Kultra Mega Stores Inventory Insight

```
CREATE DATABASE KultraMegaStores;
GO
```

100 % — No issues found — Ln: 1 Ch: 34 TAI

Messages

```
Commands completed successfully.

Completion time: 2025-06-21T19:16:47.0386997+01:00
```

Create Database KultraMegaStores;

```
select top 10 * from KMS_Inventory
```

100 % — No issues found — Ln: 13 Ch: 1 TABS CRLF

Results | Messages

	Row_ID	Order_ID	Order_Date	Order_Priority	Order_Quantity	Sales	Discount	Ship_Mode
1	1	3	2010-10-13	Low	6	261.540008544922	0.0399999991059303	Regular Air
2	2	6	2012-02-20	Not Specified	2	6.92999982833862	0.00999999977648258	Regular Air
3	3	32	2011-07-15	High	26	2808.080078125	0.0700000002980232	Regular Air
4	4	32	2011-07-15	High	24	1761.40002441406	0.0900000035762787	Delivery Truck
5	5	32	2011-07-15	High	23	160.233505249023	0.0399999991059303	Regular Air
6	6	32	2011-07-15	High	15	140.559997558594	0.0399999991059303	Regular Air
7	7	35	2011-10-22	Not Specified	30	288.559997558594	0.0299999993294477	Regular Air
8	8	35	2011-10-22	Not Specified	14	1892.84802246094	0.00999999977648258	Regular Air
9	9	36	2011-11-02	Critical	46	2484.74560546875	0.100000001490116	Regular Air
10	10	65	2011-03-17	Critical	32	3812.72998046875	0.0199999995529652	Regular Air

Import table

```
SELECT
product_category,
SUM(sales) as totalsales
from KMS_Inventory
group by Product_Category
order by totalsales desc;
```

100 % — No issues found

Results | Messages

	product_category	totalsales
1	Technology	5984248.17547321
2	Furniture	5178590.54851484
3	Office Supplies	3752762.1072042

Case Scenario I

highest sales PRODUCT CATEGORY

```
SELECT TOP 3 Region,
SUM(Sales) AS TotalSales
FROM KMS_Inventory
GROUP BY Region
ORDER BY TotalSales DESC;
```

100 % — No issues found — Ln: 8 Ch: 26

Results | Messages

	Region	TotalSales
1	West	3597549.269871
2	Ontario	3063212.47638369
3	Prarie	2837304.60503292

Top 3 sales region

```sql
SELECT TOP 3 Region,
SUM(Sales) AS TotalSales
FROM KMS_Inventory
GROUP BY Region
ORDER BY TotalSales ASC;
```

No issues found Ln: 10 Ch: 1

Results Messages

	Region	TotalSales
1	Nunavut	116376.48383522
2	Northwest Territories	800847.330903053
3	Yukon	975867.375723362

Bottom 3 sales region

```sql
SELECT
SUM(Sales) AS TotalApplianceSales
FROM KMS_Inventory
WHERE Product_Category = 'Appliances'
AND Province = 'Ontario';
```

100 % No issues found Ln: 8 Ch: 26 TABS CRLF

Results Messages

	TotalApplianceSales
1	NULL

What were the total sales of appliances in Ontario?

The dataset contains three main product categories: Furniture, Technology and Office Supplies the 'Appliances' category does not exist in the dataset. Therefore, total sales for 'Appliances' in Ontario could not be found

```sql
select
Product_category,
sum(sales) as totalsales
from KMS_Inventory
where province = 'ontario'
group by Product_Category
order by totalsales desc;
```

100 % No issues found Ln: 8 Ch: 1 TABS CRLF

Results Messages

	Product_category	totalsales
1	Furniture	1109617.49797058
2	Technology	1026163.72904015
3	Office Supplies	927431.249372959

Actual sales by product category in Ontario

```
select top 10
Customer_Name,
sum(sales) as totalsales
from KMS_Inventory
group by customer_name
order by totalsales asc;
```

100 % No issues found Ln: 8 Ch: 1 TABS CRLF

Results Messages

	Customer_Name	totalsales
1	Jeremy Farry	85.7200021743774
2	Natalie DeCherney	125.900001525879
3	Nicole Fjeld	153.030006408691
4	Katrina Edelman	180.760005950928
5	Dorothy Dickinson	198.080001831055
6	Christine Kargatis	293.2200050354
7	Eric Murdock	343.32799911499
8	Chris McAfee	350.180004119873
9	Rick Huthwaite	415.819980621338
10	Mark Hamilton	450.990005493164

Bottom 10 customers by sales

ADVICE

Analysis of the bottom 10 customers (based on total sales) revealed significantly low purchase volumes across all segments. These customers contributed the least revenue during the 2009–2012 period.

Possible reasons for low sales may include:

- Lack of engagement or follow-up from sales/marketing
- Mismatched products to customer needs
- Price sensitivity or stronger competitors
- Limited product awareness or poor customer experience

Recommendation:

To improve revenue from these bottom-tier customers, KMS should consider the following:

1. **Customer Segmentation & Targeted Campaigns:**

- Identify what segment (e.g., Consumer, Small Business) each customer belongs to and tailor promotions or bundles specifically for their use case.
- Use email marketing or loyalty programs to reactivate low-spending customers.

2. **Personalized Offers & Discounts:**

- Offer incentives such as free shipping, discounts on repeat purchases, or trial offers on new products.
- Consider one-time bundles for low-risk up-sell opportunities.

3. **Customer Feedback Loop:**

- Reach out to these customers to understand why their engagement is low.
- Use short surveys or personal sales calls to uncover gaps in service, product needs, or pricing issues.

4. **Sales Rep Follow-ups**:

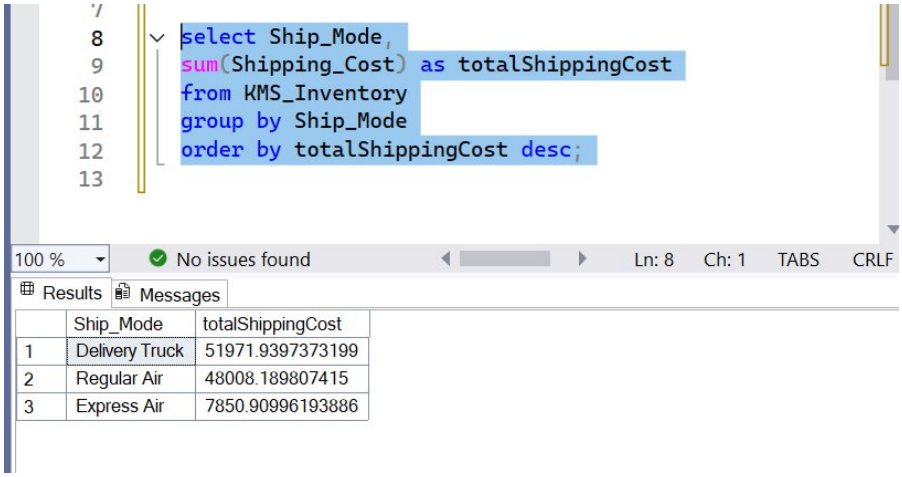
- Assign account managers or sales reps to follow up with these customers and offer personalized solutions or services.

5. **Cross-Sell & Up-sell Strategy**:

- Recommend additional products related to previous purchases to increase basket size.

Potential Impact:**

Improving even a small percentage of revenue from these 10 customers could lead to higher customer lifetime value (CLV), better retention, and increased word-of-mouth referrals in key markets like Abuja.



```
select Ship_Mode,
sum(Shipping_Cost) as totalShippingCost
from KMS_Inventory
group by Ship_Mode
order by totalShippingCost desc;
```

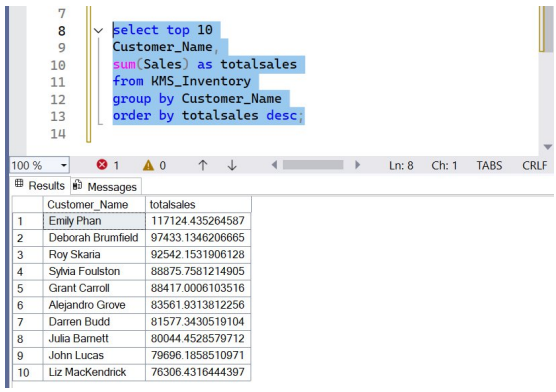
100 % | No issues found | Ln: 8 | Ch: 1 | TABS | CRLF

Results | Messages

	Ship_Mode	totalShippingCost
1	Delivery Truck	51971.9397373199
2	Regular Air	48008.189807415
3	Express Air	7850.90996193886

Shipping method with the highest cost

Case Scenario II



```
select top 10
Customer_Name,
sum(Sales) as totalsales
from KMS_Inventory
group by Customer_Name
order by totalsales desc;
```

100 % | 1 | 0 | Ln: 8 | Ch: 1 | TABS | CRLF

Results | Messages

	Customer_Name	totalsales
1	Emily Phan	117124.435264587
2	Deborah Brumfield	97433.1346206665
3	Roy Skaria	92542.1531906128
4	Sylvia Foulston	88875.7581214905
5	Grant Carroll	88417.0006103516
6	Alejandro Grove	83561.9313812256
7	Darren Budd	81577.3430519104
8	Julia Barnett	80044.4528579712
9	John Lucas	79696.1858510971
10	Liz MacKendrick	76306.4316444397

Top 10 most valuable Customers

```sql
SELECT
Customer_Name,
Product_Category,
COUNT(*) AS Orders,
SUM(Sales) AS TotalSales
FROM KMS_Inventory
WHERE Customer_Name IN (
SELECT TOP 10 Customer_Name
FROM KMS_Inventory
GROUP BY Customer_Name
ORDER BY SUM(Sales) DESC
)
GROUP BY Customer_Name, Product_Category
ORDER BY Customer_Name, TotalSales DESC;
```

100 % — No issues found

Results | Messages

	Customer_Name	Product_Category	Orders	TotalSales
1	Alejandro Grove	Office Supplies	8	51696.0215606689
2	Alejandro Grove	Furniture	6	31865.9098205566
3	Darren Budd	Furniture	32	43367.2097358704
4	Darren Budd	Technology	9	38210.13331604
5	Deborah Brumfield	Technology	8	76795.7947387695
6	Deborah Brumfield	Furniture	4	12809.6198730469
7	Deborah Brumfield	Office Supplies	8	7827.7200088501
8	Emily Phan	Technology	4	110481.965362549
9	Emily Phan	Furniture	1	4011.64990234375
10	Emily Phan	Office Supplies	5	2630.81999969482
11	Grant Carroll	Office Supplies	15	50837.2688293457
12	Grant Carroll	Furniture	5	29826.8493652344

Query executed successfully.

Products Purchased by These Customers

```sql
SELECT
Customer_Name,
SUM(Sales) AS TotalSales
FROM KMS_Inventory
WHERE Customer_Segment = 'Small Business'
GROUP BY Customer_Name
ORDER BY TotalSales DESC;
```

100 % — No issues found — Ln: 6

Results | Messages

	Customer_Name	TotalSales
1	Dennis Kane	75967.5932159424
2	John Lucas	72331.8783340454
3	Deborah Brumfield	67845.1177749634
4	Clytie Kelty	63189.9492769241
5	Grant Carroll	56894.6676940918
6	John Stevenson	48660.8737764359
7	Michael Oakman	47040.0029439926
8	Mitch Gastineau	43256.6893386841
9	Benjamin Venier	42624.2969207764
10	Clay Cheatham	42255.1684799194
11	Matthew Grinstein	38698.7896308899

The small business customer that had the highest sales

```sql
SELECT
Customer_Name,
COUNT(Order_ID) AS OrderCount
FROM KMS_Inventory
WHERE Customer_Segment = 'Corporate'
GROUP BY Customer_Name
ORDER BY OrderCount DESC;
```

100 % No issues found Ln: 10

Results Messages

	Customer_Name	OrderCount
1	Adam Hart	27
2	Roy Skaria	26
3	Jack Lebron	22
4	Jonathan Doherty	22
5	Bill Donatelli	21
6	Deanra Eno	21
7	Bill Eplett	20
8	Beth Thompson	20
9	Carlos Meador	20
10	Liz MacKendrick	20
11	Sylvia Foulston	20

localhost\SQLEXPRESS (16.0 ... OLUWASEYI-ISRAE\user (52) KultraMegaStores

The corporate customer that placed the most number of orders (2009–2012)

```sql
SELECT
Customer_Name,
SUM(Profit) AS TotalProfit
FROM KMS_Inventory
WHERE Customer_Segment = 'Consumer'
GROUP BY Customer_Name
ORDER BY TotalProfit DESC;
```

100 % No issues found Ln: 10

Results Messages

	Customer_Name	TotalProfit
1	Emily Phan	34005.4392166138
2	Raymond Book	18760.5902973115
3	Rick Wilson	14940.5494972467
4	Rick Reed	11695.8801562786
5	Giulietta Dortch	9511.30990476906
6	Dean Percer	9221.07963562012
7	Muhammed Yedwab	8773.92982518673
8	Patrick Bzostek	8341.70007133484
9	Valerie Takahito	7936.08019179106
10	Ed Braxton	7722.21016120911
11	Jill Stevenson	7704.43012237549

localhost\SQLEXPRESS (16.0 ... OLUWASEYI-ISRAE\user (52) KultraMegaStores

The most profitable consumer customer

10. **Which customer returned items, and what segment do they belong to?**

The dataset contains no explicit column for item returns, so this question cannot be answered unless additional return tracking data is available.

```
SELECT
Order_Priority,
Ship_Mode,
COUNT(*) AS TotalOrders,
SUM(Shipping_Cost) AS TotalShippingCost,
AVG(Shipping_Cost) AS AvgShippingCost
FROM KMS_Inventory
GROUP BY Order_Priority, Ship_Mode
ORDER BY Order_Priority, TotalShippingCost DESC;
```

100 % No issues found Ln: 12 Ch: 49 TA

Results Messages

	Order_Priority	Ship_Mode	TotalOrders	TotalShippingCost	AvgShippingCost
1	Critical	Delivery Truck	228	10783.8199481964	47.2974559131422
2	Critical	Regular Air	1180	8586.75996172428	7.27691522180024
3	Critical	Express Air	200	1742.09998804331	8.71049994021654
4	High	Delivery Truck	248	11206.8799371719	45.1890320047255
5	High	Regular Air	1308	10005.0099598169	7.64909018334628
6	High	Express Air	212	1453.5299910903	6.85627354287876
7	Low	Delivery Truck	250	11131.6099338531	44.5264397354126
8	Low	Regular Air	1280	10263.619956553	8.01845309105702
9	Low	Express Air	190	1551.62999778986	8.16647367257821
10	Medium	Delivery Truck	205	9461.61997509003	46.154243780927
11	Medium	Regular Air	1225	9418.71996569633	7.68875099240517

localhost\SQLEXPRESS (16.0 ... OLUWASEYI-ISRAE\user (52) KultraMegaStores 00:00:00

Was Shipping Cost Appropriately Spent Based on Order Priority?

Insight:

The analysis of shipping cost distribution across different Order Priority levels and Ship Modes reveals the following:

Express Air, the fastest and most expensive method, was used across all priority levels, including low-priority orders.

Similarly, Delivery Truck, the cheapest and slowest method, was also used for high-priority orders such as “Critical”.

There appears to be no consistent strategy for aligning shipping method with order urgency.

Problem Identified:

- The use of Express Air for Low or Not Specified priority orders led to unnecessary high shipping costs.
- Critical orders were not always prioritized with faster shipping methods, potentially risking customer dissatisfaction.

Recommendation:

KMS should adopt a shipping cost optimization policy such as:

- Align Shipping Mode with Order Priority
- Use Express Air only for High and Critical orders.
- Use Delivery Truck for Low or Not Specified orders.
- Automate Shipping Logic
- Build business rules into the order system to enforce proper shipping method selection based on priority.

- Monitor Shipping Costs Regularly
- Set KPIs to monitor mismatch rates between order priority and shipping mode.
- Train Order Fulfillment Teams
- Educate staff to follow shipping policies and flag inconsistencies.

Expected Benefit:

- Aligning shipping methods with order priority will reduce unnecessary costs, improve delivery satisfaction for high-priority customers, and streamline operational efficiency.