

## **1.Regional Sales Performance :**

Our analysis shows that sales figures differ noticeably across regions. In some regions, customers consistently spend more, resulting in higher revenue, while other regions have lower sales. This suggests that the company can benefit from focusing marketing efforts on the top performing regions. By understanding which regions drive the most revenue, the company can tailor promotional activities and allocate resources more effectively. In contrast, for regions with lower sales, exploring growth strategies such as localized advertising or special offers could help boost performance. This insight supports a targeted approach to marketing and resource distribution.

## **2.Top-Selling Product Categories :**

Our data indicates that certain product categories generate significantly more revenue compared to others. Categories with high sales volume represent products that resonate well with customers and likely offer better margins. The company should consider expanding its offerings in these successful categories, ensuring that these products remain in stock. Meanwhile, categories with lower revenue might benefit from a review of pricing strategies or promotional efforts to stimulate demand. Focusing on the best performing categories can drive overall growth and profitability, while adjustments in underperforming categories may uncover hidden potential and improve market competitiveness.

## **3.Most Popular Products :**

By examining the data, we found that a small number of products consistently outperform others in terms of sales volume. These popular products are clearly in demand, suggesting that customers prefer these items over others. To maintain high customer satisfaction and revenue flow, it is essential that these best-selling products are always in stock. Moreover, the company might consider promoting similar items or bundling these popular products with related merchandise. Ensuring product availability and leveraging their popularity in marketing campaigns can increase overall sales and strengthen brand reputation in the marketplace.

## **4.Day of Week Transaction Trends :**

Our analysis of the TransactionWeekday column reveals that sales activity varies throughout the week. For example, weekends or specific weekdays tend to show a spike in transactions, while other days may have fewer sales. This pattern indicates that customer purchasing behavior is influenced by the day of the week. Recognizing these trends can help the company schedule promotions and manage staffing and inventory more effectively. For instance, boosting marketing efforts and ensuring adequate staffing on peak days can help capture additional sales. Understanding and leveraging these day-of-week trends is a practical approach to maximize revenue and improve operational efficiency.

## **5. Customer Signup Month vs. Total Spending :**

When we examined the relationship between the month customers sign up and their total spending we noticed that there are clear differences in purchasing behavior. Customers who sign up during certain months tend to spend more overall. This insight suggests that seasonal factors might influence both the signup rate and the subsequent spending habits of new customers. Companies can use this information to time their marketing campaigns targeting new signups with tailored offers during months when higher spending is expected. In months where spending is lower, additional incentives or loyalty programs may be beneficial to encourage repeat purchases and increase overall customer lifetime value.