

# Executive Summary – Diwali Sales Data Analysis

This analysis examines 11,239 customer transactions from Diwali sales data to understand customer demographics, purchasing behavior, and revenue drivers. The dataset was cleaned and prepared by removing irrelevant columns and handling missing values, ensuring reliable insights.

## Overall Dataset Snapshot

- Total Transactions Analyzed: 11,239
- Total Revenue Generated: ~₹106.25 million
- Average Order Value: ₹9,453
- Average Orders per Customer: 2.49
- Customer Age Range: 12 to 92 years
- Primary Metrics Analyzed: Orders, Purchase Amount, Demographics, Geography, Occupation, and Product Categories

## Key Business Insights

### 1. Gender-Based Insights

Female customers contribute ~70% of total revenue.

- Female Revenue: ₹74.33 million
- Male Revenue: ₹31.91 million

**Insight:** Marketing campaigns targeting women can significantly improve sales performance during festive seasons.

### 2. Age Group Analysis

The 26–35 age group dominates purchasing activity and contributes the highest revenue.

**Insight:** Young working professionals form the most valuable customer segment.

### 3. Regional (State-wise) Performance

**Top-performing states:** Maharashtra, Uttar Pradesh, Karnataka.

**Insight:** Region-focused promotions in high-performing states can yield strong ROI.

### 4. Marital Status Impact

Unmarried customers, especially females, contribute more to total sales.

**Insight:** Lifestyle-oriented and festive gifting campaigns resonate more with unmarried customers.

## **5. Occupation-Based Trends**

**Top occupations:** IT Sector, Aviation, Healthcare.

**Insight:** Profession-based segmentation can help design premium offers and targeted ads.

## **6. Product Category Performance**

**Top categories:** Food, Clothing, Electronics & Gadgets.

**Insight:** Bundling food items with clothing or electronics can increase average order value.