

1. Gender-wise Analysis

- **Insight:**
 - Count and amount plots show **females are more in number and spend more.**
- **Action:**
 - Increase marketing targeted at **female customers.**
 - Curate female-focused product bundles or discounts during Diwali.

2. Age Group Analysis

- **Insight:**
 - The **26-35 age group** is the most active in terms of purchases and spending.
- **Action:**
 - Target this age group with digital campaigns.
 - Offer EMI options or exclusive deals, as they might be working professionals.

3. State-wise Sales

- **Insight:**
 - Top spending states include **Uttar Pradesh, Maharashtra, Karnataka**, etc.
- **Action:**
 - Invest in local/regional promotions in these states.
 - Improve delivery networks/logistics for high-sales regions to enhance satisfaction.

4. Marital Status and Gender

- **Insight:**

- **Married individuals**, especially **married women**, contribute more to total spending.
- **Action:**
 - Promote products like home decor, family gift bundles, and couple-centric deals during festivals.



5. Occupation

- **Insight:**
 - **Working professionals** and **entrepreneurs** contribute the most in terms of amount spent.
- **Action:**
 - Offer exclusive premium product lines or memberships.
 - Send targeted email marketing campaigns to professionals via LinkedIn/job-profile-based targeting.



6. Product Category

- **Insight:**
 - **Clothing & Apparel**, **Food & Beverage**, and **Electronics** are the highest-selling categories.
- **Action:**
 - Optimize inventory for these categories before Diwali.
 - Highlight these categories in advertising banners and product pages.



7. Product ID / Best Sellers

- **Insight:**
 - Specific products are selling the most (top 10 Product_IDs identified).
- **Action:**

- Feature these best sellers in promotional emails, “Trending Now” sections, and Diwali gift guides.
- Consider bundling top-selling items with complementary products.



Data Cleaning Done:

- Dropped irrelevant columns (*Status*, *unnamed1*).
- Removed null values.