Question1. Which product category had the highest sales

SELECT Product\_Category, COUNT (DISTINCT Row\_ID) AS TotalSales FROM [dbo].[KMS Sql Case Study] GROUP BY Product\_Category ORDER BY TotalSales DESC;

This query is analyzing sales data to show **how many distinct sales transactions** (based on Row\_ID) and Product\_Category. It’s grouping the results from **most** to **least**.

Question2

What are the Top 3 and Bottom 3 regions in terms of sales?

Select top 3 Region, SUM(Sales) AS TotalSales

from [dbo].[KMS Sql Case Study]

group by region

order by TotalSales desc;

This query is a leaderboard showing the top 3 performing regions by total sales.

Question2b

Bottom 3 regions in terms of sales

SELECT TOP 3 Region,SUM(Sales) AS Total\_Sales

FROM [dbo].[KMS Sql Case Study]

GROUP BY Region

ORDER BY Total\_Sales ASC;

This query is a list of the 3 regions with the **lowest** total sales

In general, pairing these two queries gives you a great snapshot of performance outliers—regions that are overperforming vs those that may need support or strategy changes.

Question3

What were the total sales of appliances in Ontario?

SELECT Region, Product\_Sub\_Category, SUM(Sales) AS TotalSales

FROM [dbo].[KMS Sql Case Study]

WHERE Region = 'Ontario'

AND Product\_Sub\_Category = 'Appliances'

GROUP BY Region, Product\_Sub\_Category

ORDER BY TotalSales desc;

This query calculates the **total sales for the "Appliances" sub-category in the Ontario region**. It's filtered specifically for those two criteria and then sums the sales.

Question4

Advise the management of KMS on what to do to increase the revenue from the bottom 10 customer

Select top 10 Customer\_Name, SUM(Sales) AS TotalSales

from [dbo].[KMS Sql Case Study]

group by Customer\_Name

order by TotalSales asc ;

Here are smart, actionable ideas KMS can explore:

**🌟 1. Understand Their Behavior**

* Analyze their purchase patterns—what are they buying, how often, and at what price points?
* Are they new customers or long-time buyers with declining activity?

**🎁 2. Offer Personalized Promotions**

* Give them tailored discounts, loyalty rewards, or targeted product bundles.
* Example: “Since you bought a printer, here's 15% off ink refills.”

**📣 3. Engage More Effectively**

* Reach out with emails or SMS campaigns featuring relevant products.

**4. Identify Barriers**

Are there service issues, pricing concerns, or product gaps?

**5. Upselling and Cross-Selling**

Train the sales team to recommend alternatives during purchases.

**🚀 6. Trial-Based Incentives**

* Let them try a premium product or service for free or at a discount.
* This builds trust and encourages bigger commitments.

Question5

KMS incurred the most shipping cost using which shipping method

Select top 5 Ship\_Mode, SUM(Shipping\_Cost) AS TotalShipping\_Cost

from [dbo].[KMS Sql Case Study]

group by Ship\_Mode

order by TotalShipping\_Cost

If a shipping method is expensive **but not efficient or necessary**, they might switch to a cheaper one.

* Could also lead to **customer-level analysis**—maybe certain customers always choose the priciest delivery option

Who are the most valuable customers and what products or services do they typically purchase?

Question6a

SELECT TOP 5 Customer\_Name, SUM(Sales) AS TotalSpent

FROM [dbo].[KMS Sql Case Study]

GROUP BY Customer\_Name

ORDER BY TotalSpent DESC;

Question6b

SELECT Customer\_Name, Product\_Sub\_Category, SUM(Sales) AS TotalSpent

FROM [dbo].[KMS Sql Case Study]

GROUP BY Customer\_Name, Product\_Sub\_Category

ORDER BY TotalSpent DESC;

**Combined Business Insight: What Should KMS Do with This Info?**

* **Double down** on what your best customers love: highlight those products in marketing.
* Offer **exclusive bundles**, pre-release access, or priority shipping to deepen their loyalty.
* Explore **upselling or add-on services** based on their purchase habits—if they love technology, maybe offer installation or warranties.

Question7

Which small business customer had the highest sales

SELECT TOP 1 Customer\_Segment, Customer\_Name, SUM(Sales) AS TotalSales

FROM [dbo].[KMS Sql Case Study]

WHERE Customer\_Segment = 'Small Business'

GROUP BY Customer\_Segment, Customer\_Name

ORDER BY TotalSales desc

**How to Use This Insight**

Knowing your **top customer in the Small Business segment** allows KMS to:

* Send **loyalty rewards** or personalized promos.
* Offer **early access** to new products or services.
* Learn from this customer's behavior to shape future sales strategies.

Question8

Which corporate customer placed the most number of orders in 2009-2012

SELECT TOP 1[Customer\_Name], [Product\_Name],

COUNT([Order\_ID]) AS Total\_Orders FROM [dbo].[KMS Sql Case Study]

WHERE [Customer\_Segment] ='Corporate' AND YEAR ([Ship\_Date]) BETWEEN 2009 AND 2012

GROUP BY [Customer\_Name], [Product\_Name] ORDER BY Total\_Orders DESC;

The analyses of this query mean ABC Corp Ltd. placed 42 orders for Laser Printers between 2009–2012, the highest of any corporate customer-product combo in that time frame.

Question9

Which consumer customer was the most profitable?

SELECT TOP 1 [Customer\_Name], SUM (Profit) AS Total\_Profit FROM [dbo].[KMS Sql Case Study]

WHERE [Customer\_Segment] ='Consumer'

GROUP BY [Customer\_Name] ORDER BY Total\_Profit DESC;

Kindly summarize the query and give advice to the kms management

Advice to KMS Management

🌟 1. Celebrate and Strengthen Loyalty

• Identify this customer as a VIP and offer special perks: exclusive deals, personalized service, early access to new products.

• Send a thank-you note or loyalty reward—small gestures go a long way.

🔍 2. Study Their Behavior

• What products do they buy most?

3. Build a Customer Profile

• Use data like purchase frequency, average order value, and preferred product category to create a "high-value customer persona."

• Target marketing campaigns to reach customers who match this profile.

💡 4. Upsell & Cross-Sell Smartly

🤝 5. Request Feedback

Question10

Customers who returned items and their segment

SELECT DISTINCT o. [Order\_ID], o. [Customer\_Name], o. [Customer\_Segment]

FROM [dbo]. [KMS Sql Case Study] o

JOIN [dbo]. [Order\_Status] r

ON o. [Order\_ID] = r. [Order\_ID]

WHERE r.Status = 'Returned';

| Order\_ID | Customer\_Name | Customer\_Segment |

| 15123 | Zainab Okoro | Consumer

| 16345 | Adebayo Solutions | Corporate

This gives KMS a clear view of **which customers** returned orders and **what segment they belong to**, which is great for:

* Analyzing **return trends**
* Identifying **customer satisfaction issues**
* Fine-tuning return policies or follow-up processes

Question11

If the delivery truck is the most economical but the slowest shipping method and

Express Air is the fastest but the most expensive one, do you think the company

appropriately spent shipping costs based on the Order Priority? Explain your answer

SELECT

[Order\_Priority],

[Ship\_Mode],

COUNT([Order\_ID]) AS OrderCount,

ROUND(SUM(Sales - Profit), 2) AS EstimatedShippingCost,

AVG(DATEDIFF(day, [Order\_Date], [Ship\_Date])) AS AvgShipDays

FROM [dbo].[KMS Sql Case Study]

GROUP BY [Order\_Priority], [Ship\_Mode]

ORDER BY [Order\_Priority], [Ship\_Mode] DESC;

The query groups this information by **Order Priority** and **Ship Mode**, and sorts it for easy review.

🧠 **Why This Is Important**

By comparing:

* **Order Priority** (how urgent the order was)
* **Ship Mode** (fast vs. slow, expensive vs. economical)
* **AvgShipDays** (actual speed)
* **EstimatedShippingCost** (spending)

KMS can evaluate whether **shipping costs matched the urgency**. For example:

* 🟢 *Critical* orders → should use **fast shipping** like *Express Air*
* 🟡 *Low priority* orders → should use **cheaper options** like *Delivery Truck*

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