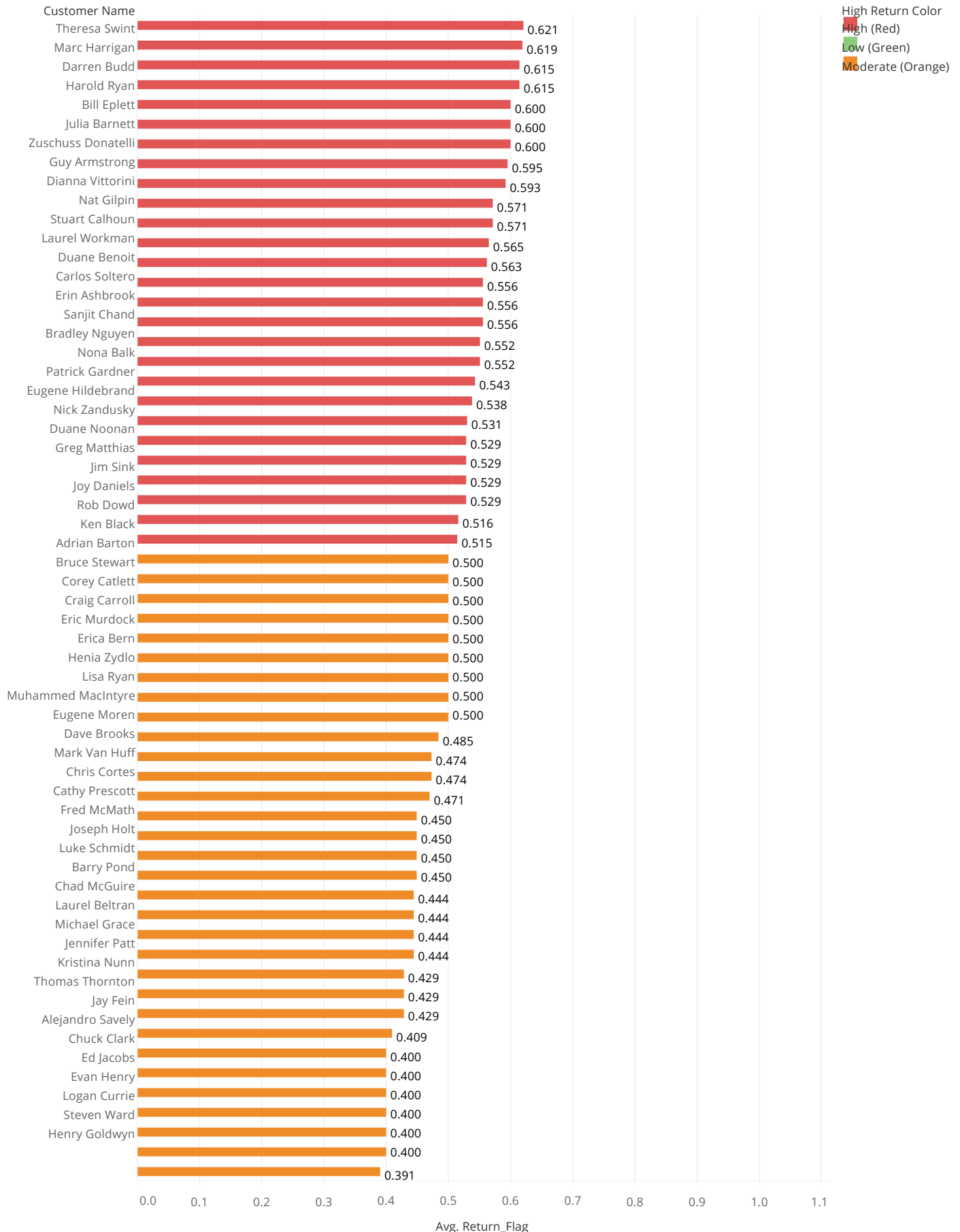
### Return Rate by Customers

86 repeat customers have a return rate above 50%, signaling potential issues or abuse.



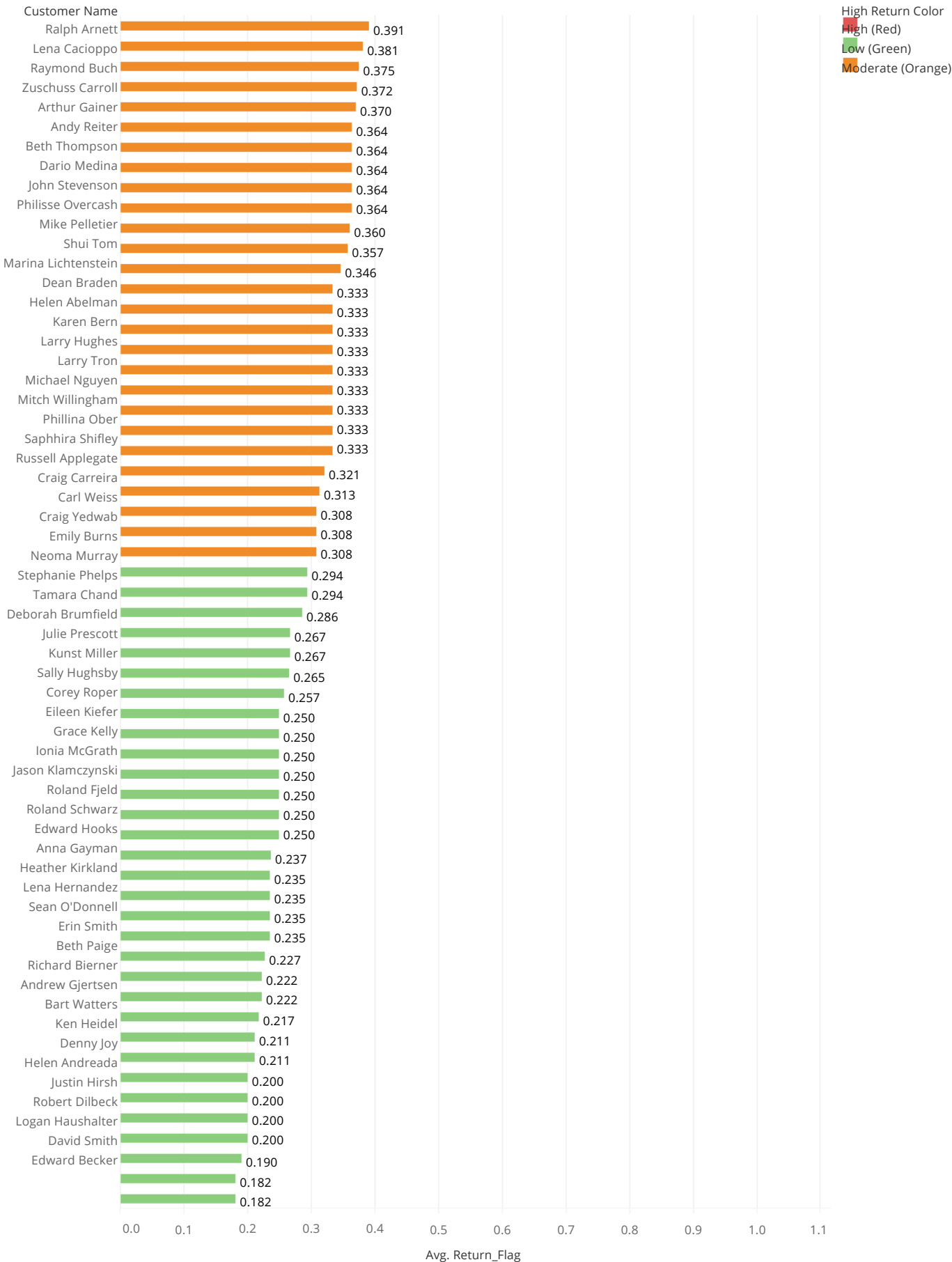
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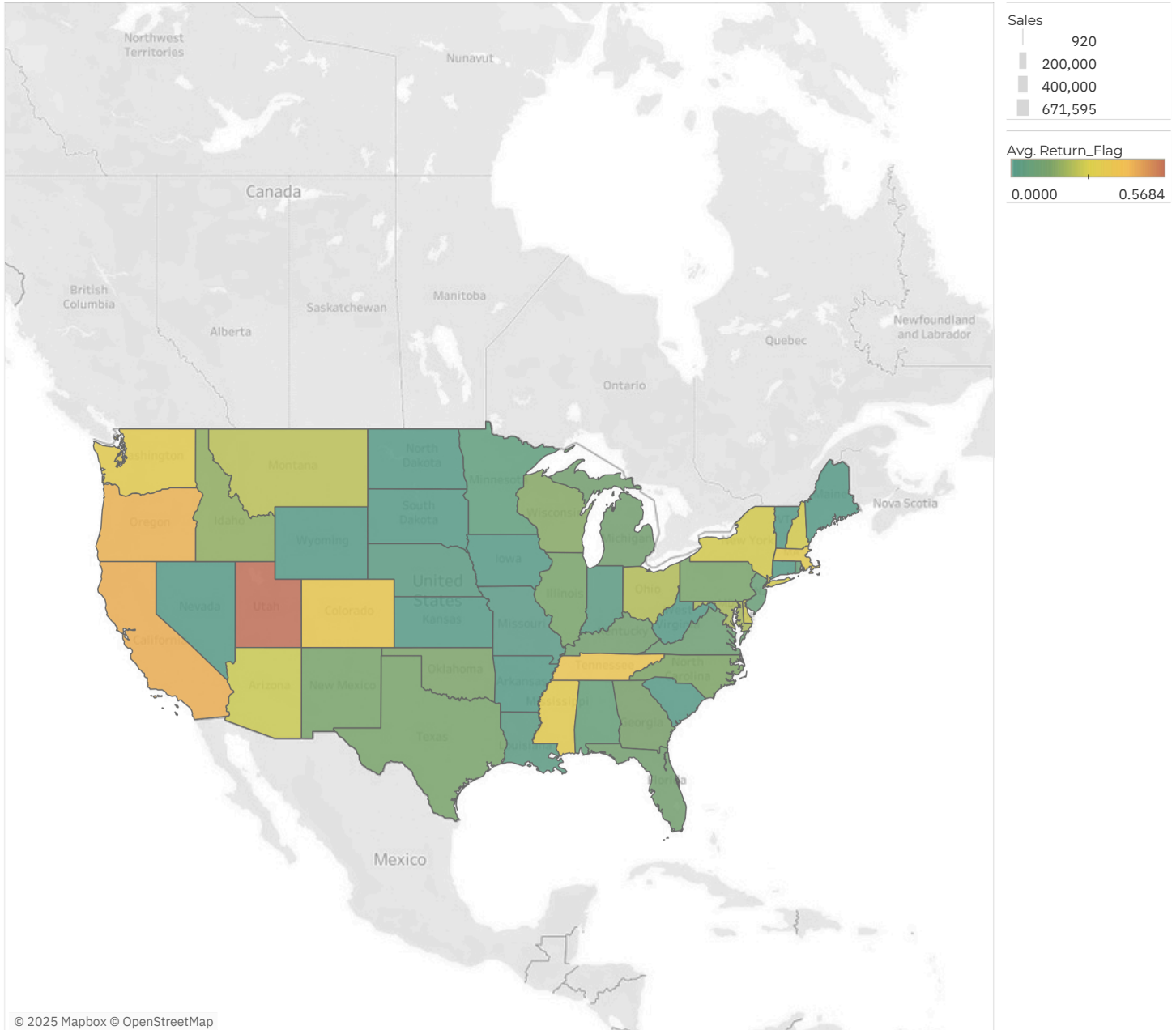
86 repeat customers have a return rate above 50%, signaling potential issues or abuse.



## Page 4: Geographic Insights - Regional Hotspots of Returns

### Return Rate by State

Higher return rates observed in Utah (~56.8%), indicating possible delivery or product fit issues. Focus states: Utah, New Hampshire, Oregon, Tennessee — high return rates detected



**High Return Rate States:** Several states exhibit exceptionally high return rates (>50%), which may signal fulfillment issues, product mismatches, or regional dissatisfaction.

Utah: ~56.8% return rate on modest sales (\$22.6K). This suggests issues in delivery, local preferences, or potential misuse.

#### Recommended Actions:

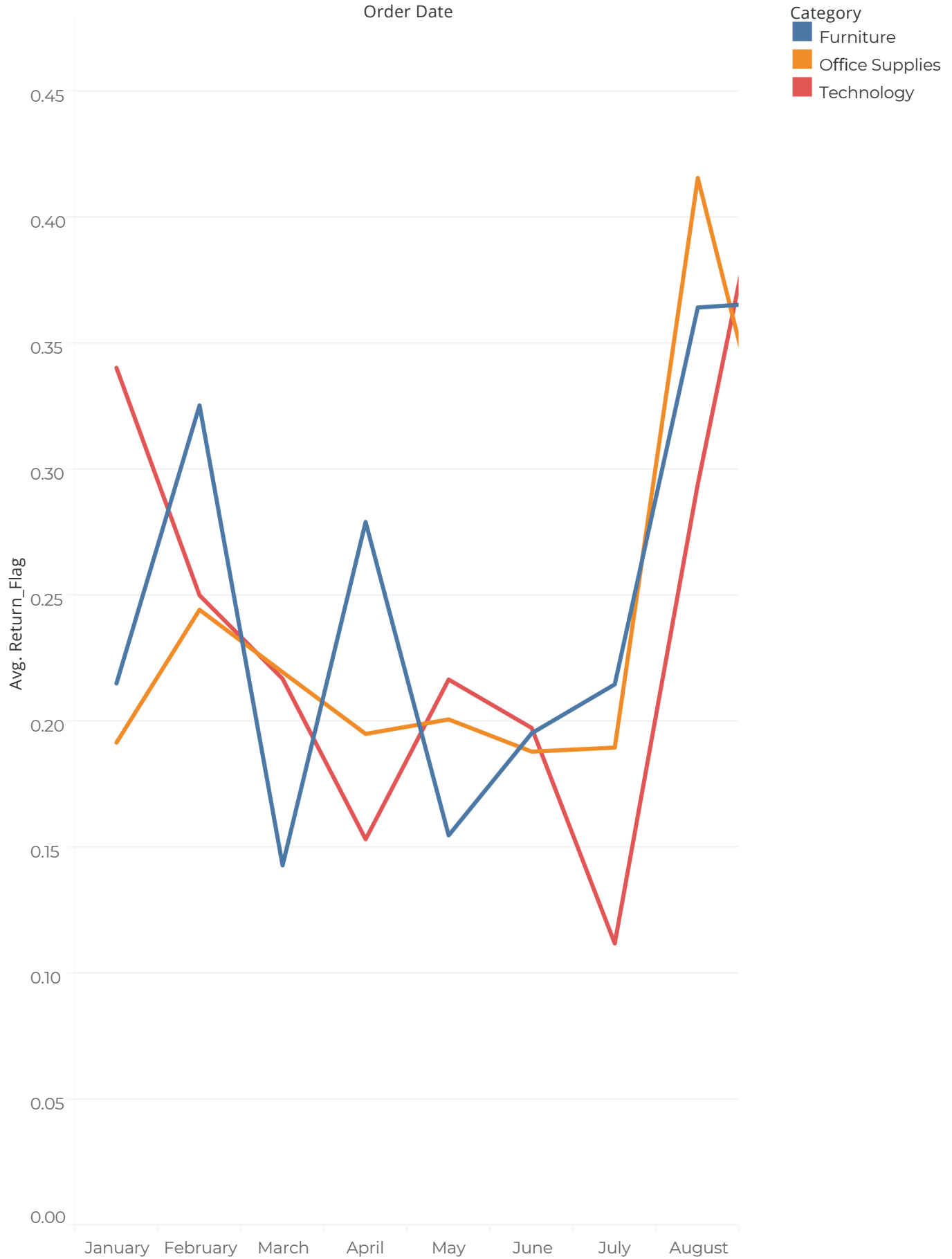
**Investigate Fulfillment Issues:** Focus on high-return states to identify specific problems in delivery or product issues.

**Examine Shipping Logistics:** Analyze whether delays, damages, or errors from specific warehouses or shipping partners are contributing to dissatisfaction.



Page 5: Return Rate Spikes by Month

## Monthly Return Rate



# Monthly Return Rate



## Page 6a: Return Rates by Category Over Time

### Return Rate Over Time

August: major spike in returns (~38.6%) likely due to seasonal bulk ordering. September: high technology returns (~45.5%), possibly from new product launches and setup issues



Technology (September): 45.5% return rate. Likely due to new product launches or issues with tech items (e.g., defects or setup difficulties).

Office Supplies (August): 41.6% return rate. Likely due to back-to-school overordering from schools or offices, with returns due to excess inventory.

Furniture (September): 36.6% return rate. Potentially related to damaged items during shipping or size issues that lead to returns.

#### What to Do:

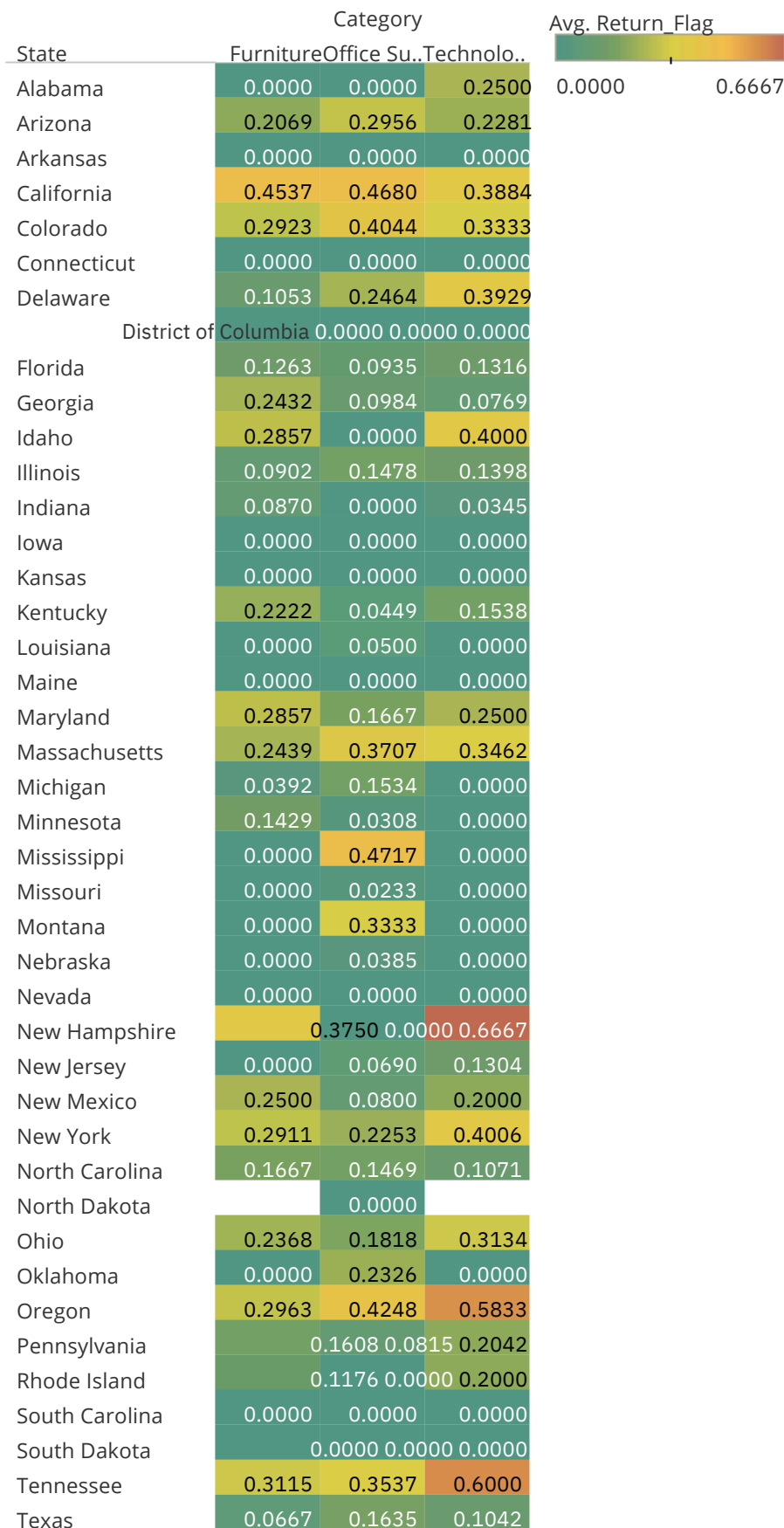
For Technology (September): Investigate new tech products for defects or unclear setup instructions that might lead to higher return rates.

For Office Supplies (August): Check for bulk ordering patterns during the back-to-school period. Provide more detailed descriptions and quantity suggestions to reduce returns.

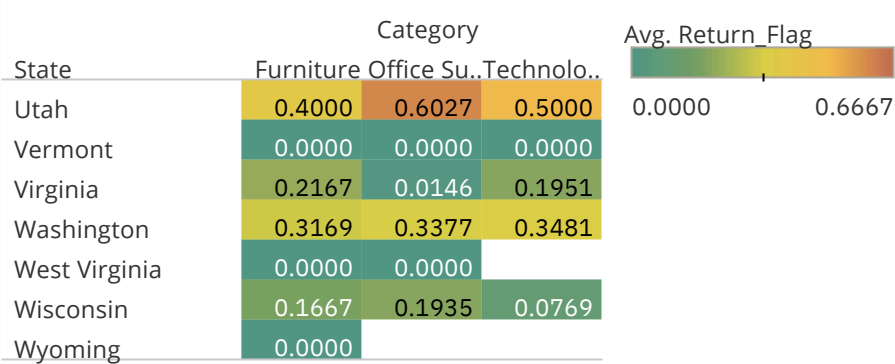
For Furniture (September): Review packaging and shipping procedures to reduce damage during transit. Ensure product sizing and details are clearer to customers to avoid returns.

January February March April May June July August Septemb.. October

## Composite Heatmap — Return Rate by State and Category



# Composite Heatmap — Return Rate by State and Category



## Technology:

New Hampshire: 66.67% return rate.

Oregon: 58.33% return rate.

Tennessee: 60.00% return rate.

## Office Supplies:

Utah: 60.27% return rate.

## Furniture:

Generally low return rates.

## Analysis:

Technology: High return rates in specific states may indicate product defects, dissatisfaction, or fulfillment issues.

Office Supplies: Utah’s high return rate may signal overordering or product issues.

Furniture: Return rates are low, indicating no immediate concerns.

## Recommendations:

Technology: Investigate high-return states for product defects or customer dissatisfaction.

Office Supplies: Look into bulk ordering patterns in Utah for office supplies to avoid overordering.

Furniture: Continue monitoring and ensure that quality control remains consistent.