

Unicorn Website Data Exploratory

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The Data at a Glance:

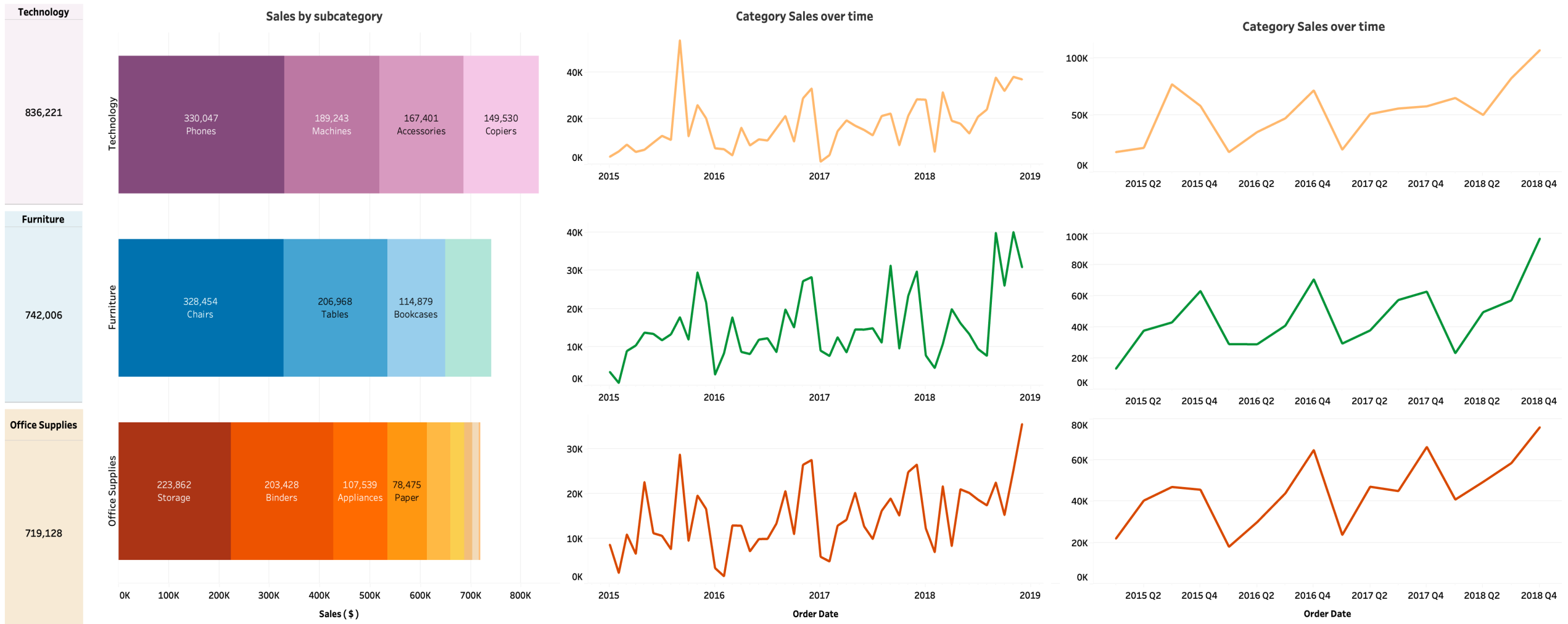
Three types of data I have used in my analysis :

- 1) Financial data : sales, profit, profit ratio and discounts over time
- 2) Location data : state and region
- 3) Product data : product name, category, subcategory and manufacturer

Sales Performance

- 1) “technology” category has the most sales.
- 2) Each category has two main subcategories that contribute to about 50% of the sales
- 3)The trend analysis over time shows that the months with the most sales are September, November, and December.
- 4)When examining the trend on a seasonal basis, it is clear that winter is the best season for sales.

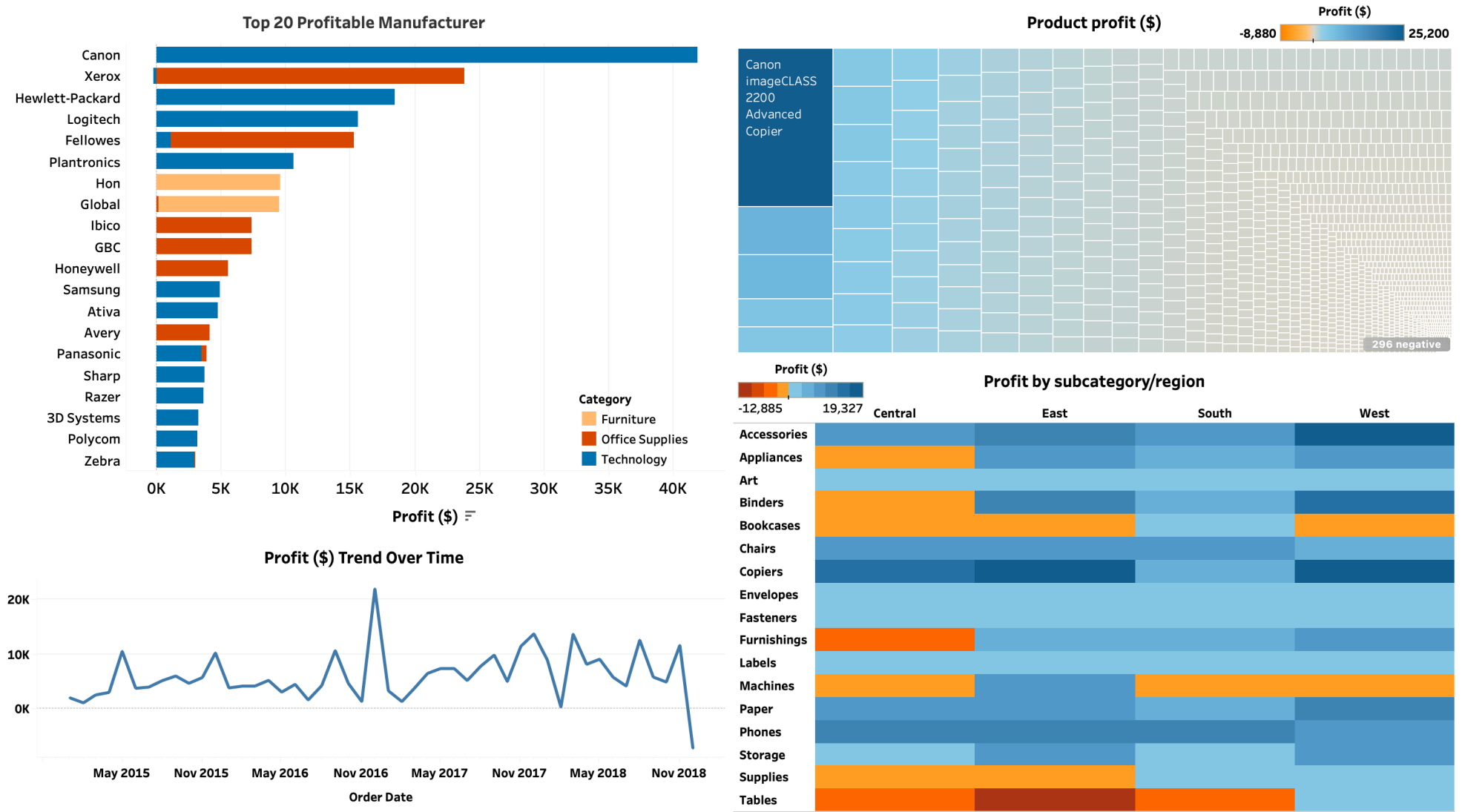
Conclusion : the dashboard suggests that companies should focus on the top-performing subcategories and aim to maximize sales during the winter season.



Profit Performance

- 1) “Canon” is the most profitable manufacturer.
- 2) The majority of the top 20 profitable manufacturers belong to the “technology” category.
- 3) Top three profitable subcategories are “accessories”, “copiers” and “phones”, while the least profitable subcategory is “Tables”
- 4) the most profitable region is the West.

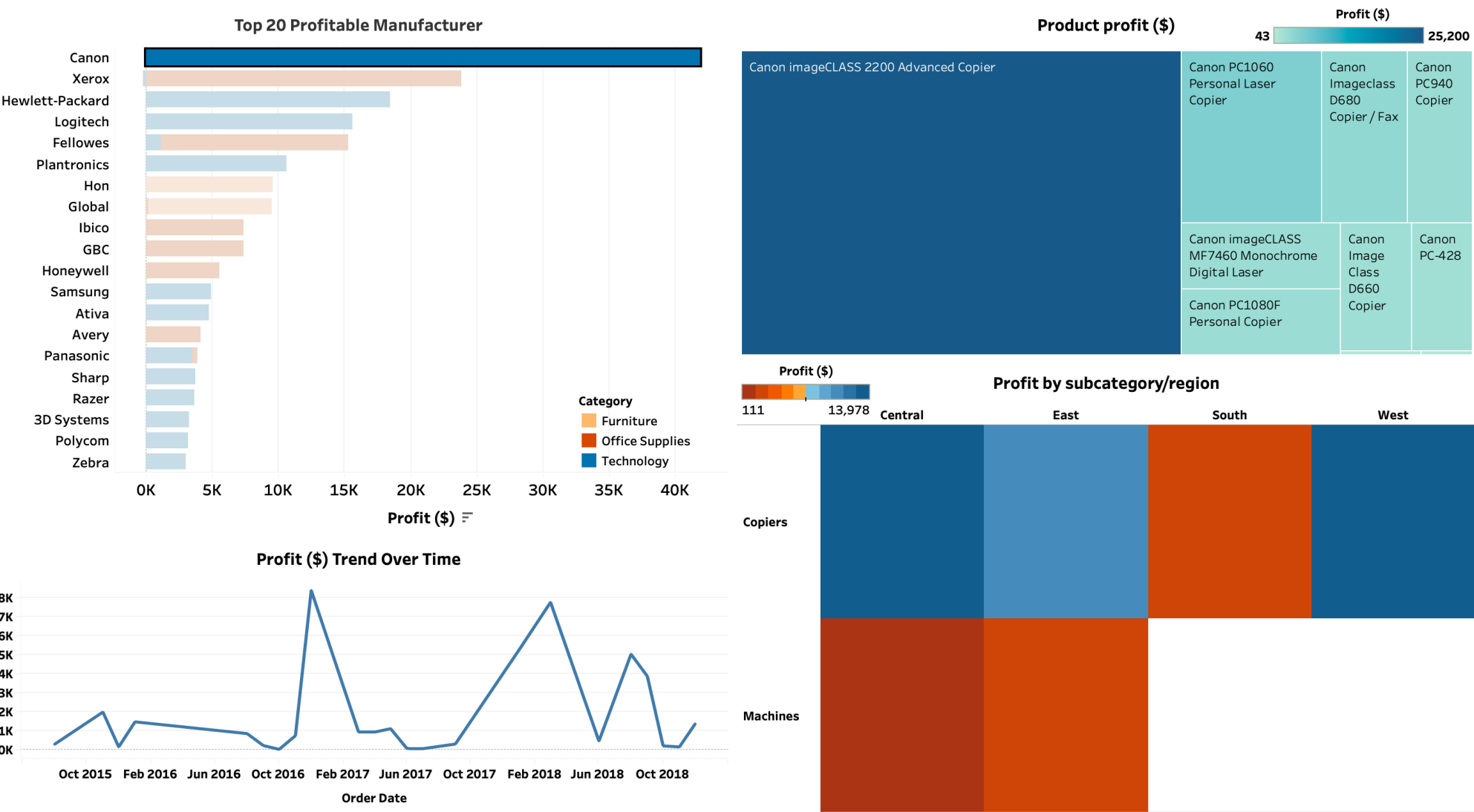
Conclusion: Unicorn should focus on the “technology” category, specifically “copiers” subcategory, and prioritize sales in the “West” region while taking steps to improve profitability in the “tables” subcategory.



Canon's Profit Performance

- 1) “Canon imageCLASS 2200 Advanced copier” is the most profitable product for the company, contributing to about 50% of Canon's total profit
- 2) December 2016 was the most profitable month and year for Canon company.
- 3) The “copiers” subcategory has been particularly profitable in the “Central” and “West” regions.

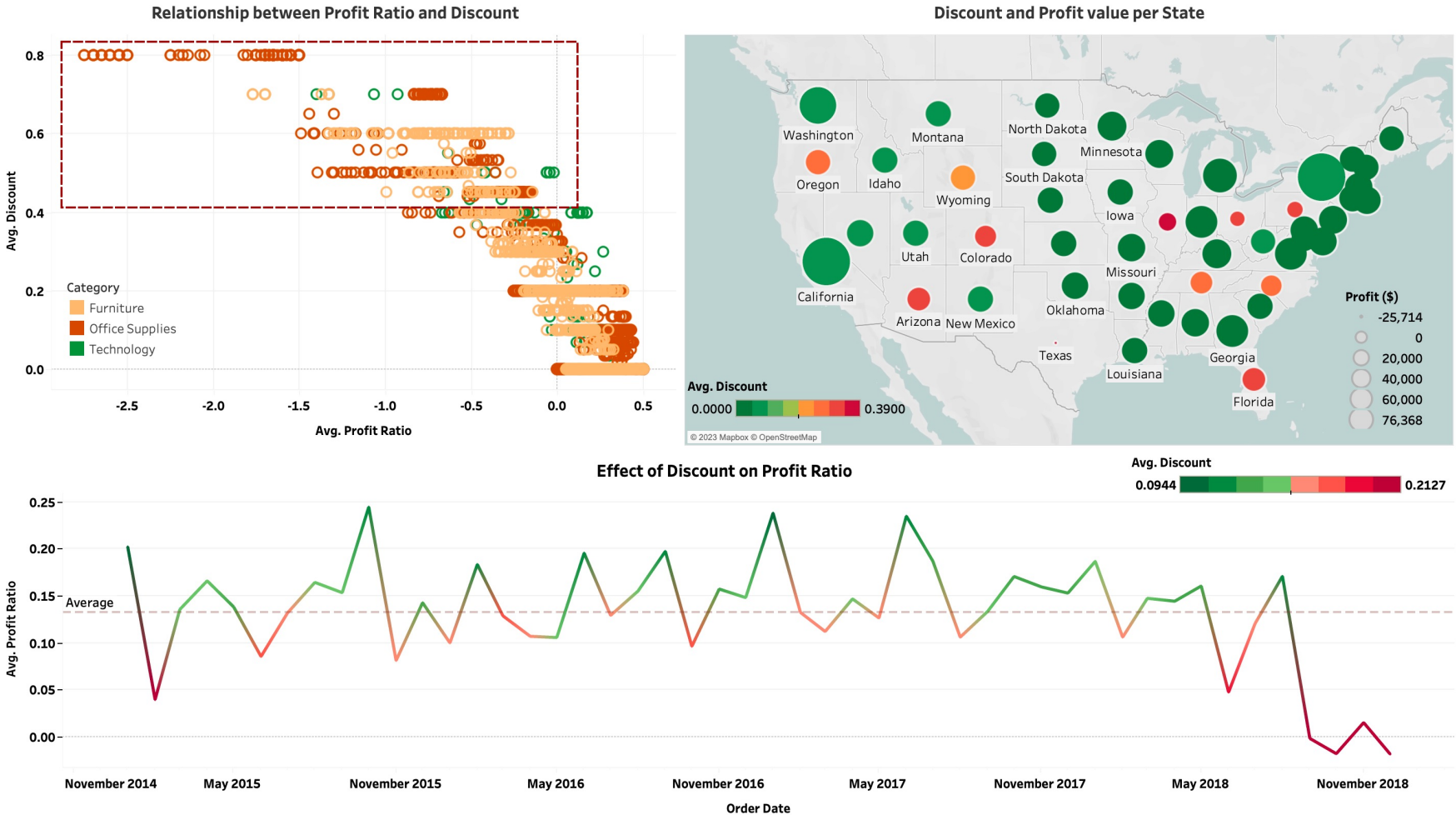
Conclusion: companies should focus on their most profitable products. For instance, for “Canon” manufacturer, Unicorn should focus on “Canon imageCLASS 2200 Advanced copier”, and prioritize sales in regions where profitability is highest, such as the “Central” and “West” regions.



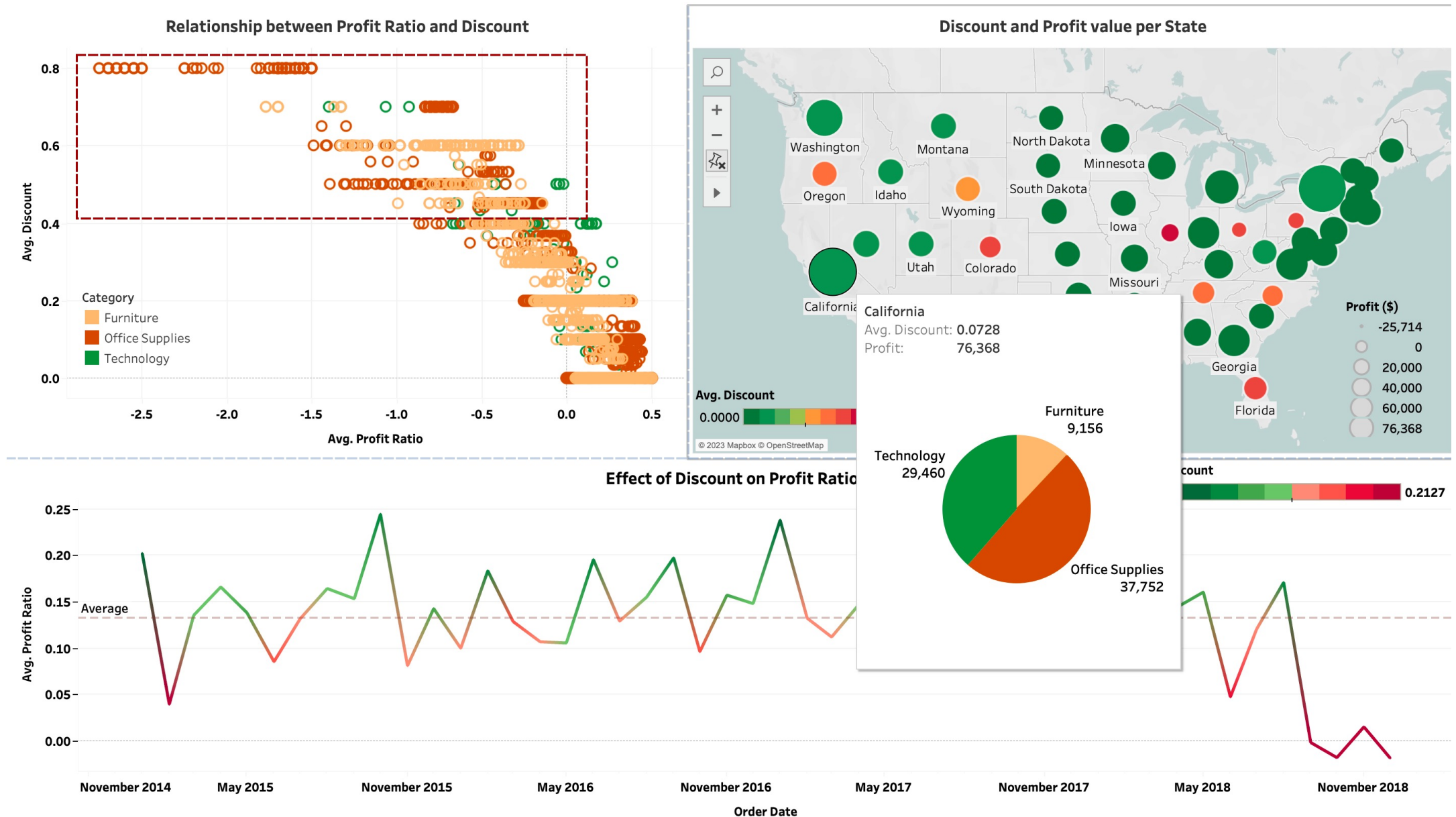
Discounts Performance

- 1) All the orders that have a discount greater than 40% resulting in negative profits.(And most of them belong to the “Office Supplies” and “Furniture” category.)
- 2) “California” is the most profitable state with an average discount of 7%, whereas “Ohio” has the highest loss with an average discount of about 40%.This suggests that offering high discounts in states like Ohio may not be profitable for the website.
- 3) For most months where the profit ratio is above average, the average discount is less than 15%. In contrast, for months where the profit ratio is below average, the average discount is higher than 15%. This suggests that offering moderate discounts, rather than high discounts, can lead to better profitability for the website.

Conclusion: Unicorn should focus on optimizing discounts and profitability by offering moderate discounts and paying attention to states where high discounts result in negative profits. The office supplies category should also be closely monitored to identify opportunities for improving profitability. By taking these steps, the website can improve its profitability and better serve its customers.



By hovering over each category's circle, we can see the portion of profit for that category in each state. It allowing us to identify which categories are driving profitability in specific states.



Suggestions

Based on the information provided in the dashboards, here are a few suggestions for the website:

1. Offer targeted promotions : optimize pricing and discounts

The negative correlation between profit ratio and average discount suggests that the website should optimize pricing and discounts to ensure that discounts do not negatively impact profits. Offering discounts of more than 15% could be avoided as they negatively affect the profit ratio. The website could consider implementing dynamic pricing strategies to optimize profits and discount levels.

Suggestions

2. Review and optimize product mix :

Since two subcategories in each category contribute to about 50% of sales, the website could review and optimize its product mix to focus on the top-performing subcategories.

The website could also consider expanding its product offerings in these subcategories to further drive sales.

Suggestions

3. Review manufacturer partnerships

Based on the profit dashboard, the website could review its manufacturer partnerships and focus on partnerships with manufacturers like Canon that are driving significant profits for the website.

Additionally, the website could work with manufacturers to optimize their product offerings to improve profitability.

Suggestions

4. Improve targeting and personalization

The website could improve its targeting and personalization efforts to offer more relevant promotions and discounts to customers. This could involve analyzing customer data to better understand customer preferences and behavior, and offering targeted promotions and discounts based on this information.

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