Diwali Sales Analysis

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Objective:

The Diwali Sales Analysis project aims to analyze sales data during the Diwali festival season to uncover valuable insights and drive business growth. This project combines data visualization and advanced data analysis techniques to provide a comprehensive view of sales performance, customer behaviour, and market trends.

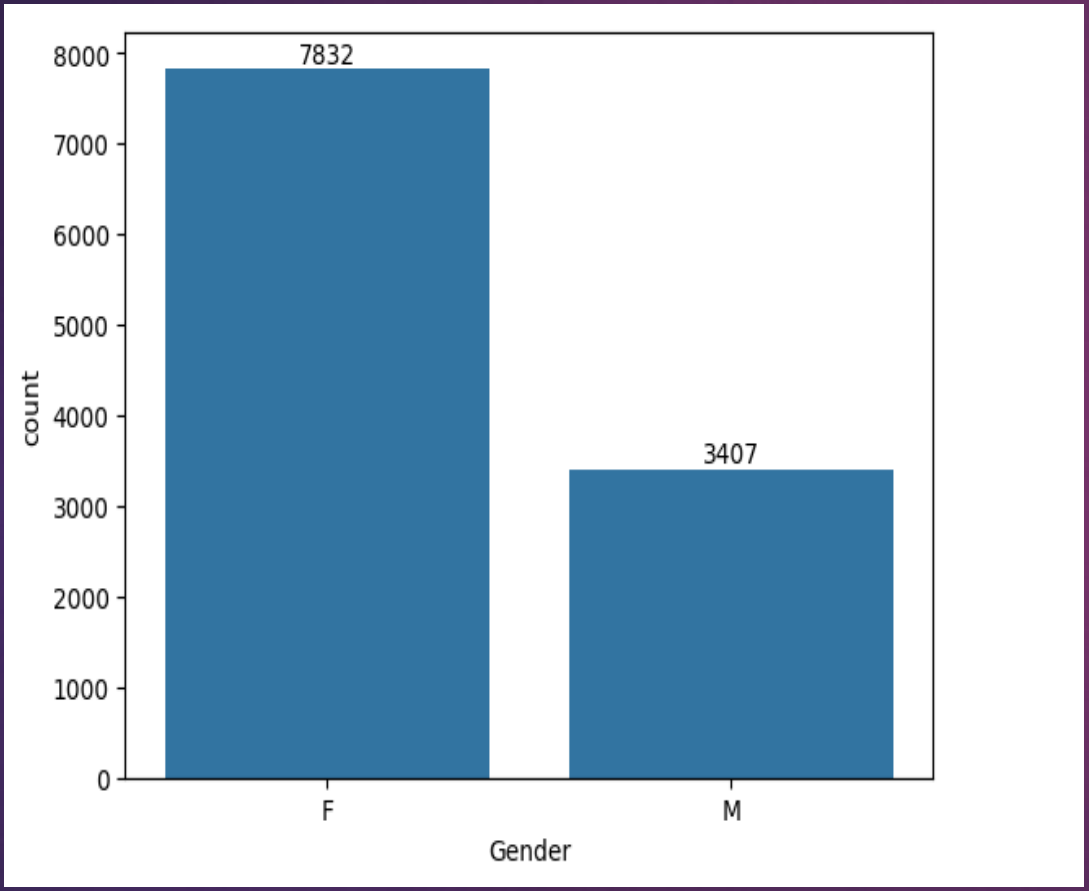
Technologies Used:

- Python: For data preprocessing, cleaning, and analysis.
- Pandas, NumPy, Matplotlib, Seaborn: For data manipulation and visualization.

Project Outcomes

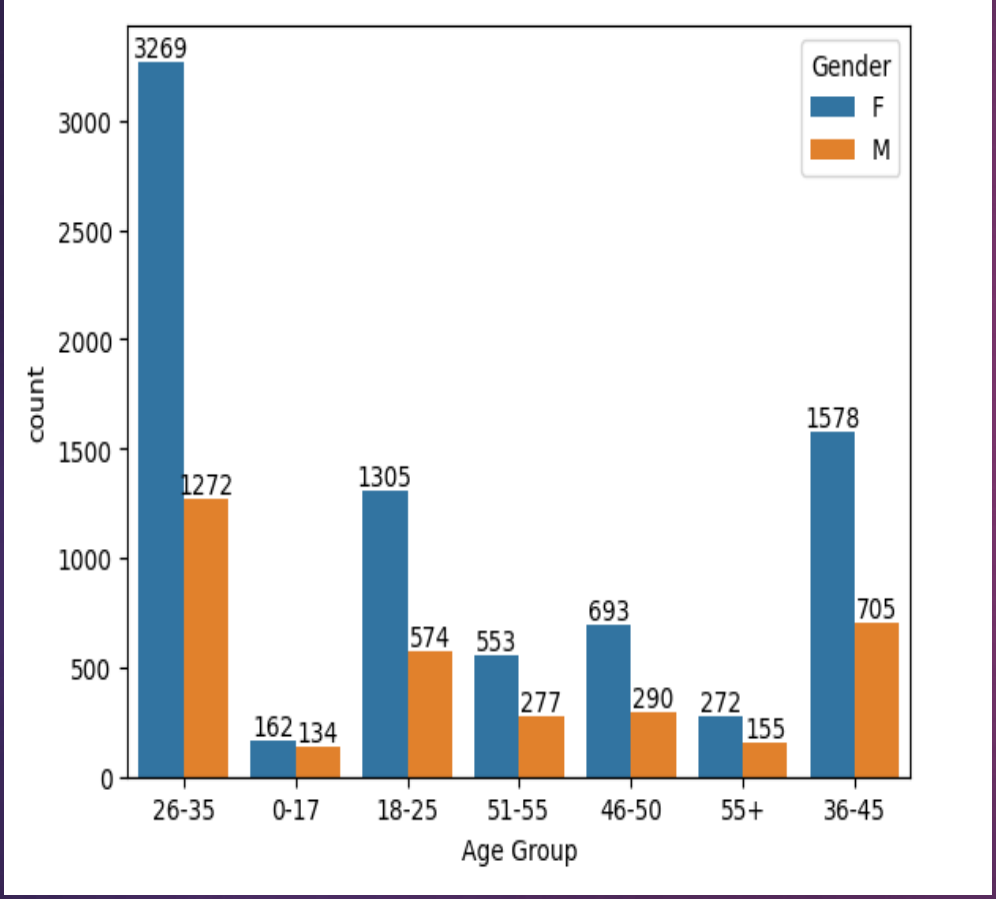
- Insights into Sales Trends: Understanding which products perform best during Diwali.
- Customer Behaviour Analysis: Identifying customer preferences and buying patterns.
- Actionable Recommendations: Strategies to optimize marketing campaigns, product promotions, and pricing.

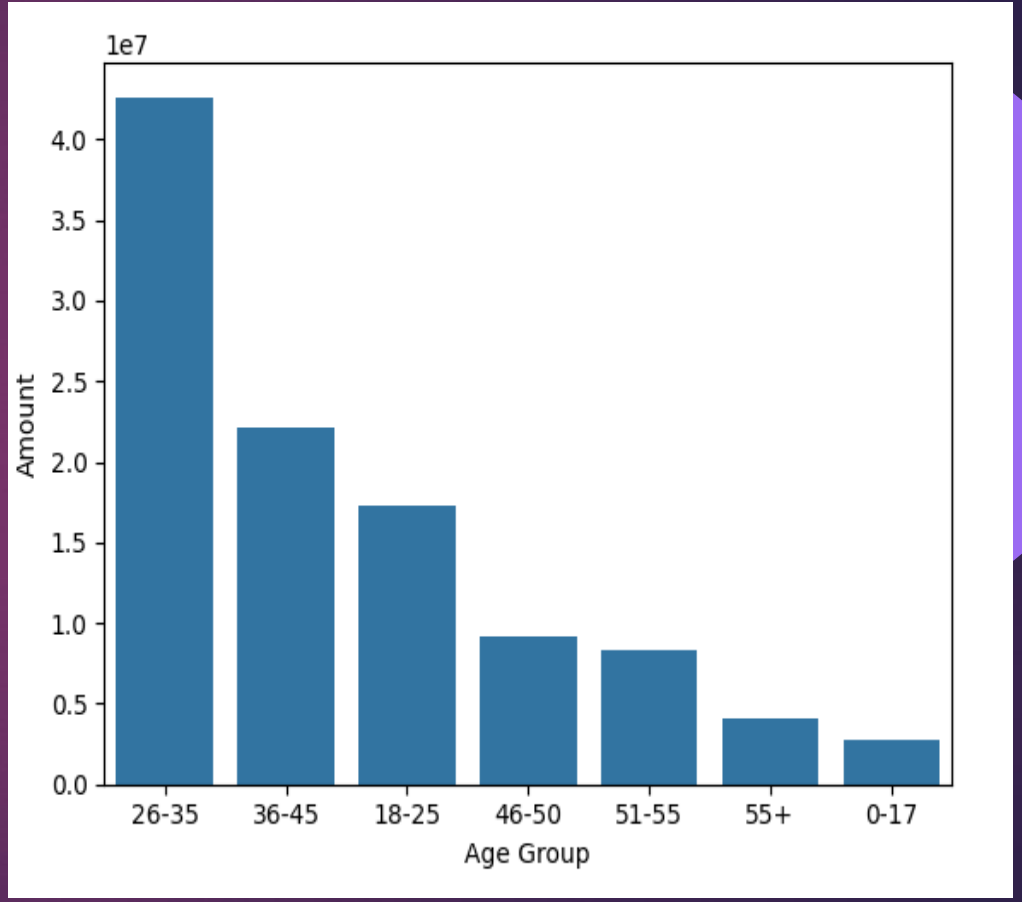
What is the distribution of sales between male and female customers?



we can see that most of the buyers are females and even the purchasing power of females are greater than men.

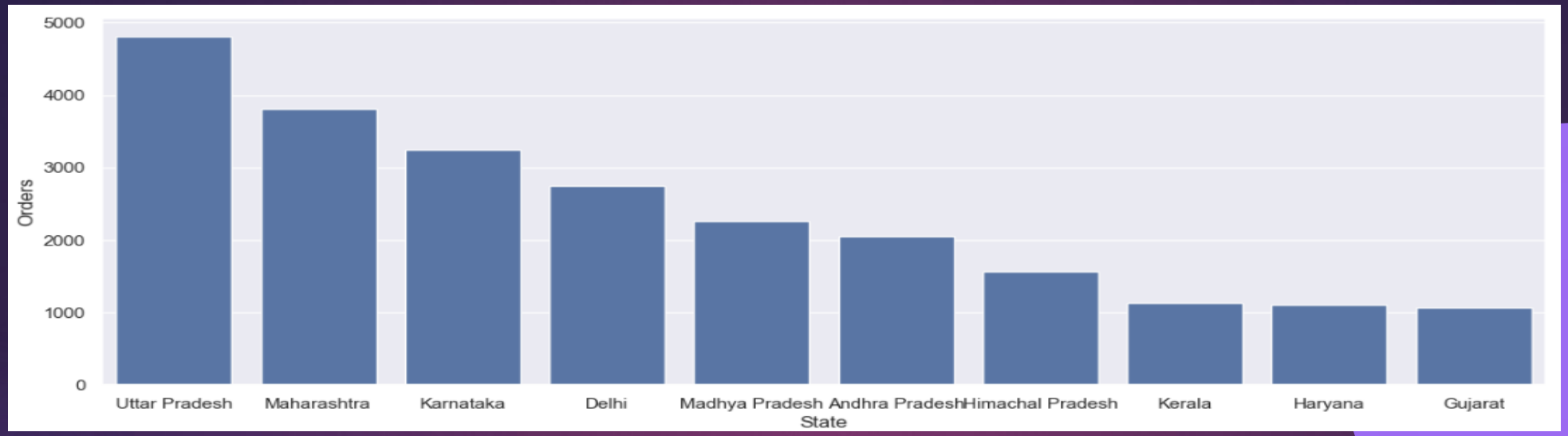
Which age group contributed the most to the sales?

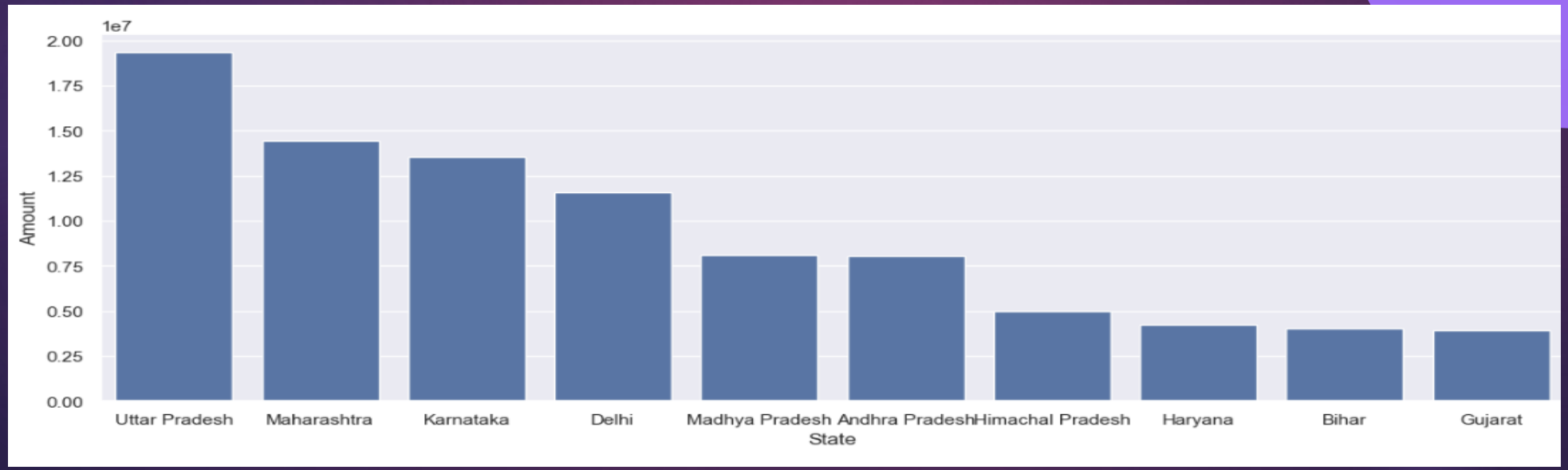




we can see that most of the buyers are of age group between 26-35 years female

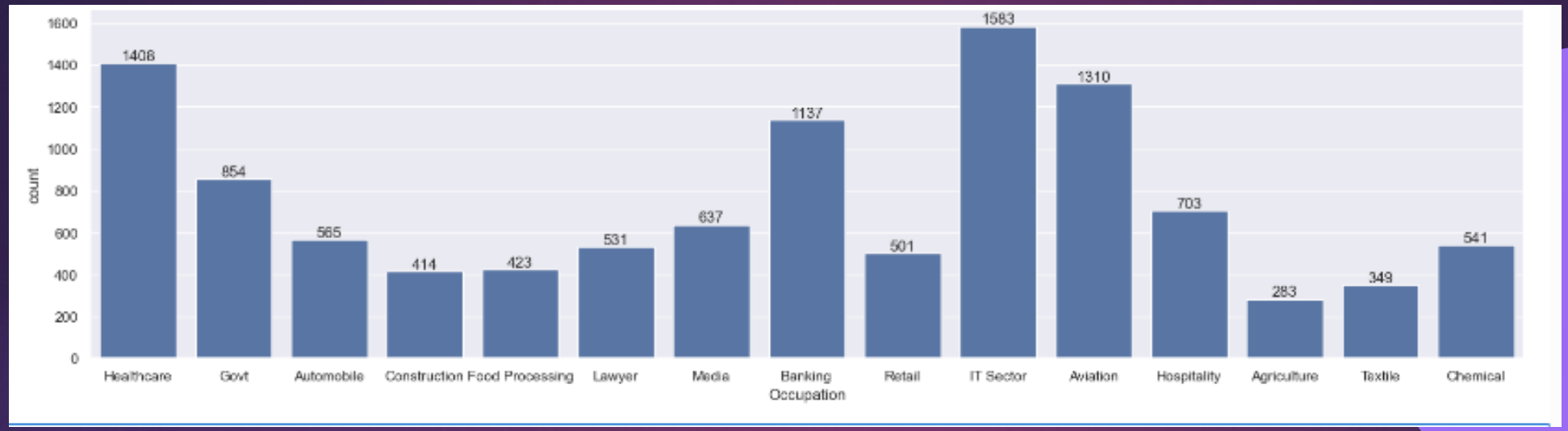
How do sales compare across different states?

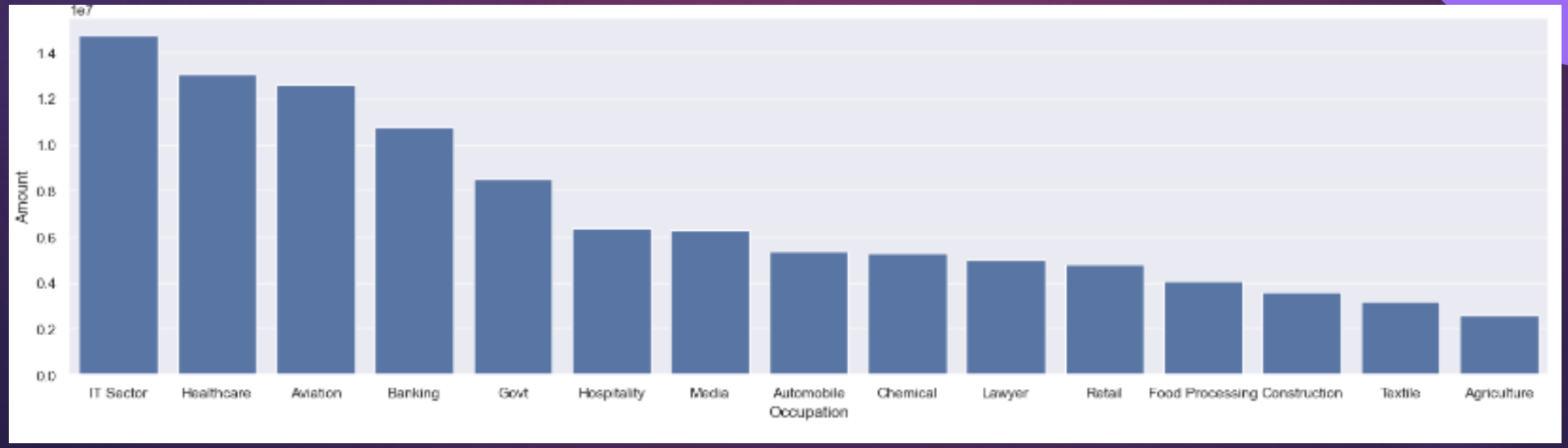




we can see that most of the orders & total sales/amount are from Uttar Pradesh, Maharashtra and Karnataka respectively.

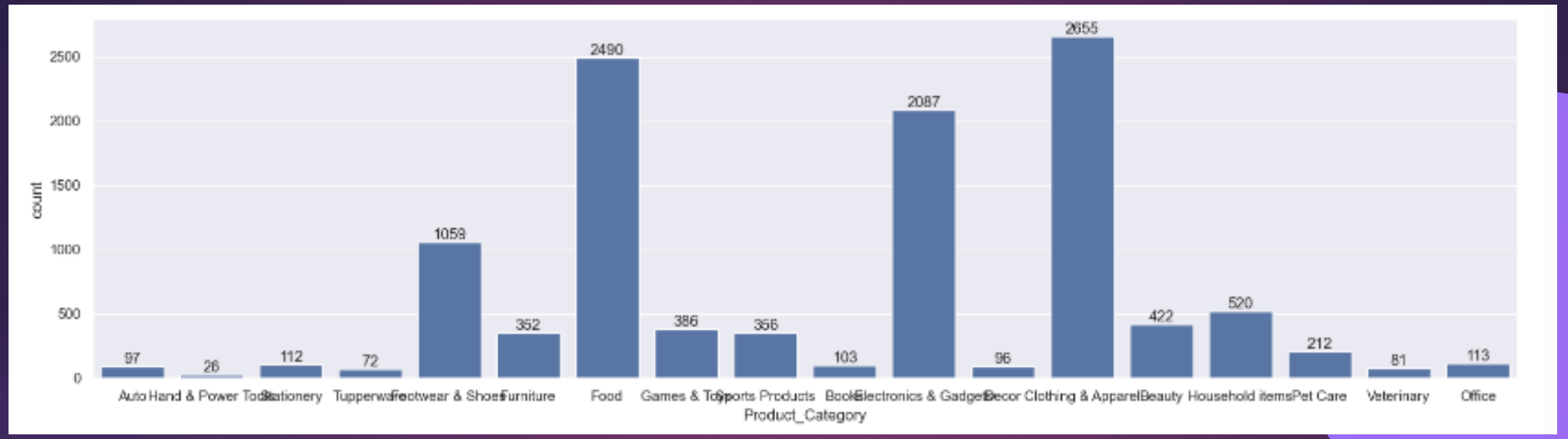
Which sector buy most of the products?

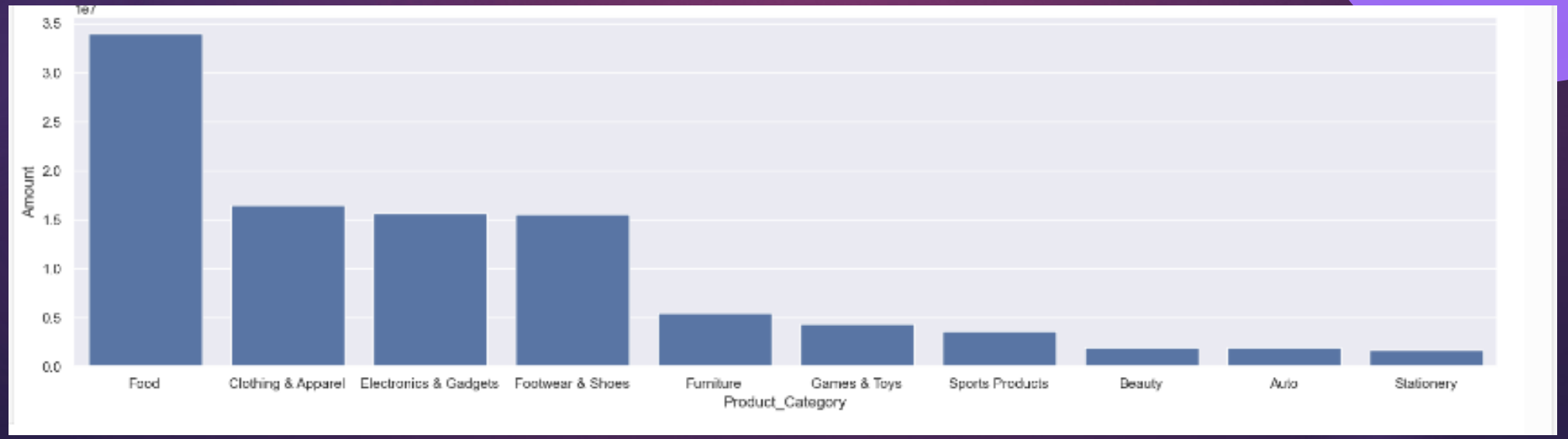




we can see that most of the buyers are working in IT, Healthcare and Aviation sector.

Which product categories had the highest sales during the Diwali season?





we can see that most of the sold products are from Food, Clothing and Electronics category.

Conclusion

The analysis indicates that the majority of buyers are females, particularly those in the 26-35 age group, who also demonstrate higher purchasing power compared to men.

Most orders and total sales originate from Uttar Pradesh, Maharashtra, and Karnataka, with buyers predominantly working in the IT, Healthcare, and Aviation sectors.

Additionally, the most frequently purchased products belong to the Food, Clothing, and Electronics categories.