

Store Dataset Report

Introduction

This dataset contains retail sales data, featuring customer demographics (Gender, Age Group), transaction details (Order ID, Status), product specifics (Category, SKU), and shipping details. Our analysis focuses on understanding customer behavior and product trends to reveal patterns and preferences. These insights empower businesses to enhance marketing strategies, optimize inventory management, and improve customer satisfaction levels.

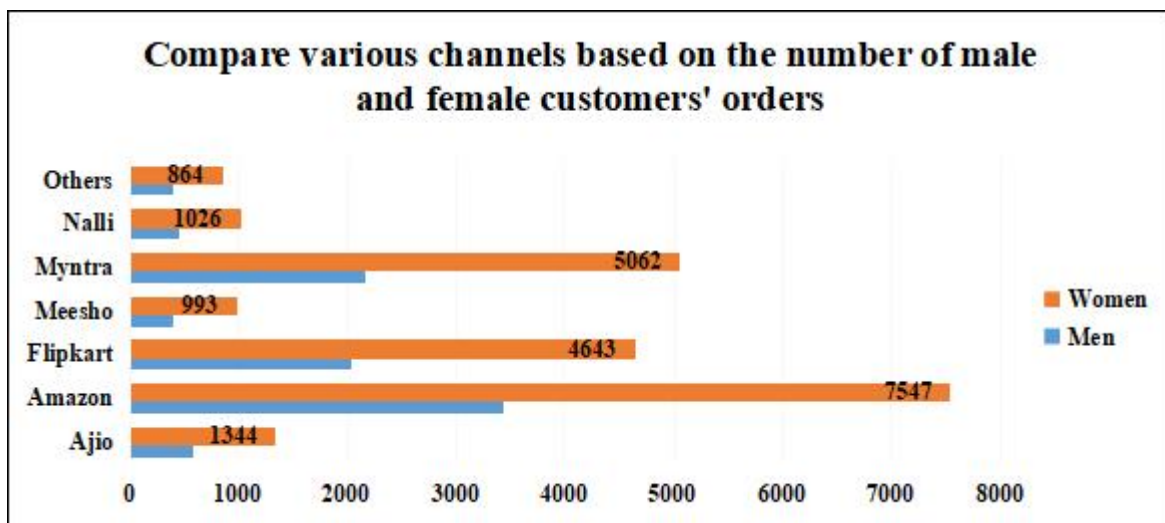
Questionnaire

1. Compare various channels based on how many male customers order and female customer order.
2. Compare all the categories of order where amount is less than 1500 and greater than 5000.
3. How many Customers are there whose age is 30 and above and state is Delhi.
4. Which of the following state perform better than other, Delhi, Tamil Nadu, Maharashtra, Rajasthan.
5. Which city performed better than all other cities based on highest order placed.
6. Compare various categories of items based on most quantity sold and show which gender buys the most category.

Analytics

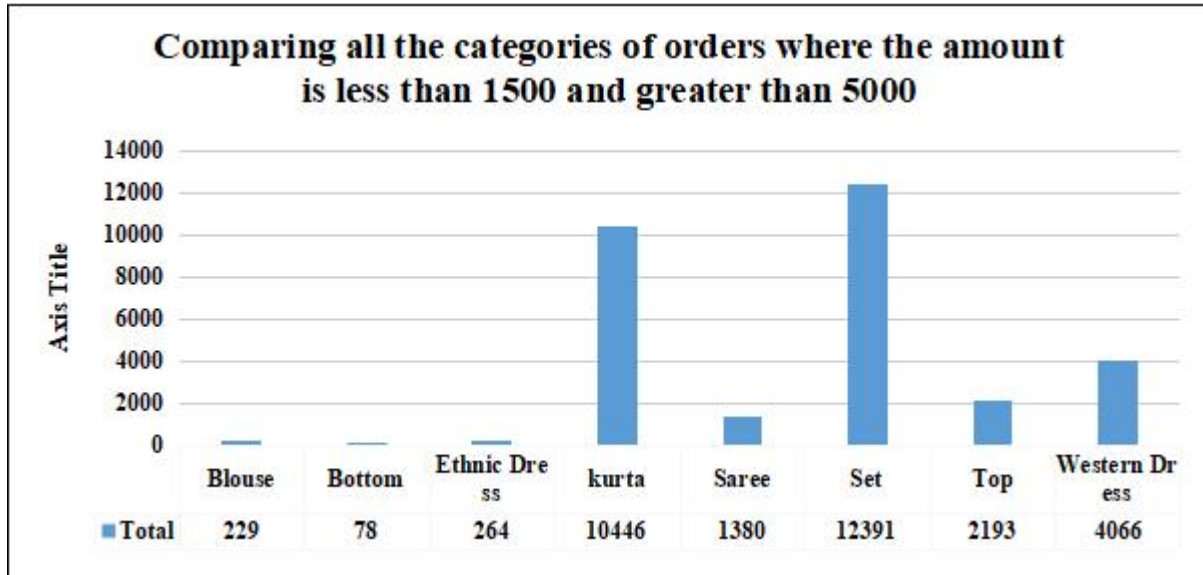
Q1. Compare various channels based on how many male customers order and female customer order?

ANS: Amazon leads in both men's and women's categories, outselling Myntra and Flipkart. Approximately 3,432 units were sold by Amazon in men's fashion, and nearly 7,547 units in women's fashion. Myntra sold around 2,156 units for men and 5,062 units for women.



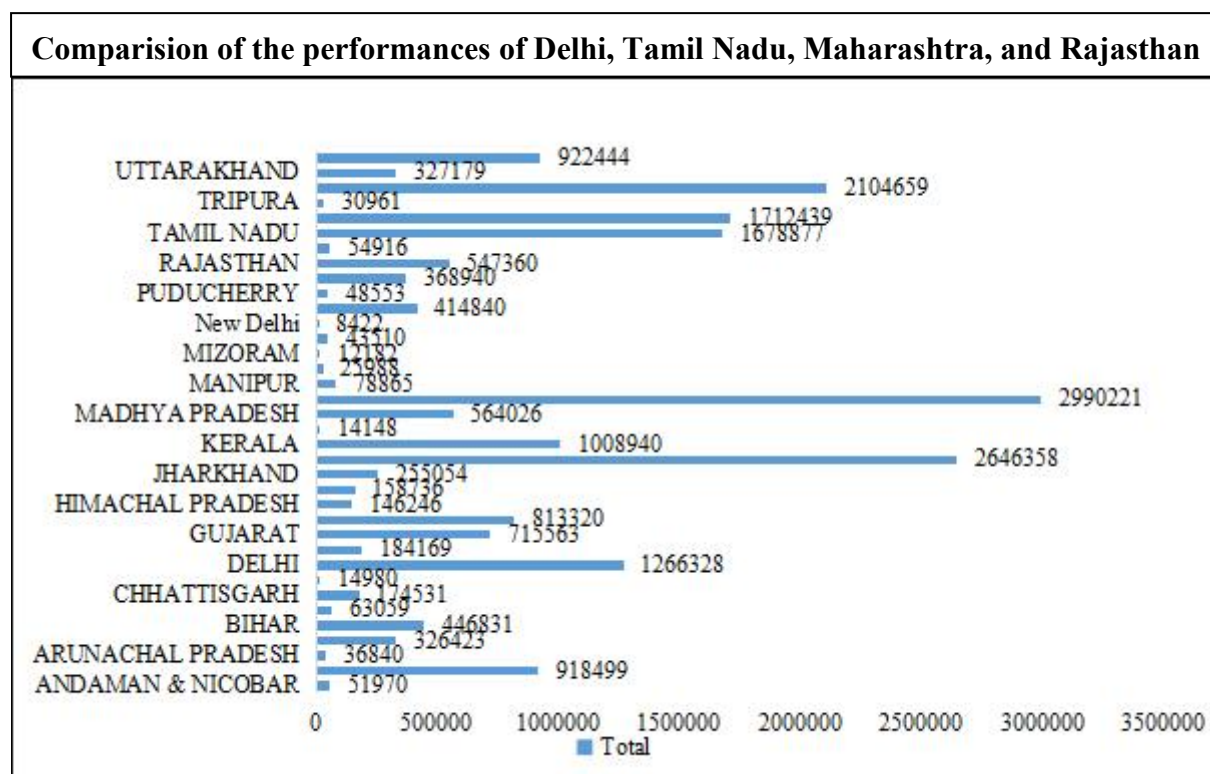
Q2. Compare all the categories of order where amount is less than 1500 and greater than 5000.

ANS: This analysis compares order categories with amounts less than 1500 and greater than 5000. Kurta and set have the highest order counts, followed by western dress, top, and saree, indicating consumer preferences across different price ranges.



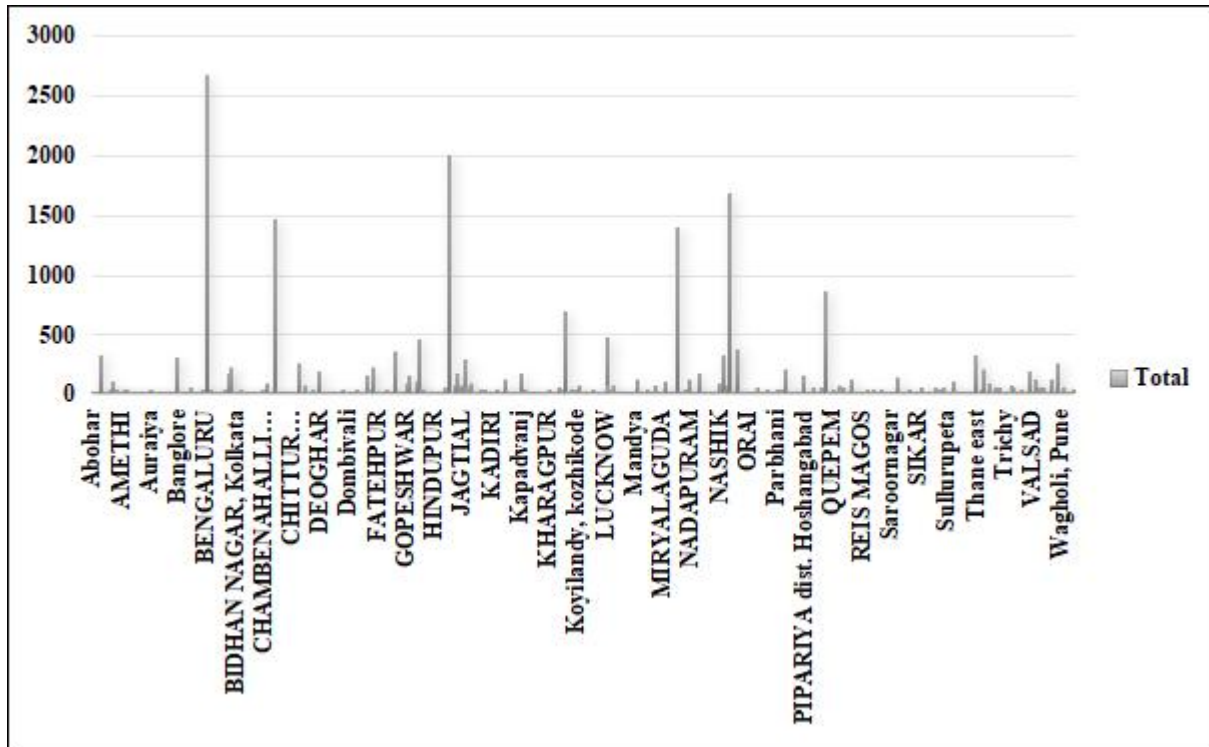
Q3. Which of the following state perform better than other, Delhi, Tamil Nadu, Maharashtra, Rajasthan.

ANS: This analysis identifies states outperforming those mentioned earlier, with Karnataka leading at 2,646,358 units sold, followed by Uttar Pradesh at 2,104,659 units. These states demonstrate superior sales performance. Understanding the top-performing states allows businesses to focus resources effectively and tailor strategies to capitalize on high-performing regions for enhanced sales and profitability.

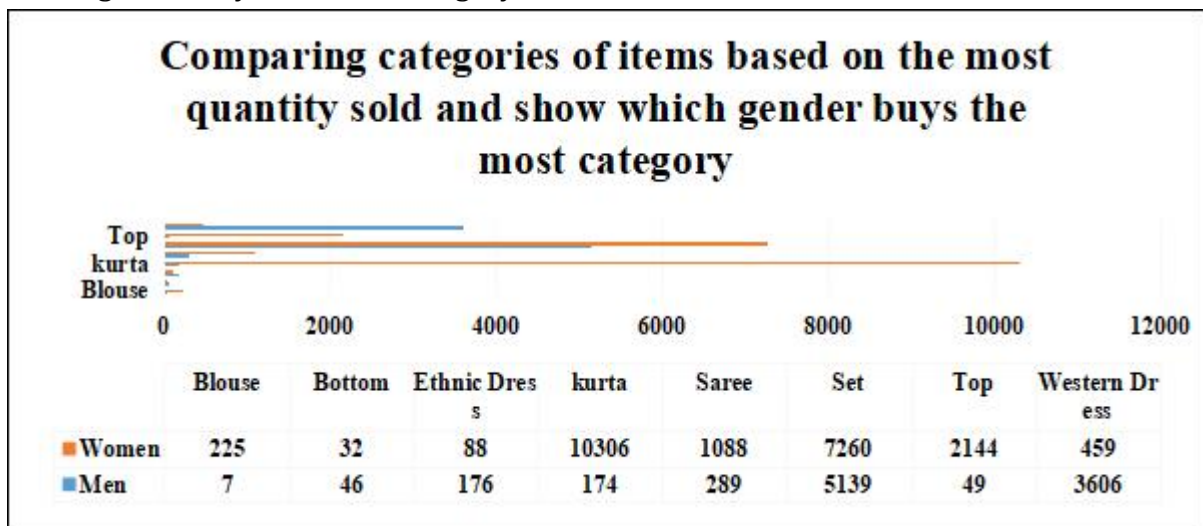


Q5. Which city performed better than all other cities based on highest order placed.

ANS: According to the recorded graph, Bangalore emerges as the top-performing city with the highest number of orders placed, totaling 2,673 orders, followed by Hyderabad with 1,998 orders. This indicates Bangalore's strong market presence and significant order volume.



Q6. Compare various categories of items based on most quantity sold and also show which gender buys the most category.



ANS: The analysis underscores the popularity of kurta and set purchases among women, with kurta being the most bought item, followed by set. For men, western dress emerges as the top choice, while top is favored by both men and women, indicating its universal appeal across genders.

Conclusion and Review

The analysis underscores Amazon's dominance in men's and women's categories, with Myntra and Flipkart trailing closely. Leading sales items include kurta and set, with Karnataka and Bangalore demonstrating exceptional performance. These insights offer valuable guidance for retailers, although delving deeper into other sales-influencing factors could enrich the analysis. Overall, the findings provide crucial insights for refining sales strategies in competitive market landscapes.

Regression

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.172398							
R Square	0.029721							
Adjusted R Square	0.029659							
Standard Error	264.5693							
Observations	31047							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	2	66561870	33280935	475.4629	0			
Residual	31044	2.17E+09	69996.92					
Total	31046	2.24E+09						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	185.155	16.57854	11.16836	6.61E-29	152.6604	217.6496	152.6604	217.6496
X Variable 1	0.047626	0.099327	0.479489	0.631594	-0.14706	0.242312	-0.14706	0.242312
X Variable 2	492.0276	15.95904	30.83065	1.3E-205	460.7472	523.308	460.7472	523.308

Anova (One factor)

Anova: Single Factor						
SUMMARY						
Groups	Count	Sum	Average	Variance		
Column 1	31047	31237	1.00612	0.008853		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	7.2E+09	1	7.2E+09	199639.8	0	3.841609
Within Groups	2.24E+09	62092	36068.2			
Total	9.44E+09	62093				

Anova (Two factor)

Anova: Two-Factor Without Replication						
<i>SUMMARY</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>		
Row 1	3	421	140.3333	42116.33		
Row 2	3	1479	493	685648		
Row 3	3	521	173.6667	59609.33		
Row 4	3	750	250	172171		
Row 5	3	607	202.3333	88482.33		
Row 31044	3	974	324.6667	283326.3		
Row 31045	3	1145	381.6667	403529.3		
Row 31046	3	446	148.6667	47506.33		
Row 31047	3	828	276	199225		
Column 1	31047	1226250	39.49657	228.5307		
Column 2	31047	31237	1.00612	0.008853		
Column 3	31047	21176377	682.0748	72136.38		
ANOVA						
<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Rows	7.49E+08	31046	24134.08	1.000774	0.468198	1.016275
Columns	9.09E+09	2	4.54E+09	188446.6	0	2.995877
Error	1.5E+09	62092	24115.42			
Total	1.13E+10	93140				

Descriptive Statistics

<i>Column1</i>		<i>Column2</i>		<i>Column3</i>	
Mean	39.49657	Mean	1.00612	Mean	682.0748
Standard Error	0.085795	Standard Error	0.000534	Standard Error	1.524289
Median	37	Median	1	Median	646
Mode	28	Mode	1	Mode	399
Standard Deviation	15.11723	Standard Deviation	0.094088	Standard Deviation	268.5822
Sample Variance	228.5307	Sample Variance	0.008853	Sample Variance	72136.38
Kurtosis	-0.1587	Kurtosis	475.3566	Kurtosis	1.768676
Skewness	0.72916	Skewness	19.4509	Skewness	1.052904
Range	60	Range	4	Range	2807
Minimum	18	Minimum	1	Minimum	229
Maximum	78	Maximum	5	Maximum	3036
Sum	1226250	Sum	31237	Sum	21176377
Count	31047	Count	31047	Count	31047

Correlation

	<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
Column 1	1		
Column 2	0.004884	1	
Column 3	0.003522	0.172377	1