

Diwali Sales Analysis

KEY INSIGHTS & STRATEGIC RECOMMENDATIONS

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Executive Summary

- ▶ **Total Revenue:** ₹106.6M
- ▶ **Key Segments Driving Sales:**
 - ▶ Female shoppers (65% of revenue)
 - ▶ Adults aged 30-39 (₹34.5M revenue)
- ▶ **Top Performing State:** Uttar Pradesh (₹19.4M)
- ▶ **Highest-Growth Category:** Food & Grocery (₹33.9M revenue)

Data Overview

- ▶ **Dataset:** 11,251 transactions, 15 features
- ▶ **Key Variables Analyzed:**
 - ▶ Customer demographics (Age/Gender/Location)
 - ▶ Purchase behaviour (Orders/Spending)
 - ▶ Product categories
- ▶ **Data Quality:**
 - ▶ Removed 12 null records
 - ▶ Enhanced with RFM segmentation

Demographic Insights

- ▶ **Gender Analysis:**
- ▶ Female customers dominate:
 - ▶ 65% of customer base
 - ▶ 65% of total revenue
- ▶ Male customers show higher average spending (₹9,452 vs ₹9,146)
- ▶ **Age Group Performance:**
- ▶ **Top segment:** 30-39 years (31% of customers, 32% of revenue)
- ▶ **High-potential segment:** 20-29 years (28% of customers)
- ▶ ANOVA confirms significant spending differences between age groups ($p=0.0104$)

Geographic Hotspots

- ▶ **Top States by Revenue:**

- ▶ Uttar Pradesh (₹19.4M)

- ▶ Maharashtra (₹14.4M)

- ▶ Karnataka (₹13.5M)

- ▶ **High-Value Zones:**

- ▶ Northern states show highest average spending (Delhi: ₹10,511)

- ▶ Western zone contributes 28% of total revenue

Product Performance

- ▶ **Top Categories by Revenue:**

- ▶ Food & Grocery (₹33.9M)

- ▶ Fashion (₹16.5M)

- ▶ Electronics (₹15.6M)

- ▶ **Order Volume Leaders:**

- ▶ Fashion (2,100+ orders)

- ▶ Food & Grocery (1,850+ orders)

Customer Segmentation (RFM)

- ▶ **High-Value Segments Identified:**
- ▶ **Champions** (12%): High spenders, recent purchases
- ▶ **Loyal Customers** (18%): Frequent buyers
- ▶ **At Risk** (22%): Declining engagement
- ▶ **Opportunity:**
- ▶ 40% of customers in "Need Attention" segment show high spending potential

Recommendations

- ▶ **Targeted Marketing:**

- ▶ Focus on female shoppers (30-39) in UP/Maharashtra with Fashion & Electronics bundles

- ▶ **Category Expansion:**

- ▶ Increase Food & Grocery inventory by 25% for next Diwali season

- ▶ **Customer Retention:**

- ▶ Launch loyalty program for "At Risk" segment (₹1,000 welcome bonus)

- ▶ **Geographic Strategy:**

- ▶ Open 3 new fulfilment centre's in Northern India

Q&A

- ▶ **Open floor for discussion**
- ▶ **Contact:** ankitparwatkar35@gmail.com

Thankyou

A Presentation By Ankit Parwatkar