

Shopping Data Analysis: Understanding the Data

Acquiring Insights About Customers and Their Shopping Habits

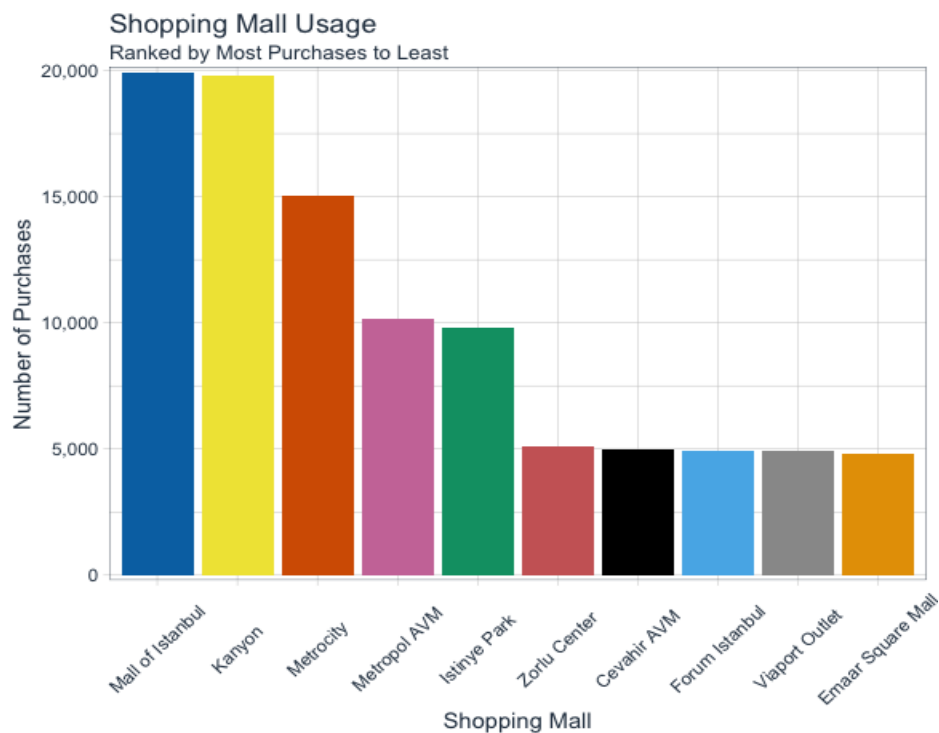
David Vargas
2023-05-01

Summary:

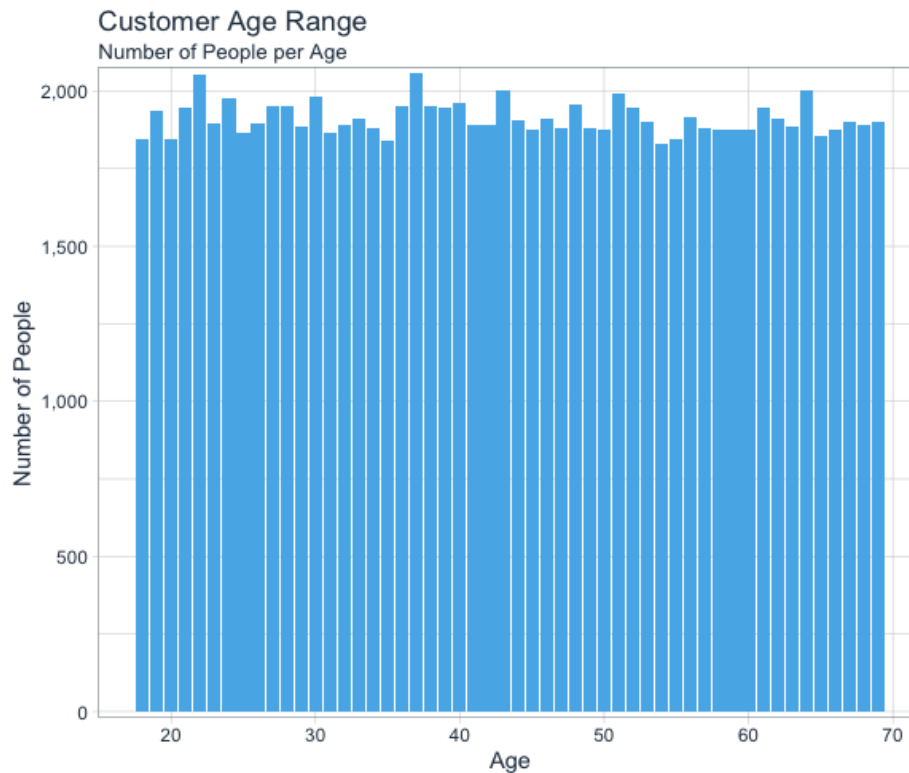
- Most customers are between the ages of 26 and 50.
- Most customers are female.
- The most purchased products are clothing, cosmetics, and food & beverage regardless of age or gender.
- Customers are most likely to spend \$250 or less regardless of age or gender.
- Most purchases are made and highest revenue is generated in July and October.

Analysis:

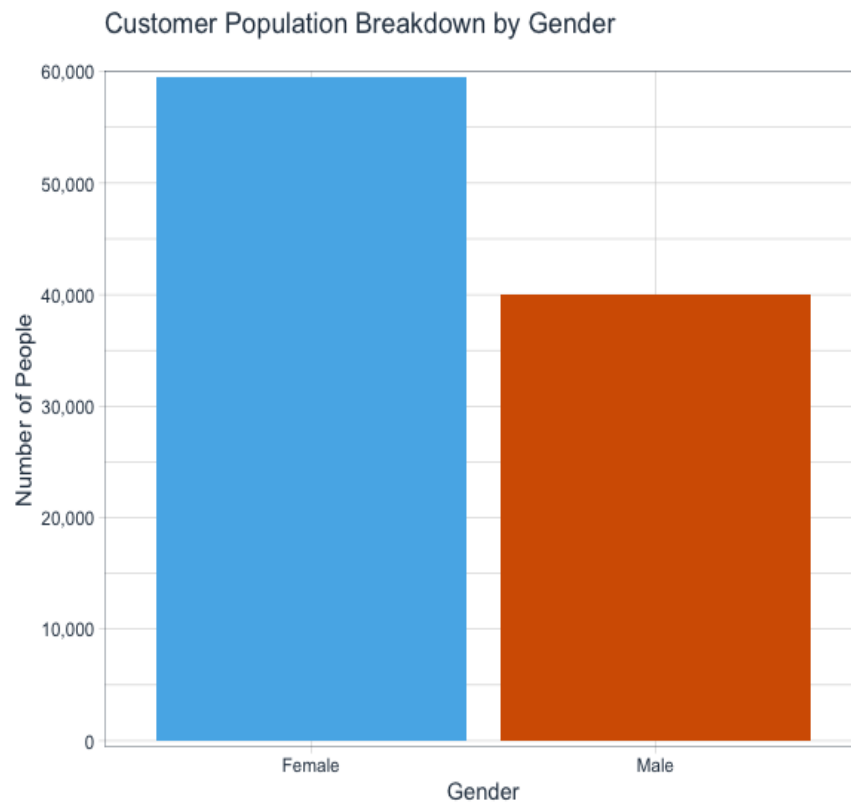
The “Mall of Istanbul” and “Kanyon Mall” are the most used shopping malls by a large margin. The Top 5 most used malls have significantly more purchases than the other 5 malls, which have relatively similar usage.



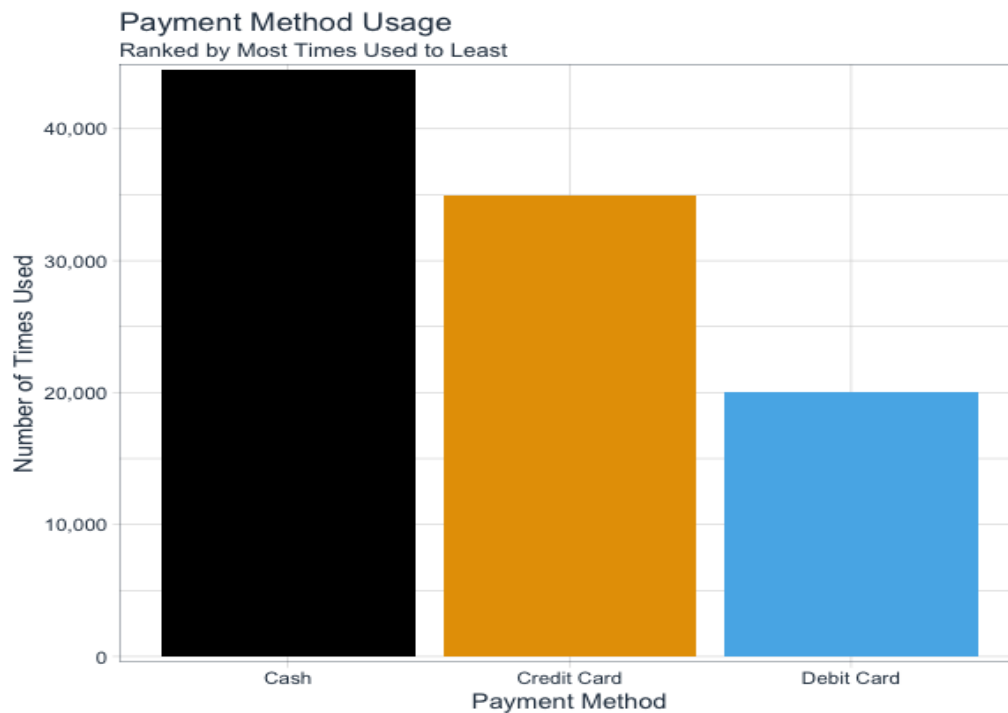
The youngest customer in the dataset is 18 years old and the oldest is 69 years old. Most customers are 37 years of age, followed by 22 years of age.



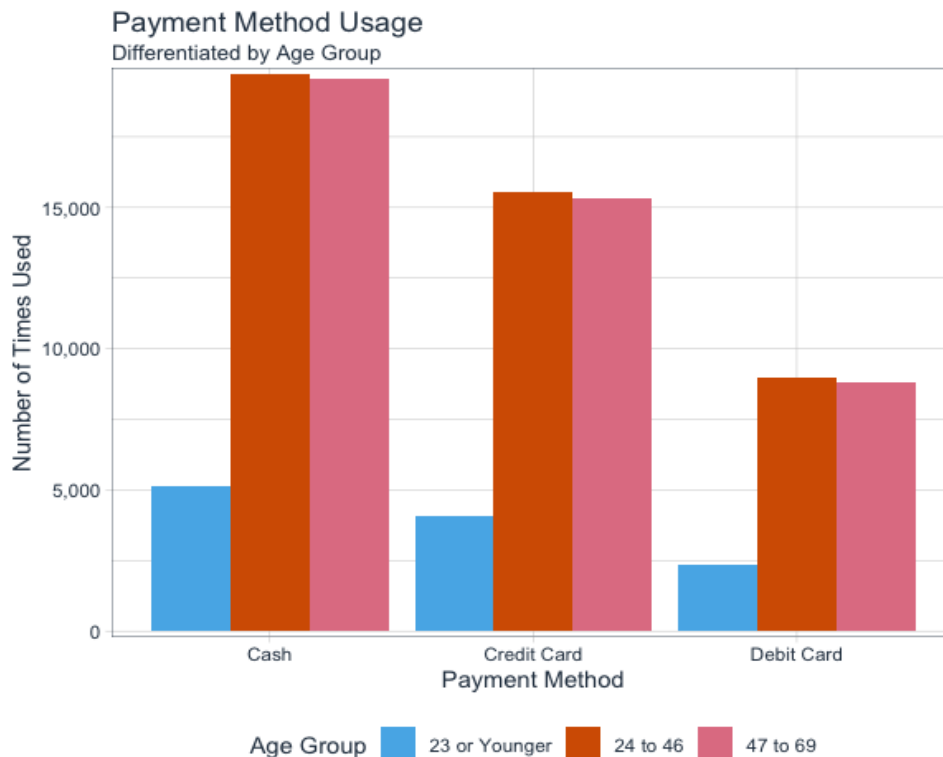
Most customers are female by a large margin (19,507 more females than males).



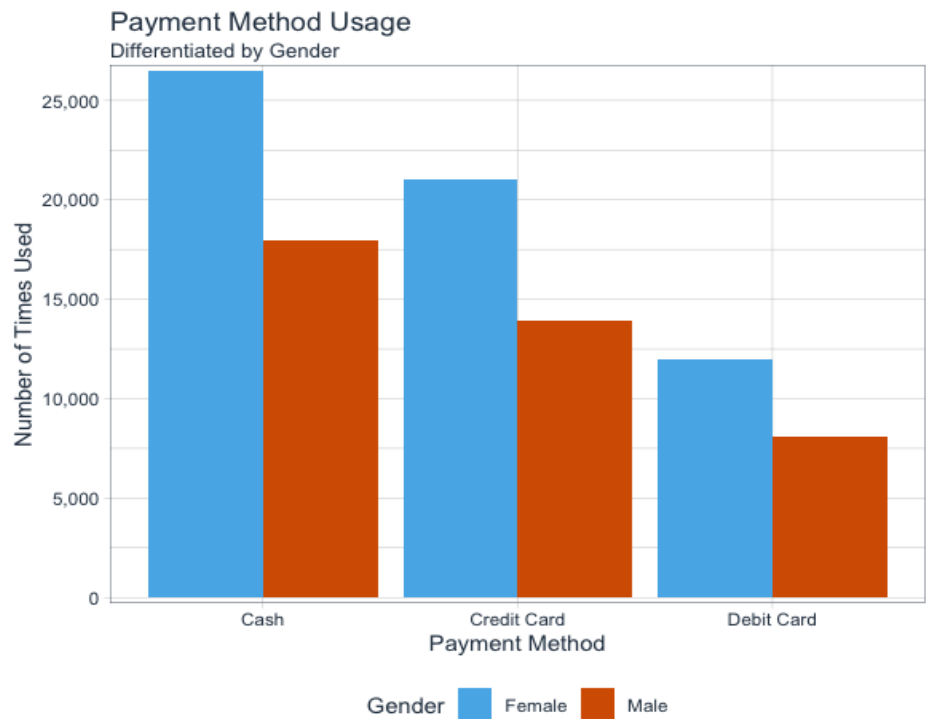
Cash is the most used payment method, and debit cards are the least used payment method. The number of purchases completed using cash is more than double the number of purchases completed using debit cards.



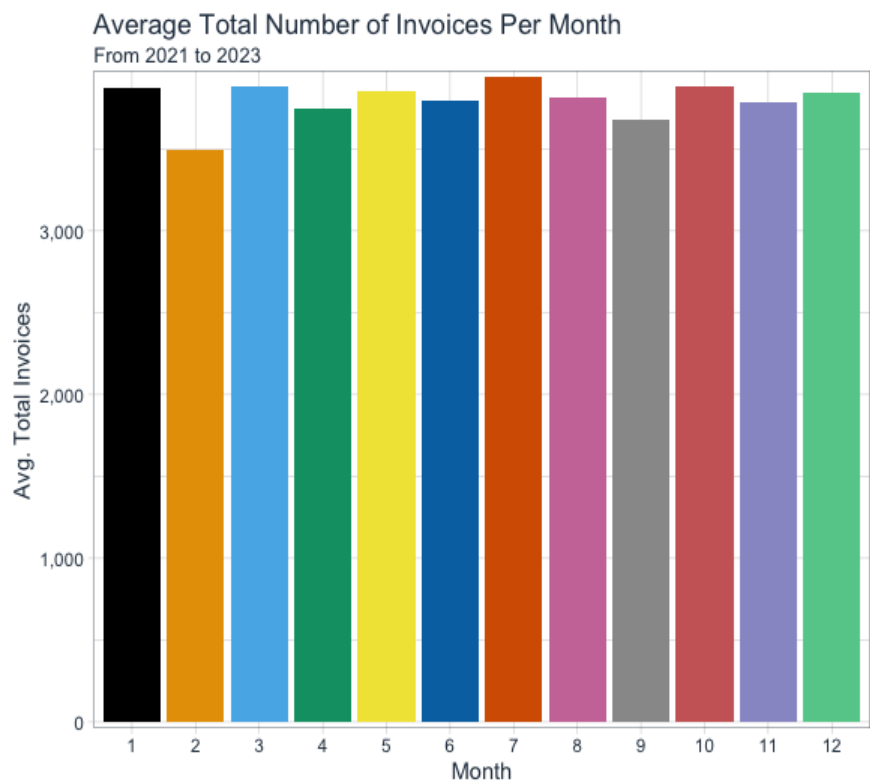
The preferred payment method for each age group is as follows: cash, credit card, and debit card.



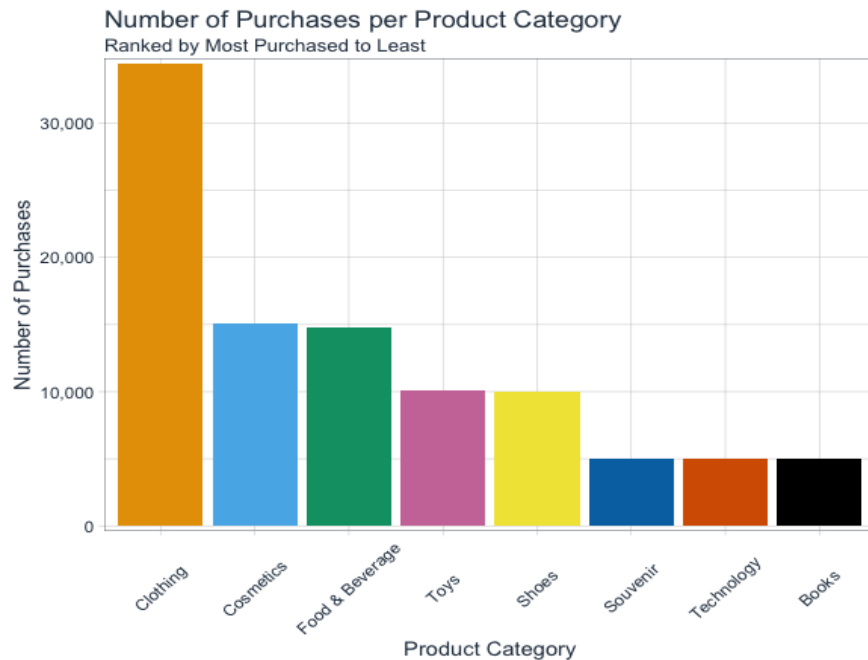
The preferred payment method for each gender is as follows: cash, credit card, and debit card.



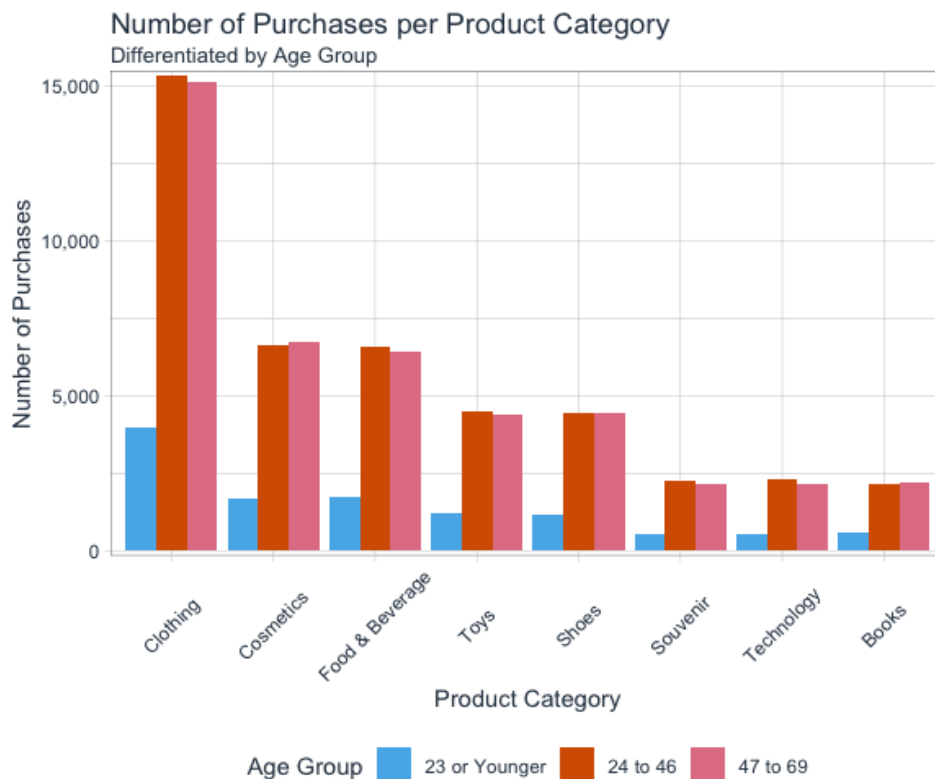
The busiest month is July with an average total invoice of 3,938, followed by October (3882 invoices) and March (3880 invoices) from 2021 to 2023.



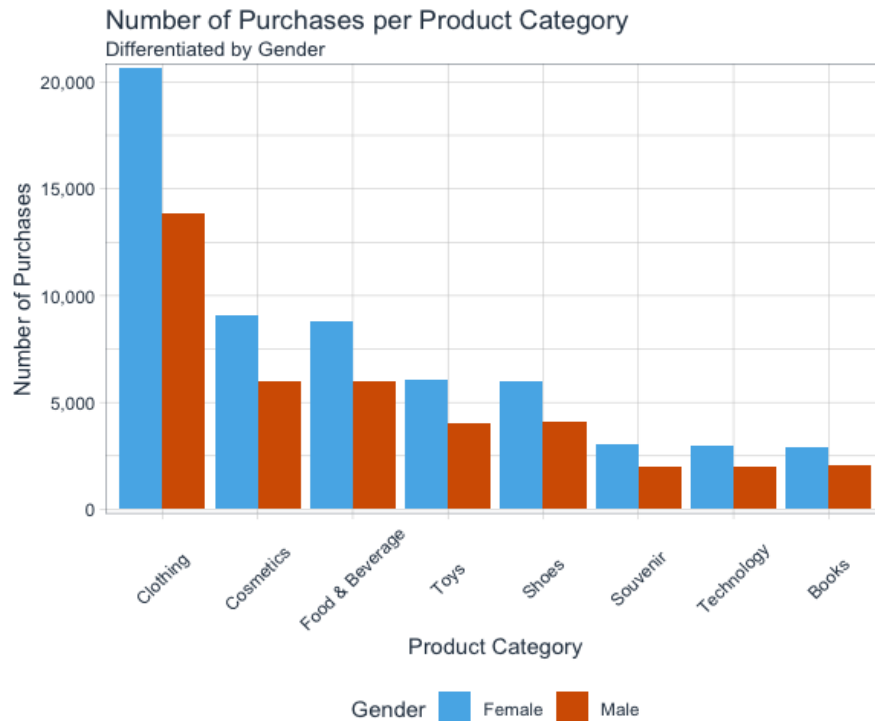
The most popular product category (the one with the most purchases) is clothing by a large margin.



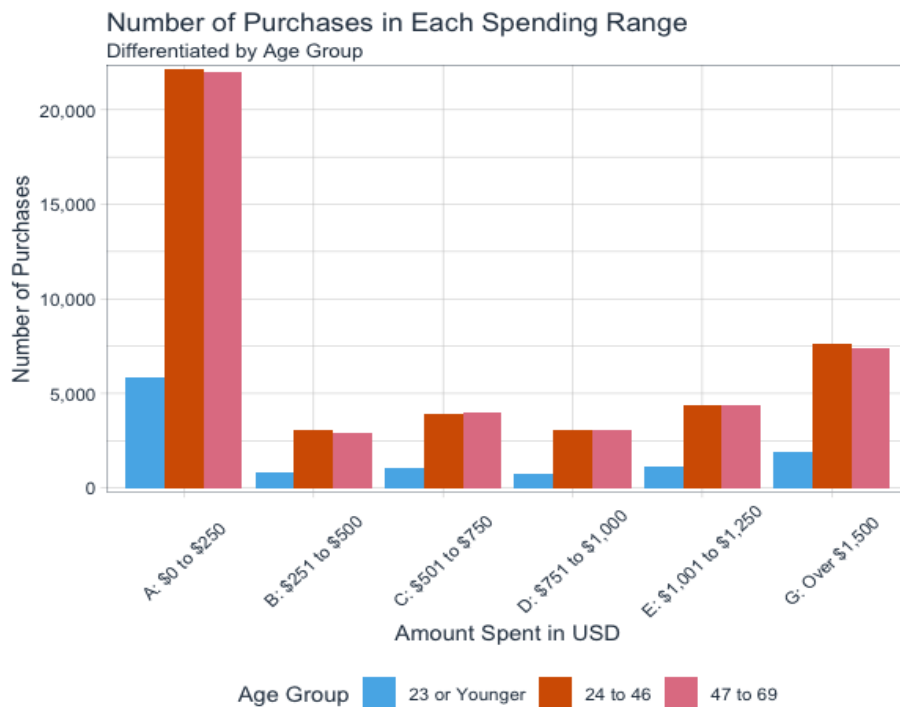
The majority of purchases for each product category are made by people of ages 26 to 50 by a substantial margin. People who are 25 years or younger have the lowest number of purchases for each product category by a significant margin.



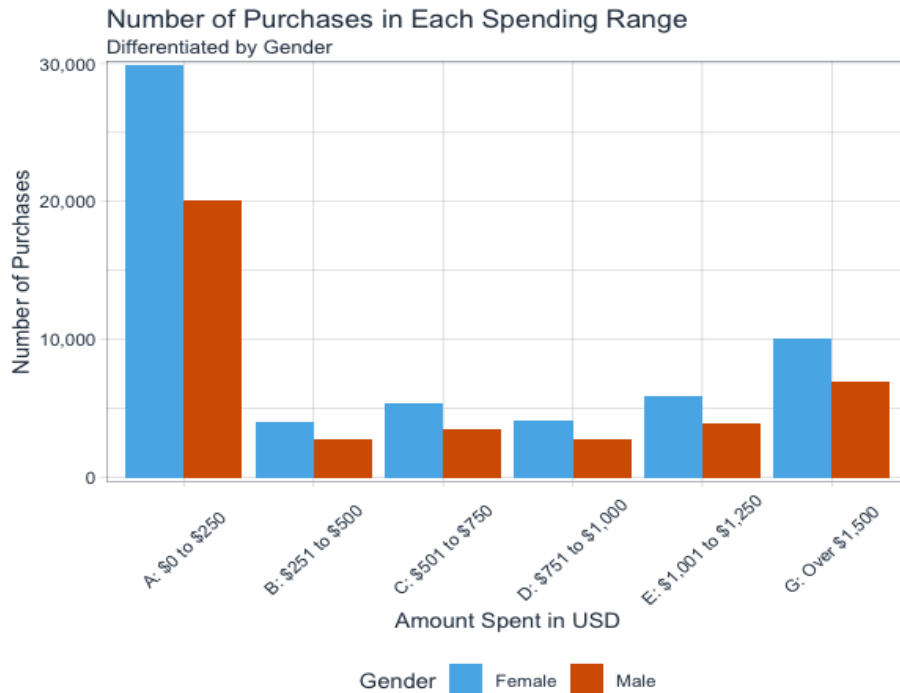
Females make more purchases than males for each product category by a substantial margin.



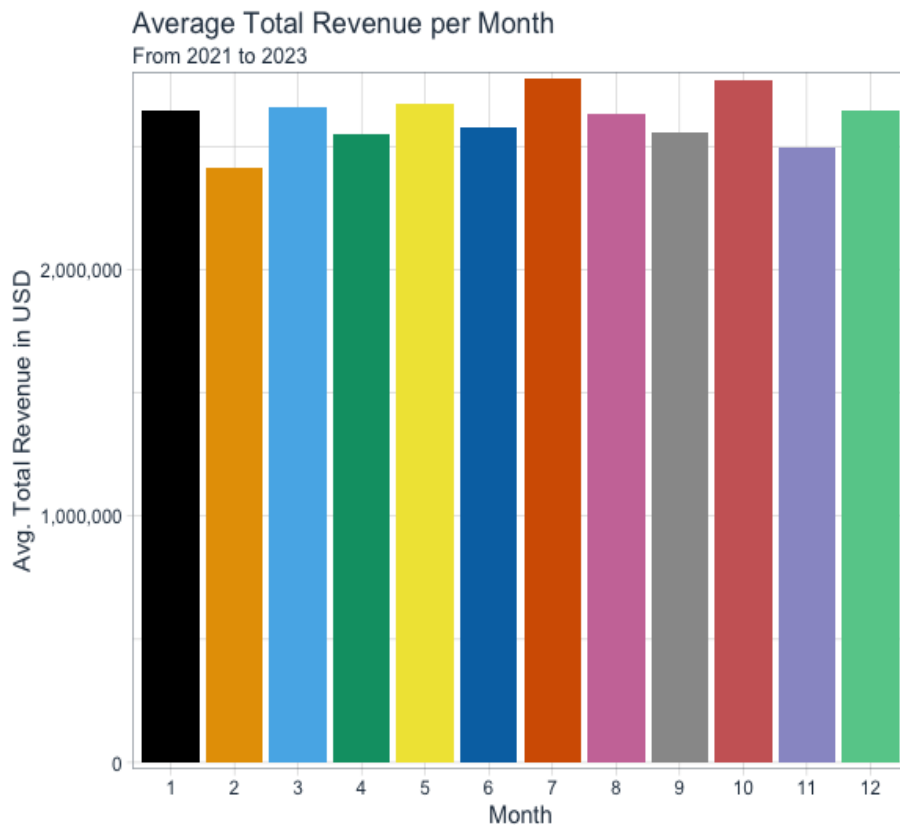
Regardless of age group, the majority of purchases have a price total of 250 USD or less. The next largest number of purchases have a price total of over 1,500 USD. Ultimately, most people are likely to spend 250 USD or less, or, 1,500 USD or more.



Females and males are most likely to have a purchase total of 0 to 250 USD, followed by a purchase total of 1,500 USD or more.



The highest total average revenue is generated in July (\$2,776,012), followed by October (\$2,769,129) and May (\$2,673,463).



The total monthly revenue for 2021 and 2022 follows a similar pattern with a notable decline in revenue in February, and significant peaks in July and October.

