# Who Speds, When, and on What?

## *The big questions*

I want to answer two questions

1. **Which customers spend the most?**

2. **How do preferences change throughout the seasons?**

This data set https://www.kaggle.com/datasets/zubairamuti/shopping-behaviours-dataset (Kaggle) contains 3,900 rows and 18 features about demographics (age, gender, location), product details (frequency of purchases, previous purchase, subscription status, discount usage, promo code), and customer feedback (review ratings).

## Key Findings

Here are the things I found during my analysis

- <u>Older shoppers spend the most</u>. Customers **50-59** and **60+** contribute to the highest total spent among all age groups, while customers **under 20** spend the least (≈$9k).

- <u>Season changes what "popular" looks like</u>. The top item by orders rotates with the seasons (Jackets in fall, Sweaters in spring, Pants in summer, and Sunglasses in winter, as shown in this sample).

- <u>People's aesthetic responses to color are shaped by the seasons</u>. The treemap makes it easy to see which colors dominate each season. This can be used for marketing and a profitable campaign

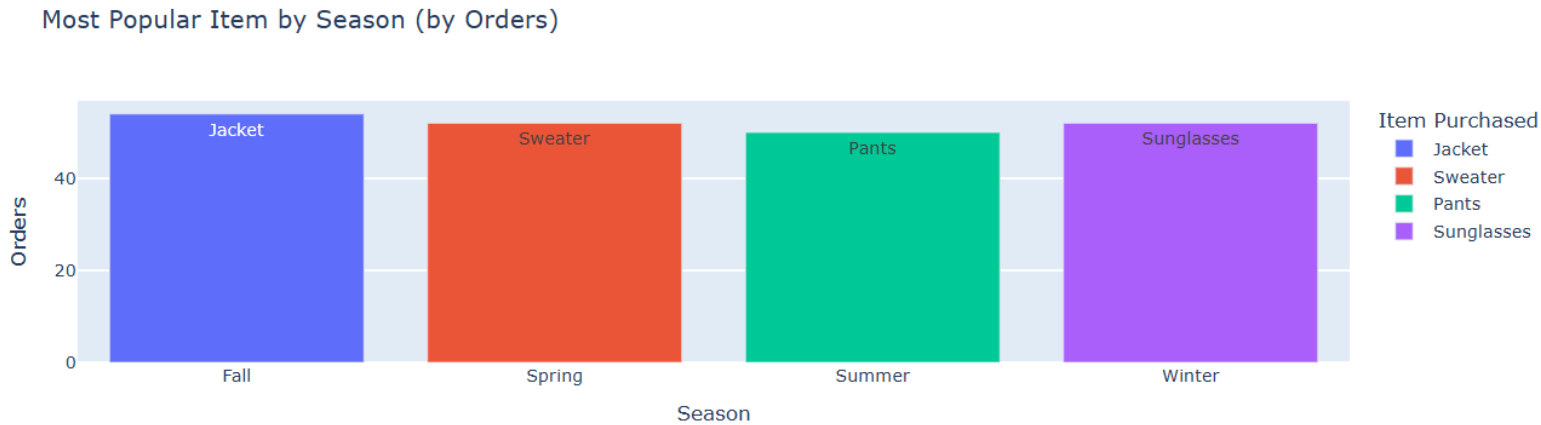# Who spends the most?

**Total Money Spent by Age Group**
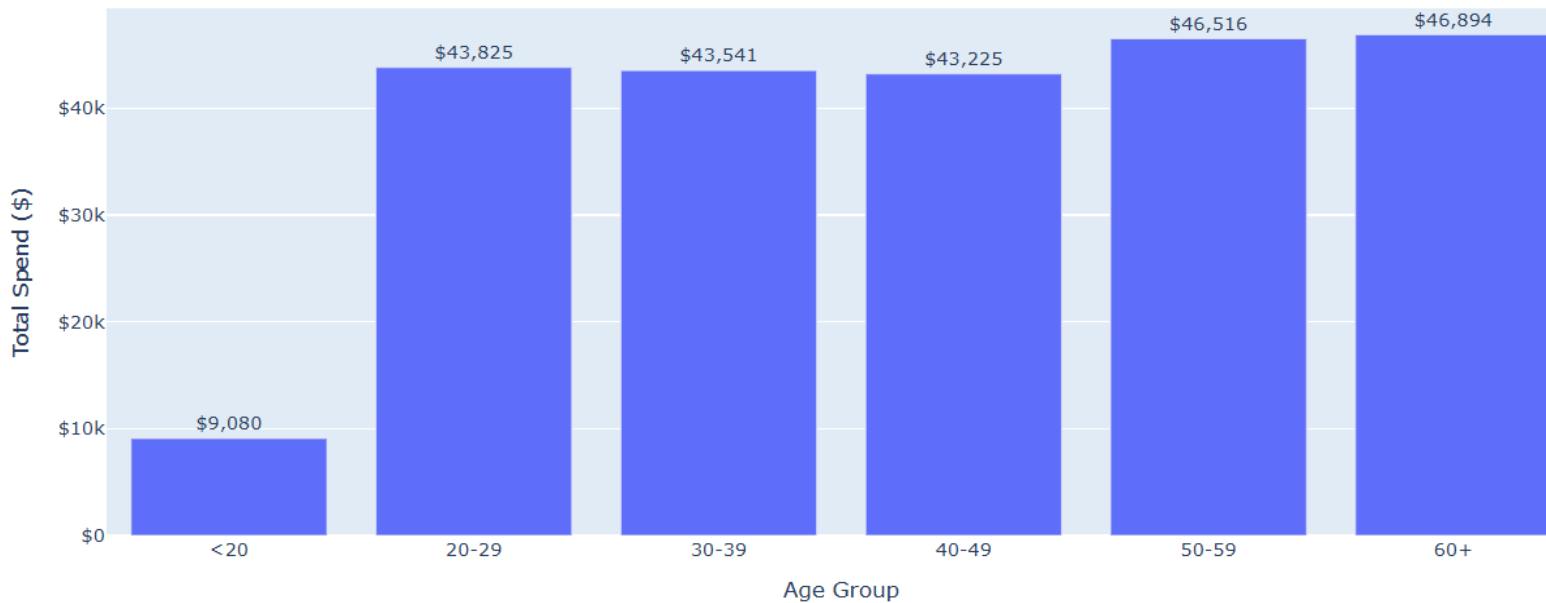


The first bar chart shows that **spending climbs with age**. Here it shows:
- **60+** and **50-59** stand at the top (≈$46.5k to ≈$46.9k).
- **20-49** fall right below them and are tightly grouped (≈$43k to ≈$44k)
- <20 is an outlier (≈$9k)

**Why this matters:** This information can be used within the business to help tailor their marketing strategies. For example, older generations may respond better to emails, while the younger generation might respond more effectively to marketing strategies on social media.

# What is popular by season?

**Most Popular Item by Season (by Orders)**

Orders: Jacket (Fall), Sweater (Spring), Pants (Summer), Sunglasses (Winter)

Item Purchased
- Jacket
- Sweater
- Pants
- Sunglasses

What is popular changes throughout the year. This bar chart shows the top item category in each season by the number of orders. Seeing sweaters as the top shopping category in Spring was unexpected, given that the season typically gets warmer. This information can be used to create seasonal bundles.

**Important Reminder:** These trends reflect only this dataset and should not be overgeneralized.

# What colors change with the seasons?

Most Money Spent on Color by Season
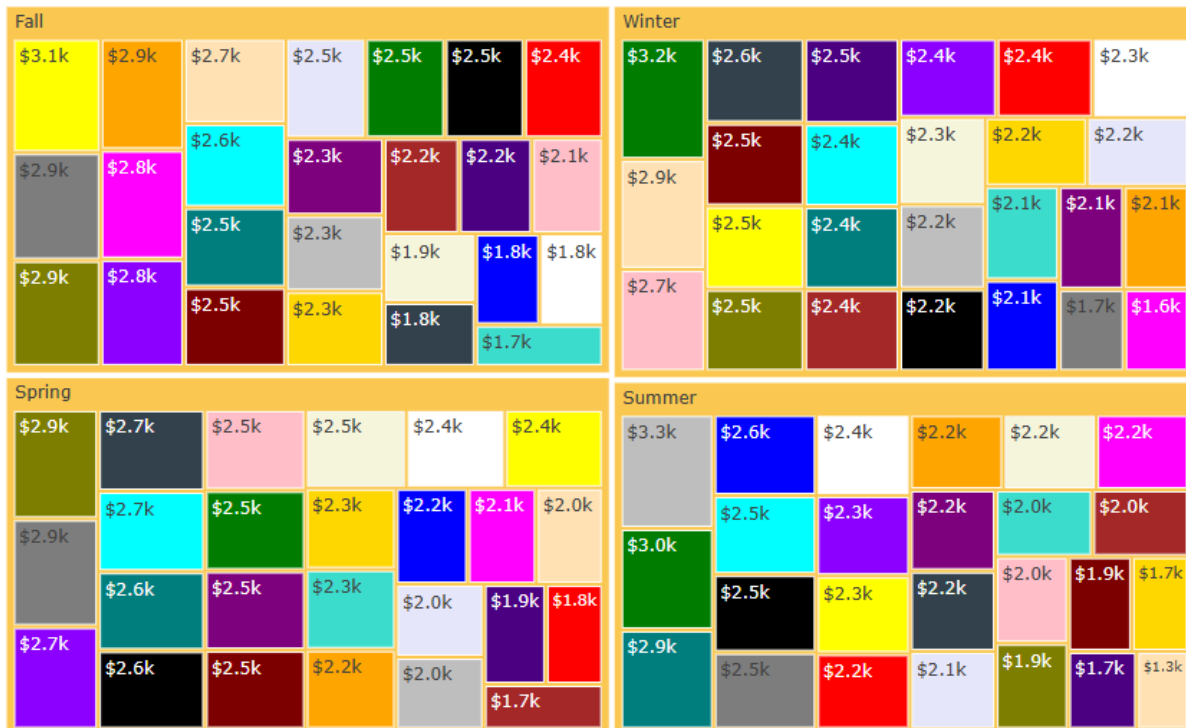


The treemap above splits by season and then again by color. Each color is sized by the amount spent during that particular season. The variation between colors is not a matter of color, but rather they change with each season; even some colors shift toward the other half between seasons. For example, green in the fall ranks 12th ($2.5k), but during the winter it is number 1 ($3.1k).

This information can be used to inform a creative decision during each season.

Limited seasonal colors can be used to help drive more profit during the season.

# What would I do?

I would use these insights to help guide marketing decisions and product strategies.

- **Age-Based Focus:** Focusing campaigns on customers 50-59 and 60+ because they spend the most money on products. Using email promotions would work most effectively.

- **Seasonal Product Planning:** Managing inventory and planning promotions to match the seasonal trends. Promote sweaters in spring, jackets in fall, and sunglasses in winter to boost sales.

- **Seasonal Colors:** Plan bundles with the most popular seasonal colors to increase attraction and appeal.