

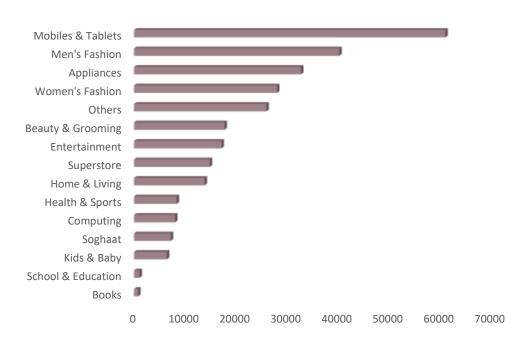


## **REPORT ON PATTERNS & TRNEDS**

1. Category: This column provides information about the category of products purchased by the customers. Analyzing this column can help understand the types of products customers are interested in.

PRODUCT CAT	No of purchase
Books	804
School & Education	1078
Kids & Baby	6421
Soghaat	7189
Computing	8025
Health & Sports	8347
Home & Living	13815
Superstore	14815
Entertainment	17120
Beauty & Grooming	17723
Others	25913
Women's Fashion	28003
Appliances	32693
Men's Fashion	40183
Mobiles & Tablets	60954

### **Most purchased Product by customers**



The top 5 most purchased items are Mobile & tablets, Men's fashion, Appliances, Women's Fashion, and Others.

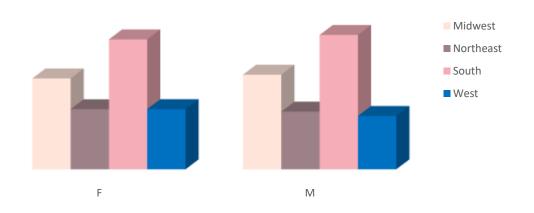




2. City, County, Region, State, Zip: Geographic information can be valuable for understanding the demographics and preferences of customers in different locations. It can help identify regional trends and tailor marketing strategies accordingly.

GENDER	Midwest	Northeast	South	West	Grand Total
F	30,817,693.93	20,396,532.63	44,070,528.00	20,425,205.36	115709960
M	32,102,938.12	19,567,713.89	45,577,321.68	18,103,105.03	115351079
Grand Total	62920632.04	39964246.52	89647849.67	38528310.39	231061039

#### Sales by Region / Gender



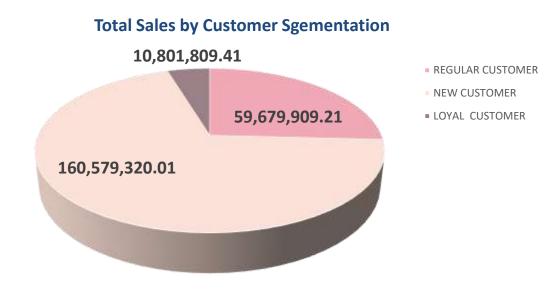
we also tried to Understand the demographics and preferences of customers in different locations across genders to help identify regional trends. From this visualization, the southern region generated the highest revenue followed by the Midwest, Northeast, and West with the genders having very close purchasing power





3. Customer Since, NO\_OF\_YRS\_AS\_CUSTOMER: These columns provide insights into the length of time customers have been with the e-commerce store. Understanding customer loyalty and tenure can reveal retention strategies and personalized offers.

Custpmer Segmentation	Sum of Total Sales	Count of Order Id
custpiner segmentation	Sum of rotal sales	count of order id
REGULAR CUSTOMER	59,679,909.21	66,398.00
NEW CUSTOMER	160,579,320.01	202,870.00
LOYAL CUSTOMER	10,801,809.41	13,810.00
Grand Total	231061038.6	283078



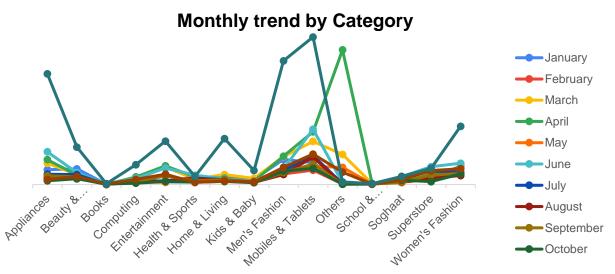
New customers have a high total purchasing revenue with the majority of the revenue coming from mobile tablets, appliances, computing, entertainment, and Others.





# 4. Date of Order, MONTH OF ORDER, Current year: Analyzing the timing of orders can reveal seasonal trends, peak purchasing periods, and the impact of promotions or events on customer behavior.

Row Labels	January	February	March	April	May .	lune J	uly	August	September	October	November	December	Grand Total
Appliances	19	02 1026	2729	3195	1008	4192	1331	873	1125	496	656	14160	32693
Beauty & Grooming	20	11 1079	1286	1218	946	1530	1275	800	998	743	1038	4799	17723
Books		53 78	3 67	46	48	106	37	37	37	70	104	111	804
Computing	4	35 289	610	983	331	795	396	329	402	184	670	2550	8024
Entertainment	3	38 422	2248	2389	303	2115	482	432	1104	409	1326	5552	17120
Health & Sports	3	45 332	695	1004	1048	1198	842	768	490	310	281	1034	8347
Home & Living	10	20 614	1 1278	825	752	737	634	596	621	405	454	5879	13815
Kids & Baby	6	79 354	1 796	441	. 481	409	315	281	. 267	251	348	1799	6421
Men's Fashion	32	17 1364	3567	3632	1954	2025	1861	1286	1534	1716	2213	15814	40183
Mobiles & Tablets	27	92 1852	5518	6742	2323	7076	3702	3507	2609	2074	3897	18860	60952
Others	1	01 69	3851	17215	2201	239	117	63	68	52	1599	338	25913
School & Education		48 60	5 148	152	83	75	69	90	88	81	50	128	1078
Soghaat	9	29 57!	5 415	325	341	1027	772	287	271	567	638	1040	7187
Superstore	7	22 51!	5 1314	1309	638	2278	1741	787	1250	385	1790	2086	14815
Women's Fashion	23	36 1356	2086	2216	2227	2730	1579	1155	1424	1365	2022	7457	28003
Grand Total	170	38 9993	L 26608	41692	14684	26532	15153	11291	12288	9108	17086	81607	283078



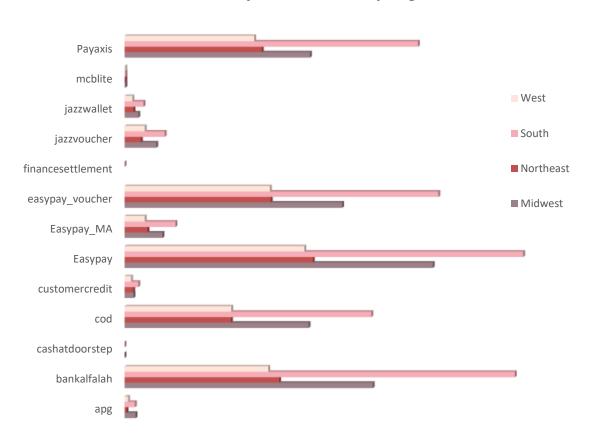
In other to identify seasonal trend on a Monthly scale, we did a plot for product category to month order and we realized that: The Months of December and April have the highest amount of orders from the Mobile & tablets AND Others categories respectively.





5. Payment Method: Understanding the preferred payment method of customers can help optimize the checkout process and payment options offered by the e-commerce store.

#### **Payment Method by Region**



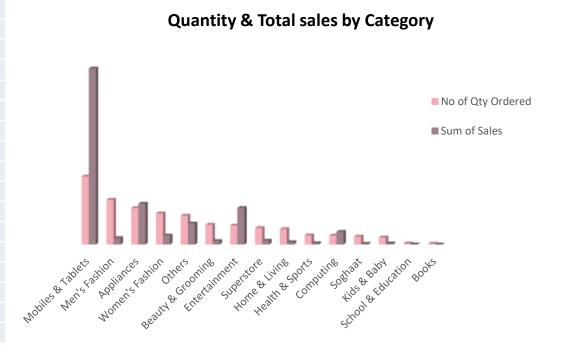
Easypay was the highest preferred payment method across all regions followed by Bankafalah in the 2<sup>nd</sup> position, In the 3<sup>rd</sup> position we have Easypay\_voucher followed by Payaxis and Cod





6. Qty Ordered, Total: These columns provide information about the quantity of items ordered and the total amount spent by customers. Analyzing purchase behavior in terms of quantity and spending can identify popular products and customer segments.

ROW LABELS	COUNT OF QTY ORDERED	SUM OF TOTAL
Appliances	32693	29,805,769.98
Beauty & Grooming	17723	2,617,225.17
Books	804	32,247.15
Computing	8025	9,290,998.27
Entertainment	17120	26,764,301.53
Health & Sports	8347	1,013,658.92
Home & Living	13815	1,790,526.78
Kids & Baby	6421	848,704.26
Men's Fashion	40183	4,764,350.40
Mobiles & Tablets	60954	128,600,063.09
Others	25913	15,429,041.75
School & Education	1078	113,817.67
Soghaat	7189	570,194.77
Superstore	14815	2,832,844.69
Women's Fashion	28003	6,587,294.19
Grand Total	283083	231,061,038.63



By Analyzing purchasing behavior in terms of quantity and amount spent, we can identify popular products and customer segments. we used this chart to provide information about the quantity of items ordered and the total amount spent by customers. Mobile& tablets, Appliances, Entertainment, and Computing had high number of quantities ordered and Sales respectively.

