Problem statement

- 1. Compare the Sales and Orders on Year-on-Year Basis
- 2. For every year which month got the highest sales & highest orders
- 3. Who purchased more (gender wise)
- 4. YOY sales and orders (gender wise)
- 5. Top3 States in terms of Sales and orders (separate) YOY basis
- 6. Bottom 3 States in terms of Sales and orders (separate)
 YOY basis
- 7. Relationship between age and gender based on the number of orders
- 8. Which channel contributes the maximum in Sales YOY basis
- 9. Highest Selling Category of Products (YOY)
- 10. Least Selling Category of Products (YOY)
- 11. Quarterly Sales for (any 2 years)
- 12. Delivery Rate & Non-Delivery Rate (YOY Basis)
- 13. KPI indicators of Your choice.
- 14. Need at least 4 slicers of your choice in the dashboard

Data Cleaning:

- Gender Column: Applied the replace function to ensure uniformity by converting all gender values into standardized codes—"M" for male and "F" for female.
- **Quantity Column:** Standardized quantity data by converting numbers written in words into numeric digits using the replace or map functions, ensuring consistency.
- Age, Quantity, & Amount Columns: Validated data integrity by checking for negative values, flagging any erroneous entries.
- **Amount Column:** Converted numbers into currency format to ensure uniformity in monetary values, improving readability.
- Ship-City & Ship-State Columns: Standardized text entries by applying the PROPER case function. Additionally, used pivot tables and filters to detect inconsistencies and maintain data uniformity.
- **Ship-Postal-Code Column:** Applied conditional formatting to verify that each postal code has exactly six digits, flagging any discrepancies.
- Duplicate Entries & Missing Data: Conducted an overall quality check, identifying and resolving duplicate records, blank values, and spelling errors.
- **Consistency & Formatting:** Ensured uniform data formatting across columns, including aligning data types to maintain accuracy.

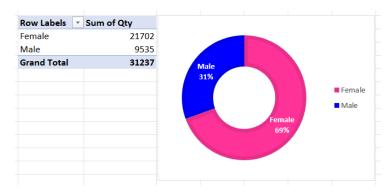
Data Summarization:

1. Which month got the highest sales & highest orders:



- Sales Performance: March recorded the highest total sales amount at ₹19,28,066, marking the peak sales period for the year.
- **Declining Trend:** Following March, sales experienced a **sharp decline**, particularly between **March and May**, indicating a post-peak slowdown.
- Quantity Sold: The total quantity sold also peaked in March at 2,843 units, aligning with the sales trend. A gradual decline followed throughout the year.

2. Who purchased more (gender wise)



Observations:

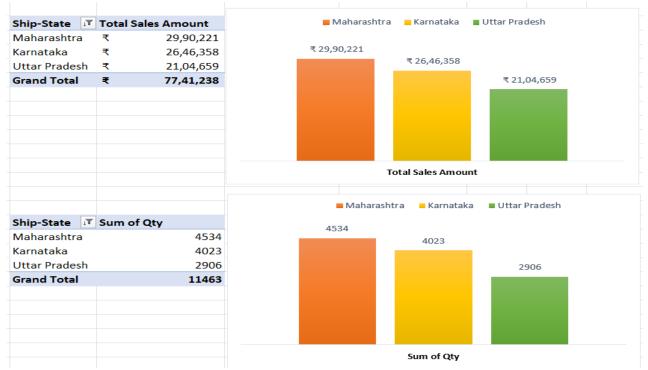
- **Female customers** account for **69%** of total sales (21,702 units), indicating a strong preference or targeted appeal towards this demographic.
- Male customers contribute to 31% of total sales (9,535 units), suggesting potential growth opportunities in expanding engagement and outreach strategies for this segment.
- The **disproportionate distribution** highlights the need for tailored marketing approaches to balance customer demographics and maximize revenue potential across both groups.

3. Month on month sales and orders (Gender wise)



- Peak Sales Month: Both female and male segments recorded their highest sales in March, with female sales reaching ₹13,39,393 and male sales at ₹5,88,673, making it the strongest revenue-generating month.
- Male Sales Trend: Male sales remained relatively stable throughout the year, with a noticeable decline in June followed by a moderate recovery in July and August, aligning with overall quantity trends.
- Female Sales Fluctuation: Female sales exhibited greater variation, with prominent peaks in March and a secondary peak in August, suggesting seasonal promotions or events that drive higher engagement among female customers.

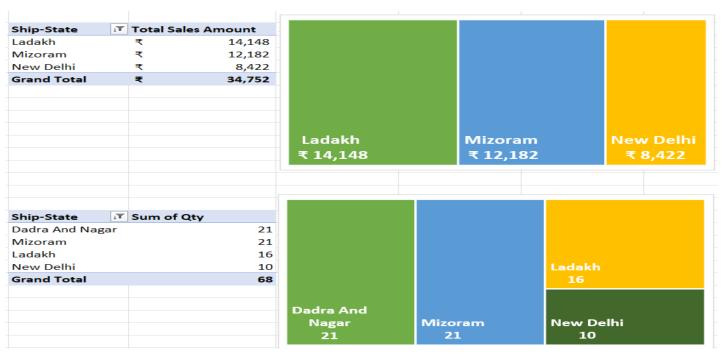
4. Top3 States in terms of Sales and orders (separate)



Observations:

- Maharashtra remains the top-performing region, achieving the highest annual total sales of ₹29,90,221, demonstrating strong market demand and consistent sales performance.
- Karnataka, ranking second in total annual sales at ₹26,46,358, maintains a steady sales trend, with a notable peak in May at ₹2,43,716, potentially driven by seasonal demand or promotional activities.
- Uttar Pradesh, securing the third-highest total annual sales at ₹21,04,659, exhibits a pattern of steady growth and decline, mirroring broader regional trends and concluding the year with stable performance.

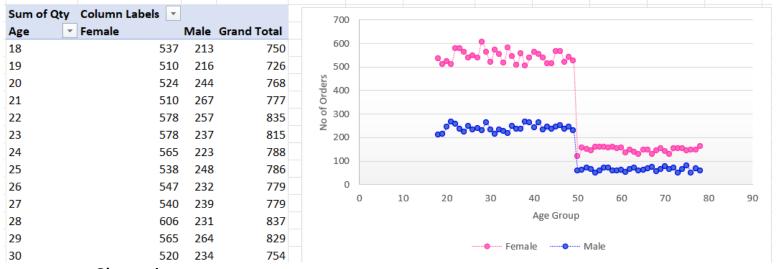
5. Bottom 3 States in terms of Sales and orders (separate)



Observations:

- Lowest Sales Regions: Among the bottom three states, Ladakh leads with total sales of ₹14,148, followed by Mizoram at ₹12,182, while New Delhi records the lowest sales at ₹8,422, making it the weakest-performing region in terms of revenue.
- Order vs. Sales Discrepancy: Despite having fewer orders than Dadra and Nagar, Ladakh generates higher total sales, indicating a higher average transaction value per order.
- Market Demand Challenge: New Delhi has the lowest number of orders and sales, reflecting limited market demand or a smaller consumer base, suggesting potential opportunities for targeted strategies to improve engagement in the region.

6. Relationship between age and gender based on the number of orders



Observations:

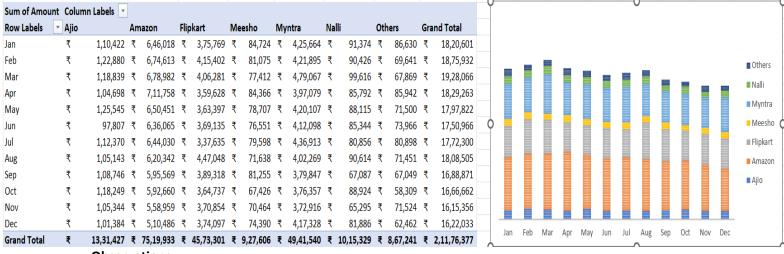
➤ Gender Comparison:

- Female quantities remain consistently higher than male quantities across all age groups, with a cumulative total of **21,702** for females and **9,535** for males.
- The higher female participation across all age ranges suggests greater engagement or product preference among this demographic, potentially driven by targeted marketing or consumer behavior patterns.

➤ Age Range Analysis:

- The **18-30** age group contributes significantly to total sales, forming a major share of the dataset, reflecting strong demand from younger consumers.
- Beyond age 30, the total quantities gradually decline, indicating a potential drop in engagement or market representation as age increases.

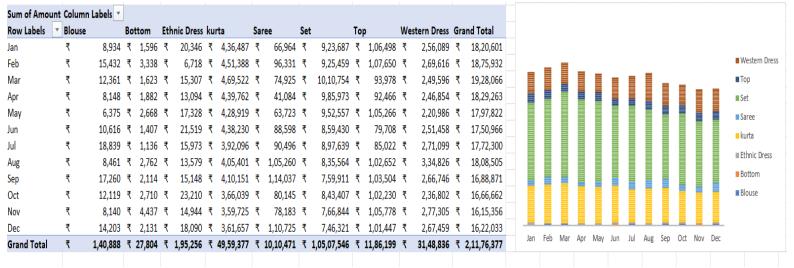
7. Which channel contributes the maximum in Sales Month on Month basis



Observations:

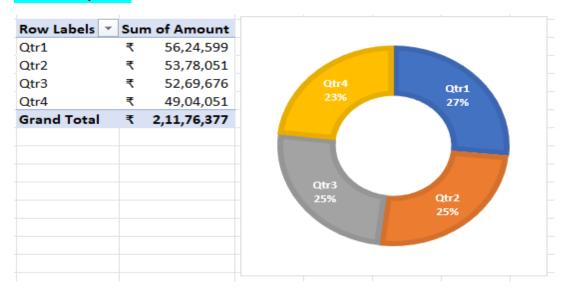
- Amazon, Myntra, and Flipkart are the top-performing platforms, with Amazon consistently driving the highest sales volume across all months.
- April and May emerge as peak sales months, indicating strong seasonal demand or promotional activities, while January and December reflect comparatively lower sales performance.
- Ajio, Meesho, and Nalli maintain steady but lower sales levels, contributing to overall
 market diversity, while the "Others" category accounts for a consistent but smaller portion
 of total monthly sales.

8. Highest and Least Selling Category of Products Month on Month basis



- **Sets** consistently record the highest sales among all categories, outperforming other product types, followed by **Saree** and **Kurta**.
- March and April show the peak sales months, while January and December have relatively lower sales, suggesting seasonal buying patterns.
- Bottoms and Blouses rank among the lowest-selling categories, likely due to lower consumer preference or market demand for these products.

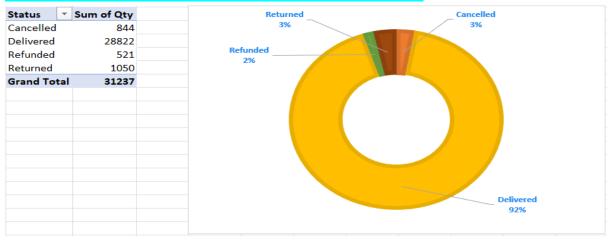
9. Quarterly Sales



Observations:

- Q1 records the highest sales at ₹56,24,599, followed by a slight decline in Q2 (₹53,78,051) and Q3 (₹52,69,676).
- Q4 has the lowest sales at ₹49,04,051, reflecting a downward trend in revenue across the vear.
- The **gradual decline in quarterly sales** suggests potential seasonal fluctuations or marketdriven factors affecting revenue in the later months.

10. Delivery Rate & Non-Delivery Rate (Month on Month Basis)

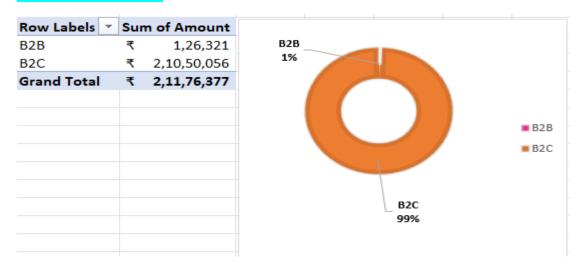


Observations:

- **High Fulfillment Rate:** The vast majority of orders, **28,822 (92%)**, were successfully **delivered**, indicating strong logistics efficiency and fulfillment reliability.
- **Returned Orders: 1,050 orders (3.4%)** were **returned**, potentially due to product quality issues, incorrect orders, or customer dissatisfaction.
- Order Cancellations: 844 orders (2.7%) were cancelled, suggesting concerns with order processing, stock availability, or changes in customer intent.
- **Refunded Transactions: 521 orders (1.7%)** were **refunded**, possibly due to discrepancies in order fulfillment, damaged products, or unmet customer expectations.

These trends highlight the overall reliability of deliveries while identifying areas for improvement in returns, cancellations, and refunds.

11. Sales Composition



Observations:

- **B2C transactions dominate the sales composition**, contributing ₹2,10,50,056, which accounts for an overwhelming 99.4% of the total revenue.
- B2B transactions make up only ₹1,26,321, representing a minimal 0.6% of the overall sales, underscoring the business's strong focus on direct consumer sales rather than wholesale or corporate transactions.
- The **significant disparity between B2C and B2B sales** indicates that the company's revenue model is primarily driven by retail customers, suggesting potential opportunities for expansion in the B2B segment.

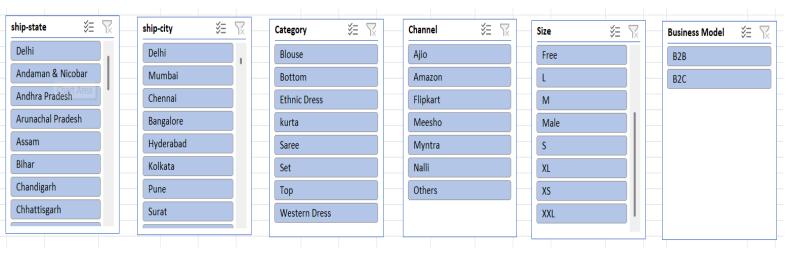
12. KPI indicators:

Total Sales Amount						Total	Qty				Average Orde	r Value (AOV)			
Row Labels	Sun	n of Amount				Row Labels ~	Sum of Otv				Row Labels	- AOV			
Jan	₹	18,20,601				Jan	2717				Jan	₹ 674			
Feb	₹	18,75,932				Feb	2770				Feb	₹ 682	_		
Mar	₹	19,28,066				Mar	2843	_	$^{\sim}$		Mar	₹ 684			
Apr	₹	18,29,263				Apr	2704				Apr	₹681	V	V /	
May	₹	17,97,822			_	May	2641				May	₹ 687			
Jun	₹	17,50,966				Jun	2612				Jun	₹ 674			
Jul	₹	17,72,300				Jul	2592				Jul	₹ 687	₹ 682.07		
Aug	₹	18,08,505		₹ 2,11,76,37	1	Aug	2629		31237	7	Aug	₹691			
Sep	₹	16,88,871				Sep	2508				Sep	₹ 678			
Oct	₹	16,66,662				0ct	2436				Oct	₹688			
Nov	₹	16,15,356				Nov	2395				Nov	₹678			
Dec	₹	16,22,033				Dec	2390				Dec	₹ 680			
Grand Total	₹	2,11,76,377				Grand Total	31237				Grand Total	₹ 682			

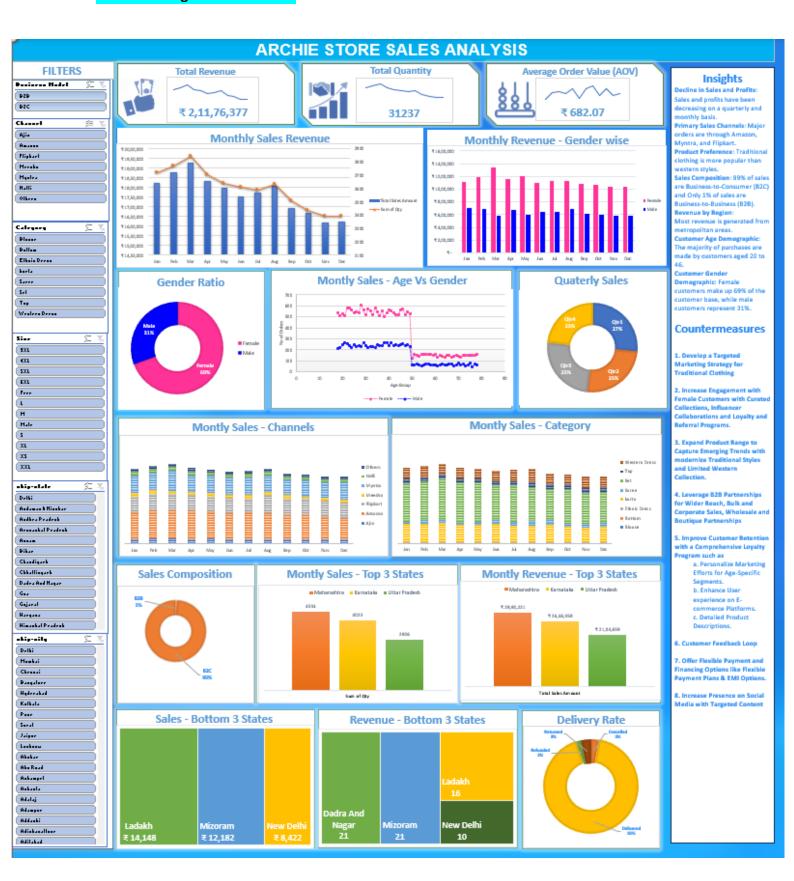
- Sales Performance: Monthly revenue shows a gradual decline from its peak in March (₹19,28,066) to December (₹16,22,033), indicating possible seasonality or external market influences affecting demand.
- Sales Volume Trend: The total quantity sold follows a similar downward trajectory, reducing from 2,843 units in March to 2,390 units in December, highlighting potential shifts in consumer demand.

• Average Order Value (AOV): The AOV fluctuates between ₹670 and ₹688 throughout the year, with a Grand Total AOV of ₹678, suggesting relative pricing stability across months.

13. Slicers for the Dashboard:



Dashboarding & Visualization:



Insights:

- **Decline in Sales and Profits:** Sales and profits have been consistently decreasing both quarterly and monthly.
- Primary Sales Channels: Major sales come from Amazon, Myntra, and Flipkart.
- **Product Preference: Traditional clothing** is significantly more popular than western styles.
- Sales Composition: 99% of sales are Business-to-Consumer (B2C); only 1% are Business-to-Business (B2B).
- Revenue by Region: Majority of revenue is generated from metropolitan cities.
- Customer Age Demographic: Purchases are mainly made by customers aged 20 to 46 years.
- Customer Gender Demographic: 69% Female and 31% Male customer base.

Assumptions:

- **Seasonality:** Business may experience natural demand cycles; March could mark the end of a peak season.
- **Economic Changes:** Factors like inflation or economic downturn could be lowering consumer spending.
- **Quality Concerns**: Real or perceived declines in product quality could be impacting repeat purchases.
- **Limited Innovation:** Lack of new designs, features, or product updates may be causing customer interest to wane.

Countermeasures Suggested:

- Develop Targeted Marketing Strategies for Traditional Clothing to tap into its proven popularity.
- Establish a Customer Feedback Loop to catch and correct issues early.
- Increase Engagement with Female Customers through:
 - o Curated traditional collections.
 - o Collaborations with fashion influencers.
 - Loyalty and referral programs.
- Expand Product Range:
 - Modernize traditional styles.
 - o Introduce a limited, trendy **Western wear collection** to test new markets.
- Leverage B2B Partnerships:
 - Target bulk buyers, corporate orders, boutiques, and wholesalers.
- Improve Customer Retention:
 - Build a strong loyalty program.
 - o Personalize marketing for different age groups.
 - o Enhance user experience on marketplaces and future e-commerce platforms.
 - Offer rich product descriptions with sizing, styling tips, and material info.
- Offer Flexible Payment Options: Introduce flexible payment plans and EMI options to reduce purchase barriers.
- **Boost Social Media Presence**: Create **targeted**, **engaging content** aligned with customer demographics and shopping behaviors.