

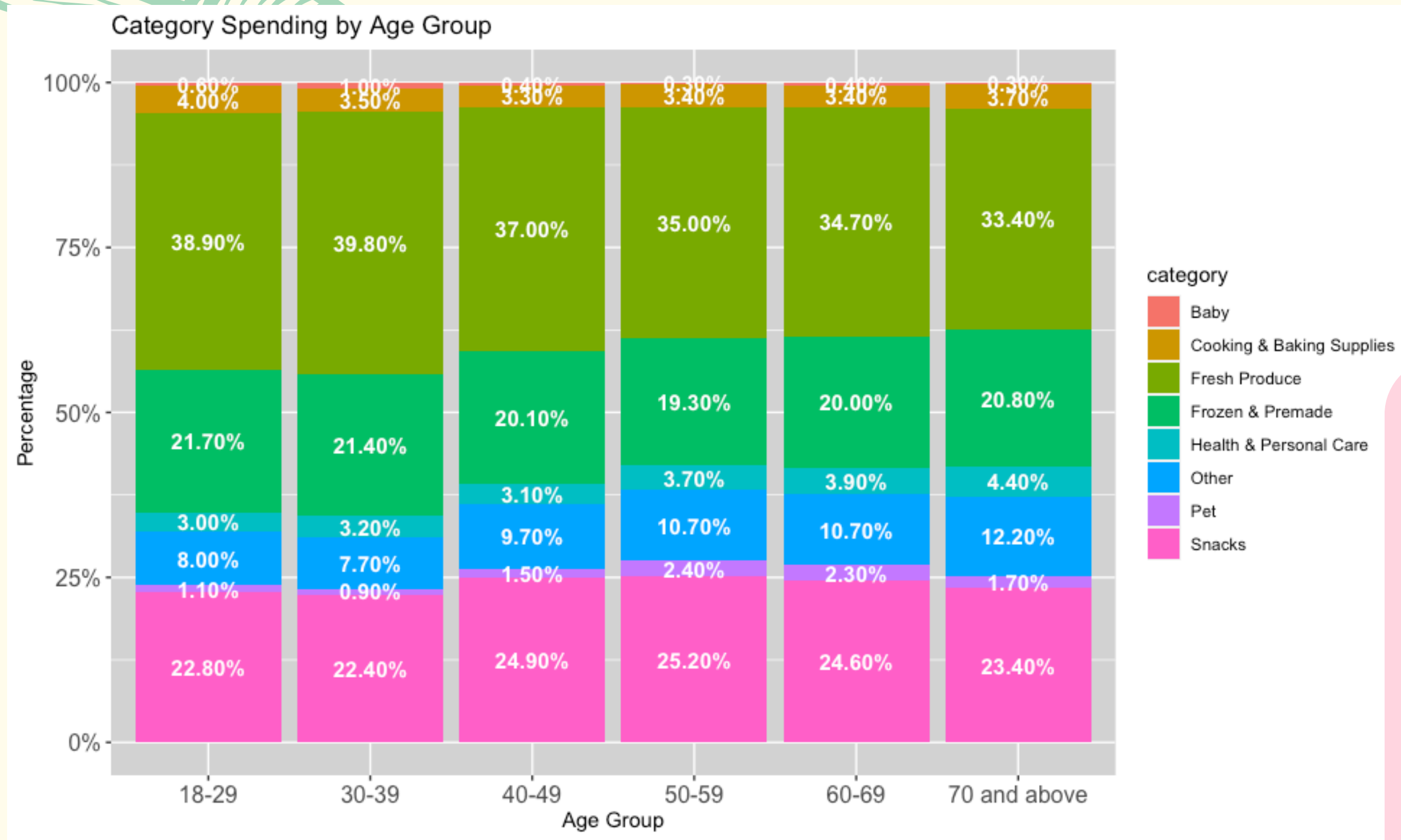
group 9

Grocery Data Visualization

Christine Hao Wang, Winnie Huang,
Nancy Gao, Irene Fang



01 - CATEGORICAL SPENDING BY AGE



Top sales categories

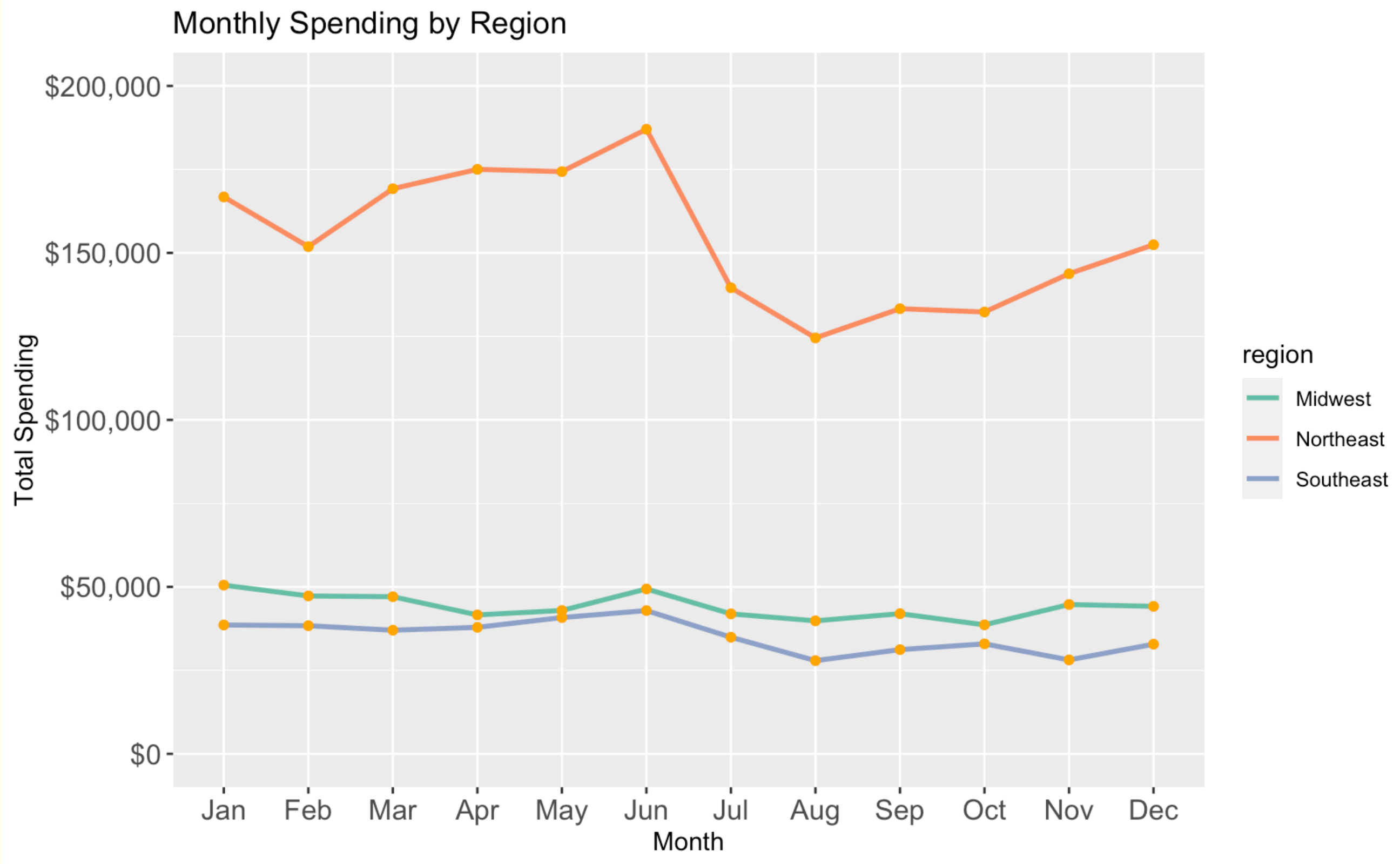
- Fresh Produce
- Snacks
- Frozen & Premade

Findings

Percentage spending on fresh produce decreases as age gets older, indicating a more diverse market basket.

Older customers are more likely to have a stable family unit. Being the primary shopper for the entire family requires them to shop for a more diverse selection of product to fulfill different household needs.

02 – MONTHLY SPENDING BY REGION



Findings

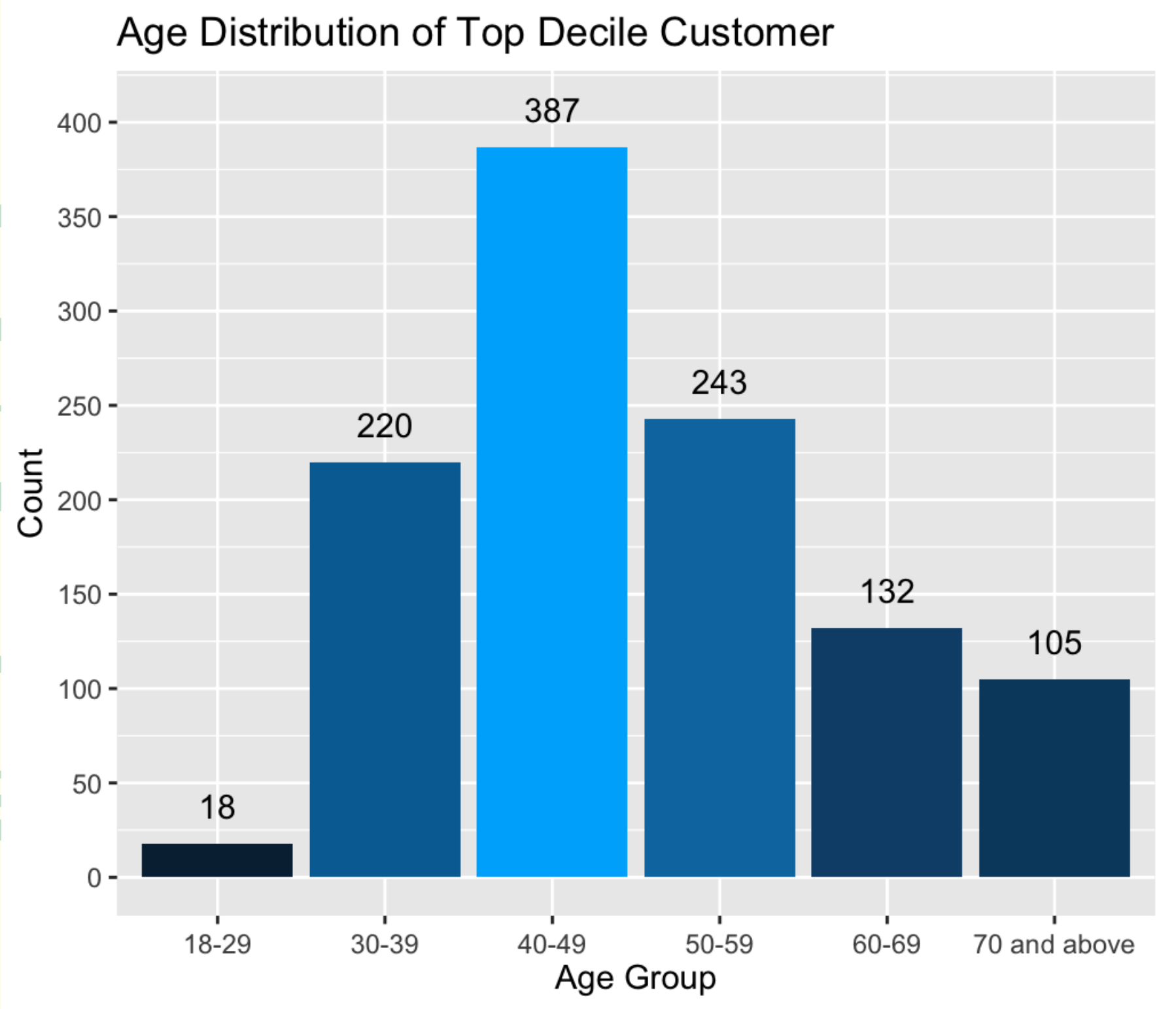
This particular grocery chain has more presence in the Northeast.

The **midwest** and the **southeast** experience less fluctuation, potentially due to an abundance of agricultural products and more stability in year-round food supply.

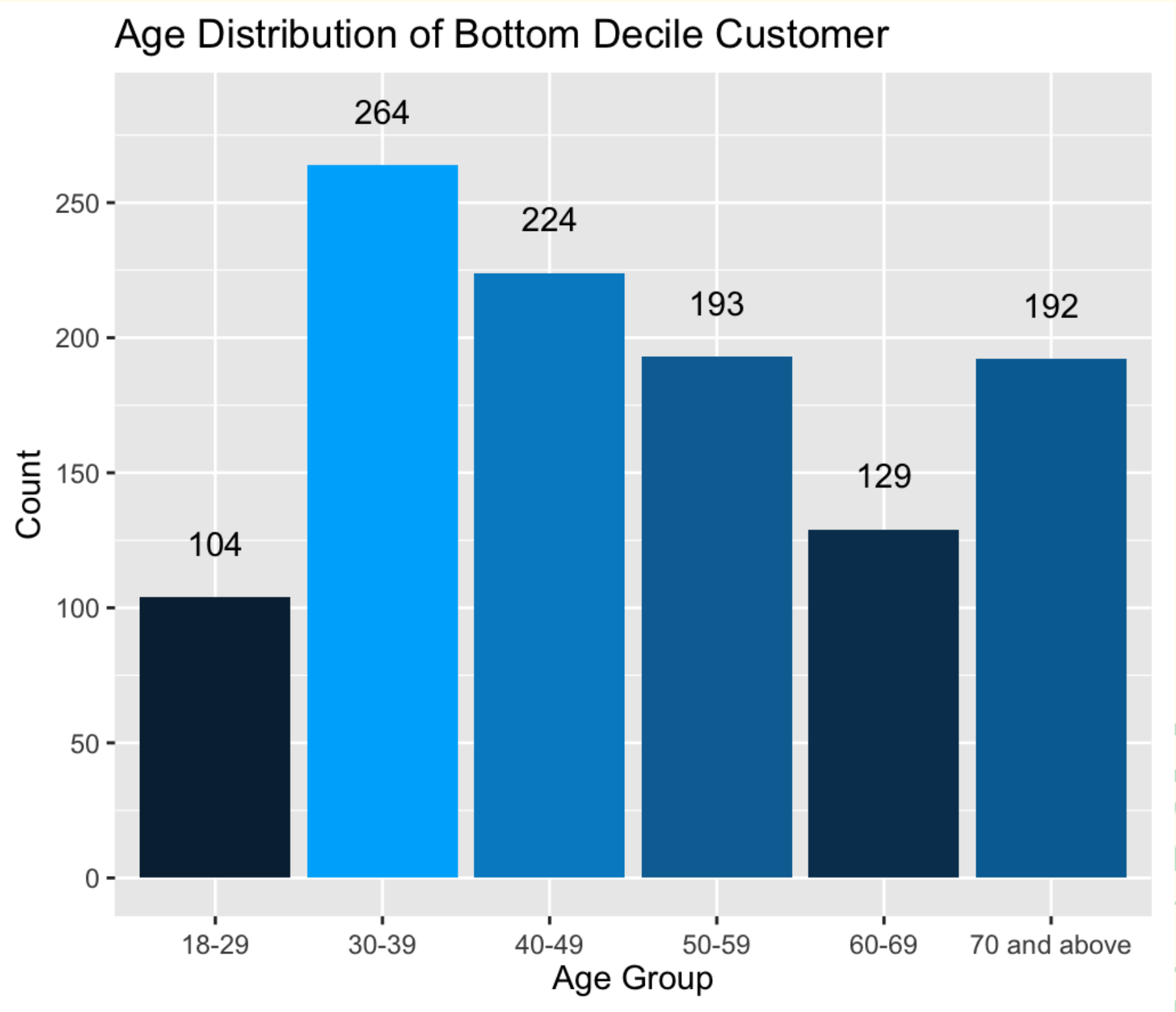
The **northeast** experiences more drastic fluctuation in their sales cycle due to external factors like weather (e.g. Hurricane Sandy in 2013) and economic conditions.

This has implications on grocery stores' inventory management, seasonal promotional strategies, and product assortment for the different regions across the US.

03 – SPENDING DIFFERENCE OF TOP VS. BOTTOM DECILE CUSTOMER



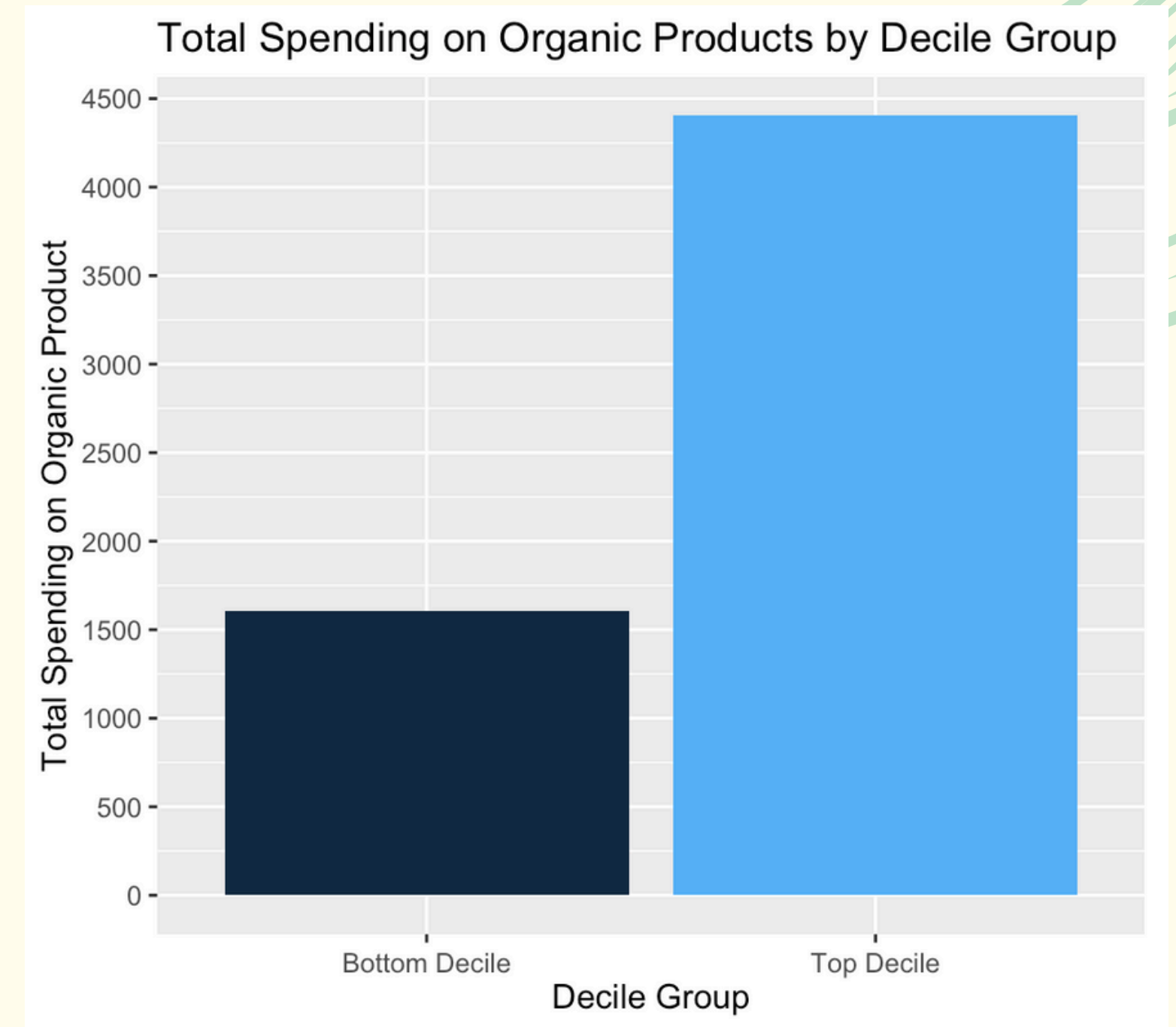
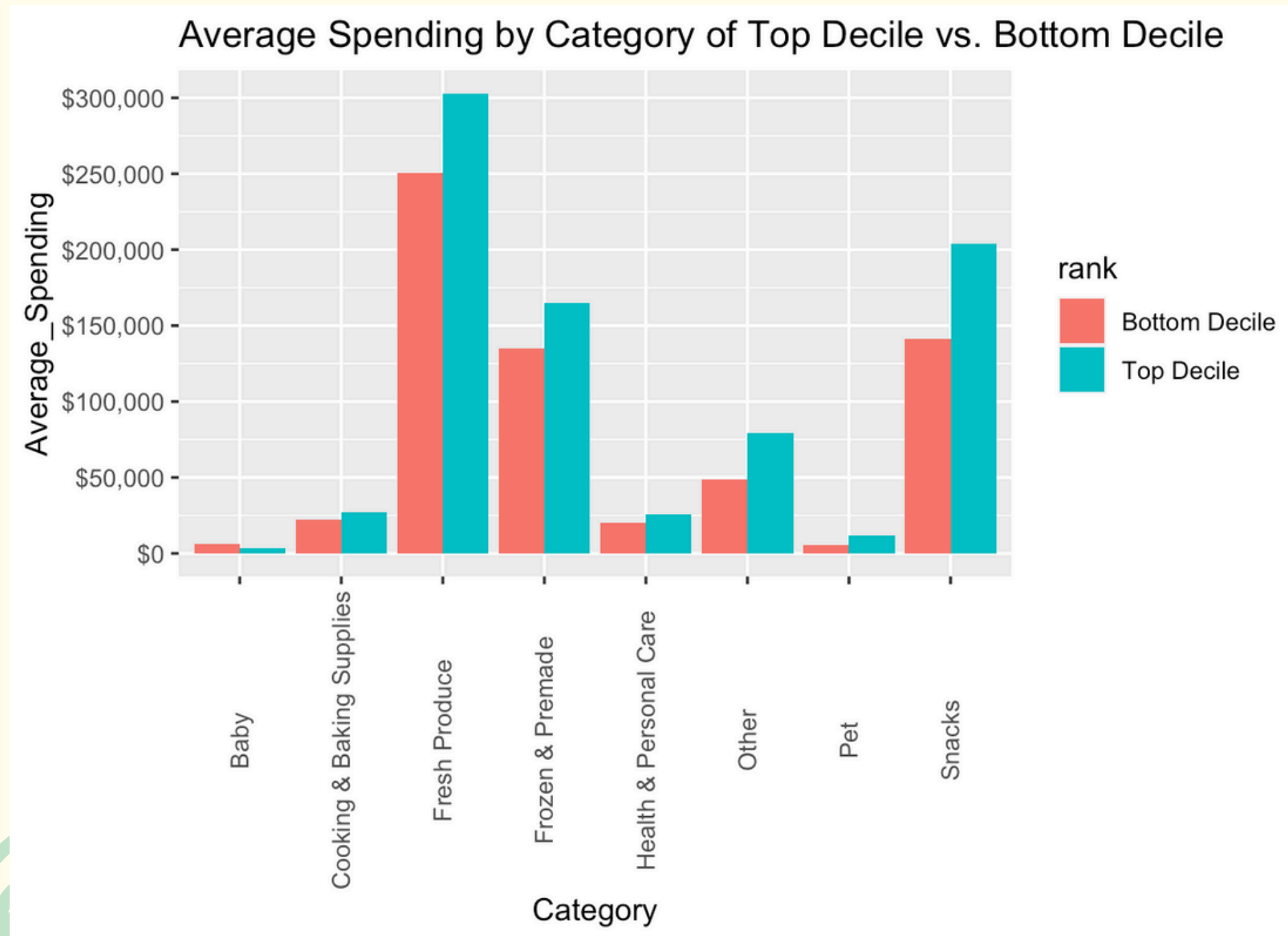
Average spending: **\$712.5**



Average spending: **\$67.1**

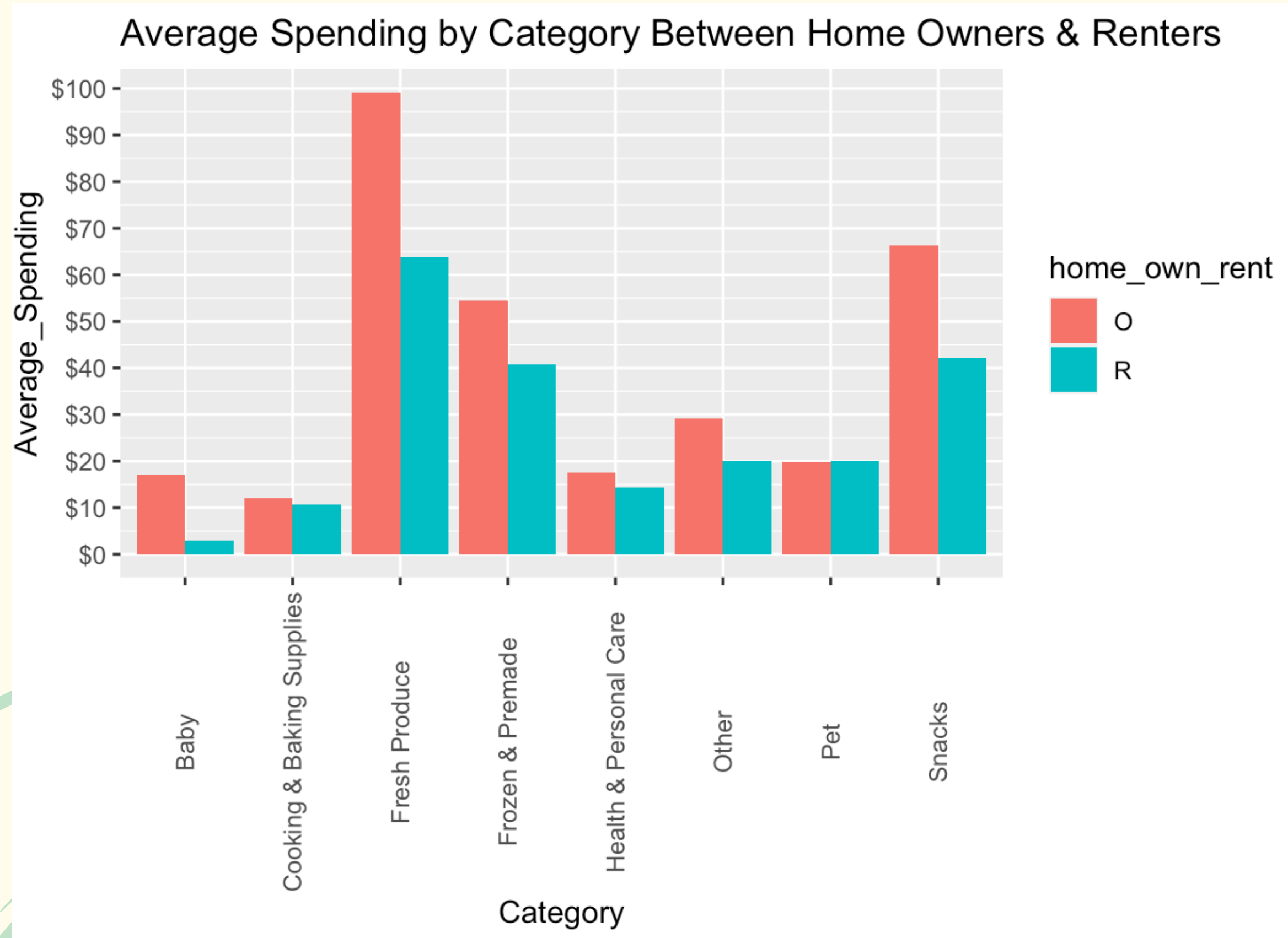
Customers in the top decile spend **\$645.4 more** than customers in the bottom decile

04 – ORGANIC CONSUMPTION BY DECILE GROUP



- Not much difference in category spending as a percentage of the total spending.
- BUT, customers in the top decile group spend **\$2,798** more on organic products than customers in the bottom decile group.

05 – HOME OWNERS v.s. RENTERS



Home owners spend significantly higher in almost all categories, especially Fresh Produce, Baby, Snacks, and Frozen&Premade.



Business Implication

Product Development and Inventory: Home owners spend significantly more than non-home owners. This suggests that products and services should be tailored to meet the preferences and needs of home owners.

Customer Insights: Understanding the age distribution of decile groups helps to gather deeper insights into consumer behavior. For instance, the 40-49 age group might prioritize quality over cost, whereas the 18-29 group might be more price-sensitive.

Location-based Marketing: target marketing ads by location. For example, the retailer can use ads to help with the sales fluctuation in the Northeast or increase the overall sales in Midwest and Southeast.



Thank You!

