

Fashion Store Data Analysis Report 2022

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Tool Used: Excel for Data Analysis

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INTRODUCTION

This project involves a detailed analysis of a fashion retail store's sales and customer data. The aim is to uncover patterns, identify top-performing segments, and derive insights to guide future business strategies. Using Excel for data visualization and statistical evaluation, we analyzed sales trends, customer demographics, order channels, and category performance. The report highlights key metrics that drive profitability and engagement in the fashion retail domain.

INFORMATION ABOUT DATA SET

The dataset used for this analysis is a comprehensive record of transactions from a fashion retail store, comprising **31,047** entries across **20 columns**. Below is an overview of the key fields:

- **Order ID** – Unique identifier for each order placed by a customer.
- **Cust ID** – Unique customer identification number.
- **Gender** – Captures whether the customer is Male or Female.
- **Age** – Age of the customer at the time of purchase.
- **Age Group** – Categorical segmentation of customers (e.g., Teenagers, Adults, Seniors).
- **Date** – Date on which the order was placed.
- **Status** – Indicates delivery status (e.g., Delivered, Returned).
- **Channel** – Sales platform used (e.g., Myntra, Ajio, Amazon).
- **SKU** – Stock Keeping Unit representing the unique product.
- **Category** – Product category (e.g., Women's Wear, Men's Wear, Accessories, Kids Wear).
- **Size** – Product size ordered (e.g., S, M, L, XL, 4XL, 5XL).
- **Qty** – Quantity of units ordered.
- **Currency** – Currency of the transaction (primarily INR).
- **Amount** – Total order value for the transaction.
- **Ship-City / State / Postal Code / Country** – Geographic details for order delivery.
- **B2B** – Boolean field indicating if the order was business-to-business.

DATA PREPARATION

The initial step involved importing the raw data into Excel for processing. Upon review, the dataset was found to contain 20 columns and over 31,047 records, offering a substantial base for analysis. One of the key transformations included deriving the **Age Group** column from the existing **Age** field, enabling clearer customer segmentation. This helped categorize customers into groups such as Teenagers, Adults, and Seniors for more focused insights. A detailed examination of the dataset was carried out to identify column types, patterns, and any inconsistencies, setting the foundation for further data cleaning and analysis.

DATA CLEANING

- Checked for duplicate records and removed them to ensure data accuracy.
- Checked for zero or blank values in critical fields and filtered out such rows to maintain overall data quality.
- All columns were reviewed for correct data types and adjusted as needed.
- The **Gender** column was standardized by converting inconsistent values such as “men”, “m”, “women”, and “W” into consistent labels: “**Men**” and “**Women**”.
- The **Quantity** column, which contained both numeric and text values, was cleaned by converting all entries into proper numerical format.
- A new column named **Age Group** was created based on the **Age** column:
 - Age > 50 → **Senior**
 - Age > 30 → **Adult**
 - Others → **Teenager**

This age segmentation enabled clearer demographic analysis of the customer base.

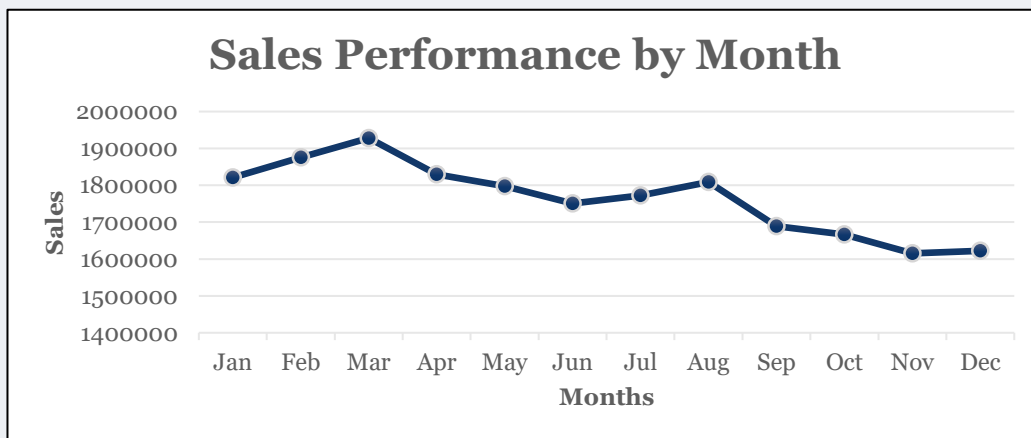
QUICK INSIGHTS

- **Sales Performance Highlights:** Sales peaked in March at nearly ₹20L, dipped below ₹16L in November, with monthly orders averaging 2,600–2,800 before a year-end slowdown.
- **Category-Wise Performance:** The 'Set' category led sales with ₹10.05M, followed by Kurta (₹4.95M), Western Dress (₹3.15M), and Top (₹1.19M).
- **Channel Performance:** Amazon led with ₹7.5M in sales, followed by Myntra (₹4.9M) and Flipkart (₹4.6M), while Ajio, Nalli, and Meesho contributed smaller shares.
- **Regional Insights:** Top sales originated from Maharashtra, Uttar Pradesh, Tamil Nadu, Telangana, and West Bengal.
- **Customer Demographics:** Women drove 64% of sales (₹13.6M) vs. men's 36% (₹7.6M), with adults forming the largest age group and women leading across all segments.
- **Order Status Distribution:** Order fulfillment was strong with 92% delivered, while returns, cancellations, and refunds accounted for just 8% collectively.

DETAILED INSIGHTS

1. Sales Distribution according to Months:

Months	Count of Order	Total Sales
Jan	2702	1820601
Feb	2750	1875932
Mar	2819	1928066
Apr	2685	1829263
May	2617	1797822
Jun	2597	1750966
Jul	2579	1772300
Aug	2617	1808505
Sep	2490	1688871
Oct	2424	1666662
Nov	2383	1615356
Dec	2384	1622033
Grand Total	31047	21176377



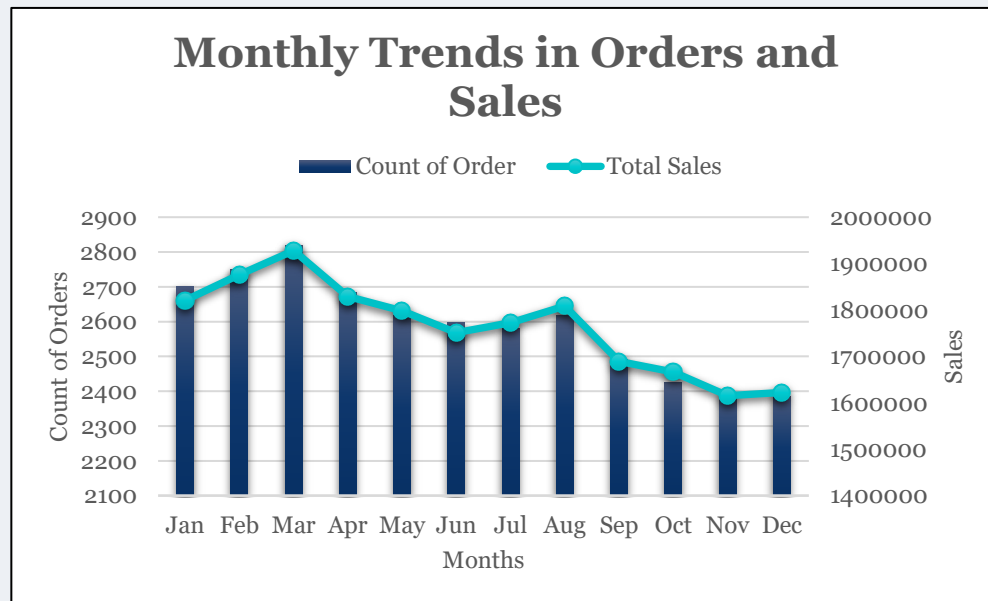
Insights:

- Sales peaked in **March** (~₹1.93M) after a steady Q1 rise.
- **Lowest sales** in **November** (~₹1.6M), slight recovery in December.
- Sales declined steadily from April to July, indicating a drop in consumer interest or seasonality effects.

Recommendations:

- Analyze Q1 highs and H2 dips to plan seasonal boosts, mid-year launches, and festive prep with influencers and inventor.

2. Monthly Trends According to Orders and Sales



Insights:

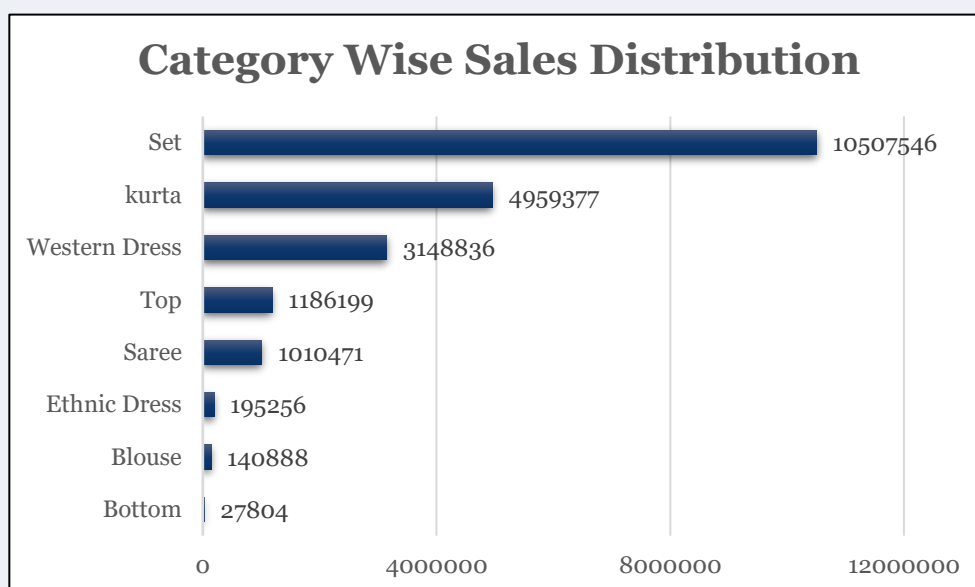
- **Orders Peak in March:** Correlates with highest sales.
- **Stable Orders, Declining Sales:** Orders remained stable in later months, but average order value likely dropped.

Recommendation:

- Refine pricing and bundle strategies, especially during off-peak periods.

3. Category-Wise Sales Distribution

Category	Sum of Amount
Bottom	27804
Blouse	140888
Ethnic Dress	195256
Saree	1010471
Top	1186199
Western Dress	3148836
kurta	4959377
Set	10507546
Grand Total	21176377



Insights

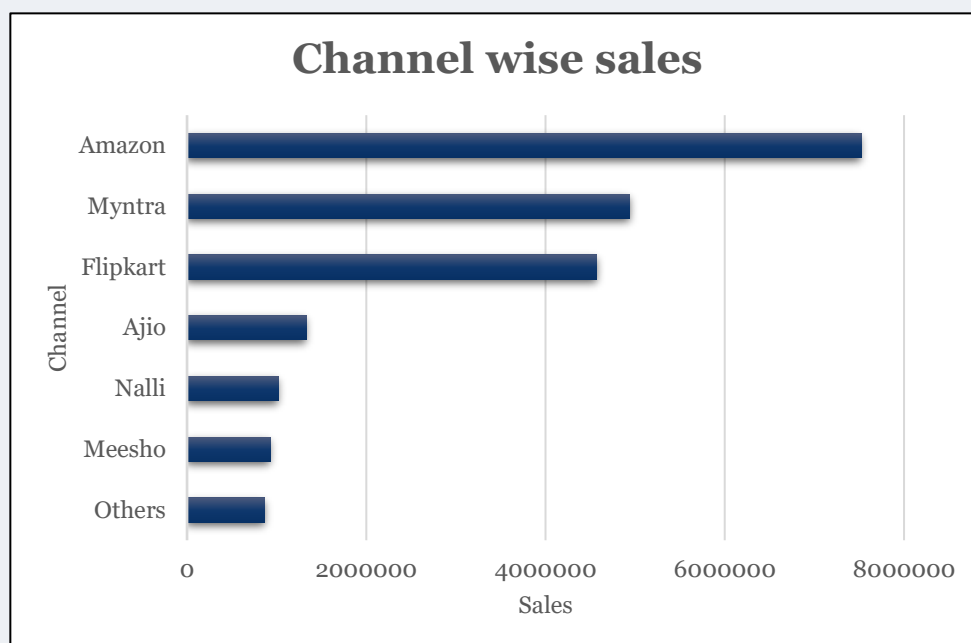
- **Top-Selling Category:** *Set* contributes the highest sales with **₹10.5 million+** indicating strong market preference., followed by *Kurta* and *Western Dress*.
- **Low-Performing Categories:** *Bottoms*, *Blouse*, and *Ethnic Dress* contribute the least to total sales.

Recommendation:

- Focus marketing on top categories like Sets and Kurtas while strategizing ways to boost demand for underperforming categories.

4. Channel-Wise Sales

Row Labels	Sum of Amount
Amazon	7519933
Myntra	4941540
Flipkart	4573301
Ajio	1331427
Nalli	1015329
Meesho	927606
Others	867241
Grand Total	21176377



Insights

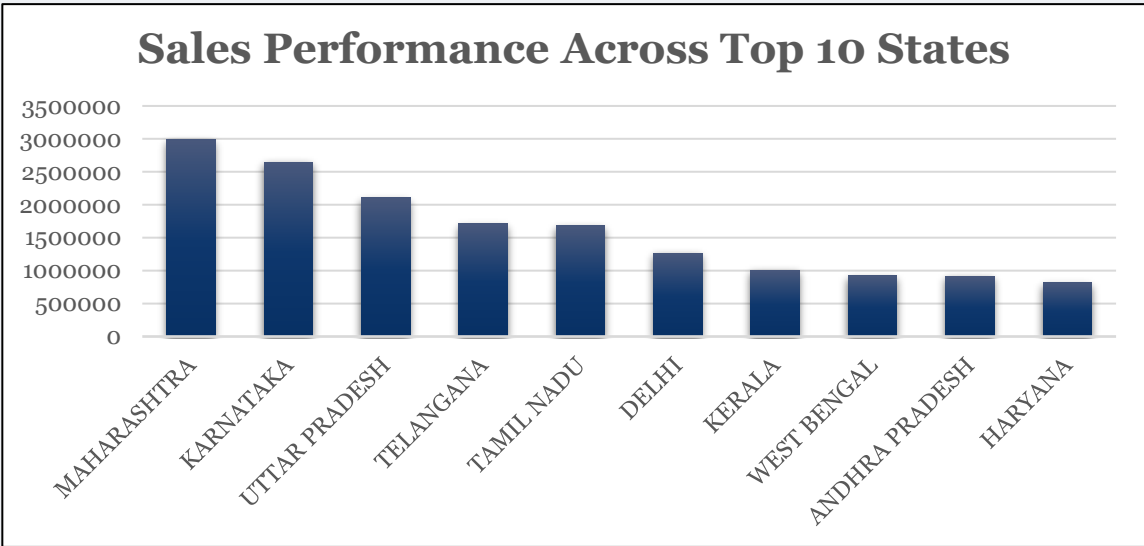
- **Top Channels:** *Amazon* (₹7.5M), *Myntra* (₹4.9M), and *Flipkart* (₹4.5M).
- **Underperformers:** *Meesho*, *Nalli*, and *Others* generate under ₹1M each.
- Amazon leads in sales, significantly outperforming all other channels, with Myntra and Flipkart following behind. Ajio, Nalli, Meesho, and Others contribute minimal sales, indicating weak market traction. The gap between Amazon and lower-performing channels suggests an uneven distribution of consumer preference.

Recommendation:

- Strengthen partnerships with top channels. Review the ROI and strategy for underperforming platforms.

5. Top 10 State-Wise Sales

Ship-State	Sales
MAHARASHTRA	2990221
KARNATAKA	2646358
UTTAR PRADESH	2104659
TELANGANA	1712439
TAMIL NADU	1678877
DELHI	1266328
KERALA	1008940
WEST BENGAL	922444
ANDHRA PRADESH	918499
HARYANA	813320
Grand Total	16062085



Insights:

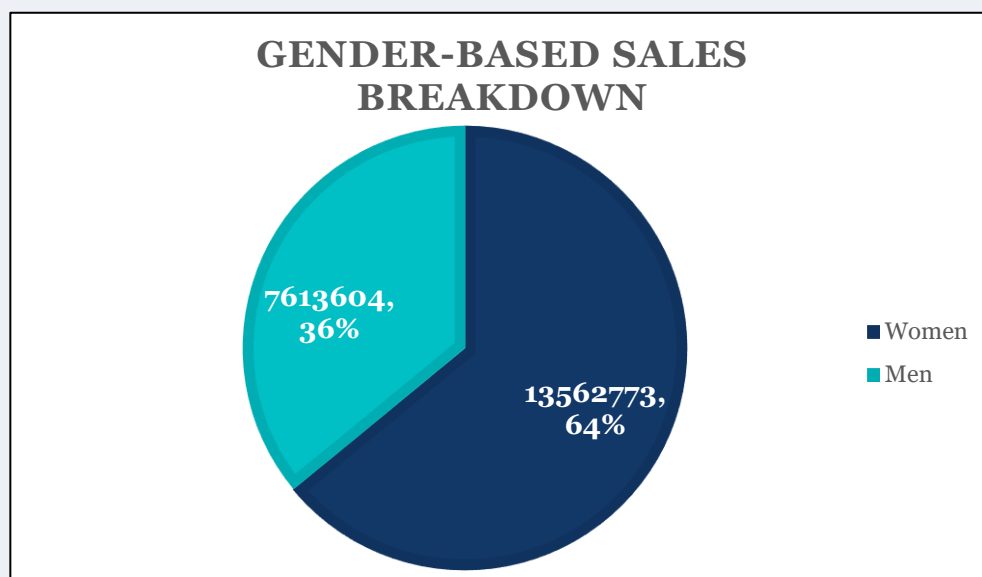
- **Top 3 States:** *Maharashtra, Karnataka, Uttar Pradesh*
- **Lowest Sales Among Top 10:** *Haryana, Andhra Pradesh*
- Maharashtra leads in sales performance, surpassing all other states, followed closely by Karnataka and Uttar Pradesh. Haryana records the lowest sales among the top 10 states, indicating weaker market presence.

Recommendation:

- Concentrate marketing in high-performing states. Explore growth potential and promotional opportunities in lower-performing regions.

6. Gender-Based Sales Breakdown

Gender	Total Sales	% of Grand total sales
Women	13562773	64.05%
Men	7613604	35.95%
Grand Total	21176377	100.00%



Insights:

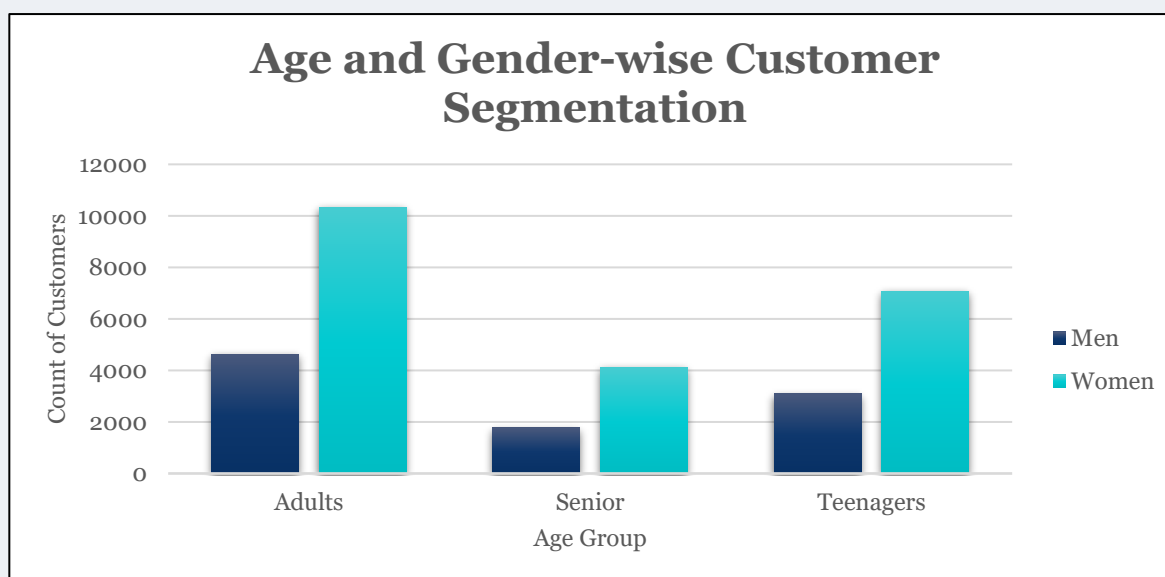
- Women account for 64% of total sales, significantly outpacing men's purchases, indicating a stronger demand in the female segment.
- Men's sales represent 36% of the market, suggesting an opportunity to boost engagement and capture more male buyers.

Recommendation:

- Women-centric marketing is yielding results. Consider expanding offerings for men to balance revenue sources.

7. Age and Gender-Wise Customer Segmentation

Count of Cust ID	Gender		
Age Group	Men	Women	Grand Total
Adults	4629	10344	14973
Senior	1777	4132	5909
Teenagers	3088	7077	10165
Grand Total	9494	21553	31047



Insights:

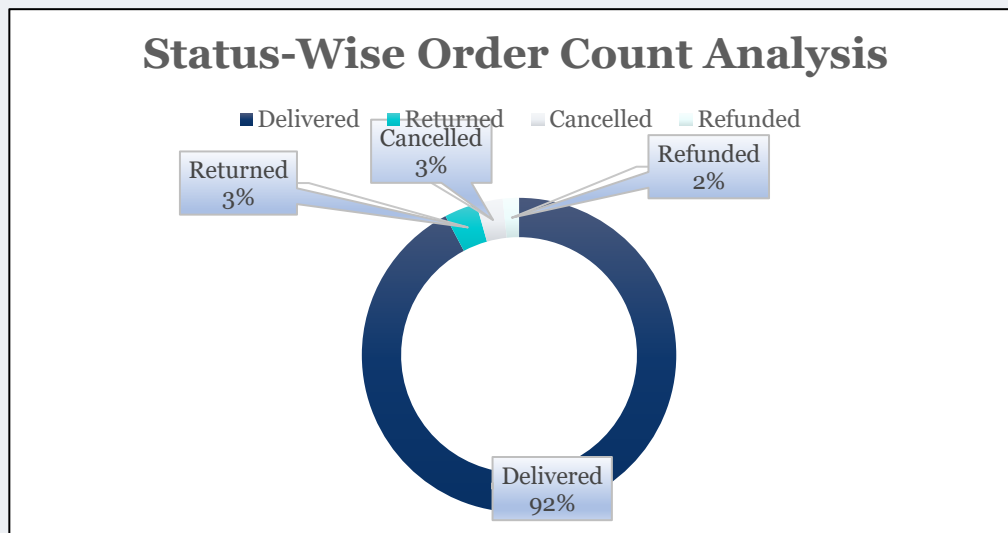
- **Largest Customer Group:** *Adult Women* significantly outnumber others.
- **Teenagers & Seniors:** Lower customer counts across both genders.
- Adult women make up the largest customer segment, suggesting a strong preference for shopping in this group. Teenage women and adult men also have substantial representation, highlighting secondary customer bases.

Recommendation:

- Prioritize adult retention through loyalty programs and engage teens with trend-driven, affordable offerings.
- Expand outreach to seniors, particularly men, with tailored and accessible campaigns.

8. Breakdown of Order Fulfillment Status

Status	Count of Order ID
Delivered	28641
Returned	1045
Cancelled	844
Refunded	517
Grand Total	31047



Insights:

- **Delivered Orders:** 28,641
- **Returned:** 1,045
- **Cancelled:** 864
- **Refunded:** 517
- The overwhelming majority of orders (92%) are successfully delivered, indicating strong logistical efficiency. Returns and cancellations are minimal at 3% each, with refunds at only 2%, suggesting overall customer satisfaction.

Recommendation:

- Continue optimizing delivery operations while investigating the causes of returns and cancellations for further improvement.
- Low return and refund rates suggest high customer satisfaction and product quality. Focus on minimizing cancellations.

Overall Business Summary

- **Strong Q1 Performance:** Sales and order volumes peaked in March (~₹1.93M), indicating successful early-year campaigns and product demand.
- **Mid-to-Late Year Drop:** A steady decline from April to July and the lowest sales in November point to seasonality effects and potential gaps in late-year strategy.
- **Category Focus:** "Sets" dominate category sales (₹10.5M+), while categories like Bottoms, Blouses, and Ethnic Dresses underperform, highlighting areas for promotion or product improvement.
- **Channel Strength:** Amazon leads in performance (₹7.5M), followed by Myntra and Flipkart. Meesho, Nalli, and Others remain under-leveraged, suggesting the need to reassess channel strategy.
- **Geographic Opportunities:** Maharashtra, Karnataka, and Uttar Pradesh are top-performing states. Lower engagement in Haryana and Andhra Pradesh presents growth opportunities.
- **Customer Demographics:** Women drive 64% of sales, especially adult women, who dominate across segments. There's untapped potential in the male and senior customer base.
- **High Fulfillment Success:** 92% of orders are delivered successfully with minimal returns (3%), cancellations (3%), and refunds (2%), indicating operational efficiency and customer satisfaction.

Quick Insights:

- **Q1 Optimization:** Leverage March peak trends to plan early-year marketing and product launches.
- **H2 Revival:** Address mid-to-late year dips with festive campaigns and influencer tie-ups.
- **AOV Strategy:** Analyze declining average order value in H2 despite stable order volume.
- **Category Focus:** Promote high performers like **Sets** and **Kurtas**; revamp strategies for **Bottoms** and **Ethnic Dress**.
- **Channel Strategy:** Strengthen presence on **Amazon, Myntra, and Flipkart**; reassess ROI on **Meesho, Nalli, and Others**.
- **State Targeting:** Maximize returns in **Maharashtra, Karnataka, and Uttar Pradesh**; boost visibility in **Haryana and Andhra Pradesh**.
- **Gender Expansion:** Expand offerings for **Men** while maintaining strong **Women-centric marketing**.
- **Age Segmentation:** Retain **Adult Women** with loyalty perks; attract **Teens** and **Seniors** with tailored campaigns.
- **Order Quality:** Maintain high delivery efficiency and investigate **Returns** and **Cancellations** for refinement.