

Questions

Enter your question here:

"Which customer had the highest
percentage increase in total revenue
for the month dec-23"



ENTER 

Show Query History



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Query 1

Question: How many unique customers made voice calls in February 2023?

SQL Query: `SELECT COUNT(DISTINCT t.calling_nbr) AS unique_customers FROM telecom_data_v3 t WHERE t.part_month = 'Feb-23';`

Query Result:

	unique_customers
0	99,972

Result:

KPI

unique_customers: 99972

Query 2

Question: Who are the top 5 customers by total revenue in December 2023?"

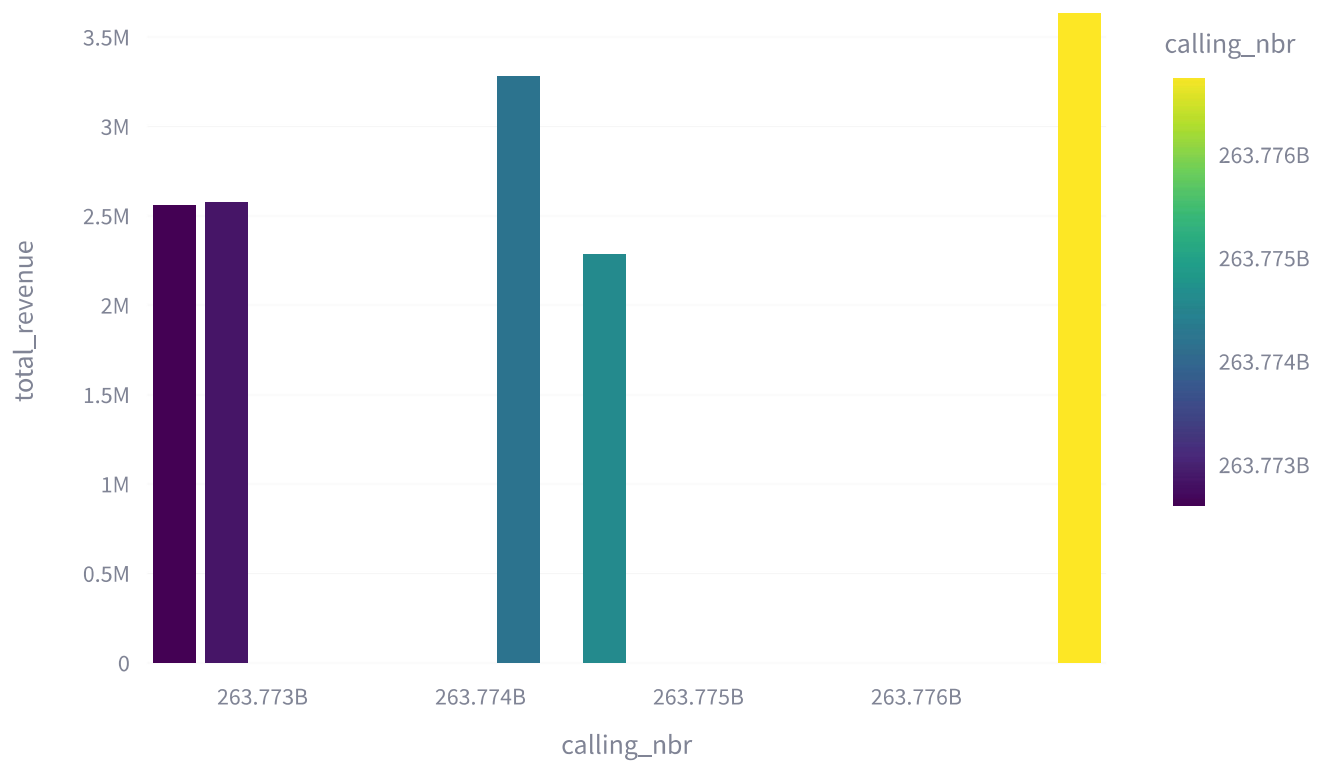
SQL Query: `SELECT t.calling_nbr, t.total_revenue FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' ORDER BY t.total_revenue DESC NULLS LAST LIMIT 5;`

Query Result:

	calling_nbr	total_revenue
0	263,776,747,074	3,631,220.886
1	263,774,173,144	3,282,338.944
2	263,772,836,420	2,572,572.282
3	263,772,594,468	2,561,008.512
4	263,774,570,361	2,284,255.561

Result:

total_revenue by calling_nbr

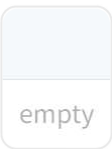


Query 3

Question: "Calculate the average revenue per user (ARPU) for prepaid plans in March 2023."

SQL Query: `SELECT t.calling_nbr, AVG(t.total_revenue) AS arpu FROM telecom_data_v3 t WHERE t.part_month = 'March-23' AND t.plan_code ilike '%Prepaid%' GROUP BY t.calling_nbr ORDER BY arpu DESC NULLS LAST;`

Query Result:



Result:

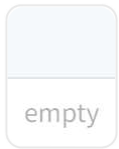
No data to display.

Query 4

Question: "Calculate the average revenue per user (ARPU) for prepaid plans in Mar-23 limit 20."

SQL Query: SELECT t.calling_nbr, AVG(t.total_revenue) AS arpu FROM telecom_data_v3 t WHERE t.part_month = 'Mar-23' AND t.plan_code ilike '%Prepaid%' GROUP BY t.calling_nbr LIMIT 20;

Query Result:



Result:

No data to display.

Query 5

Question: "Calculate the average revenue per user (ARPU) in Mar-23 limit 20."

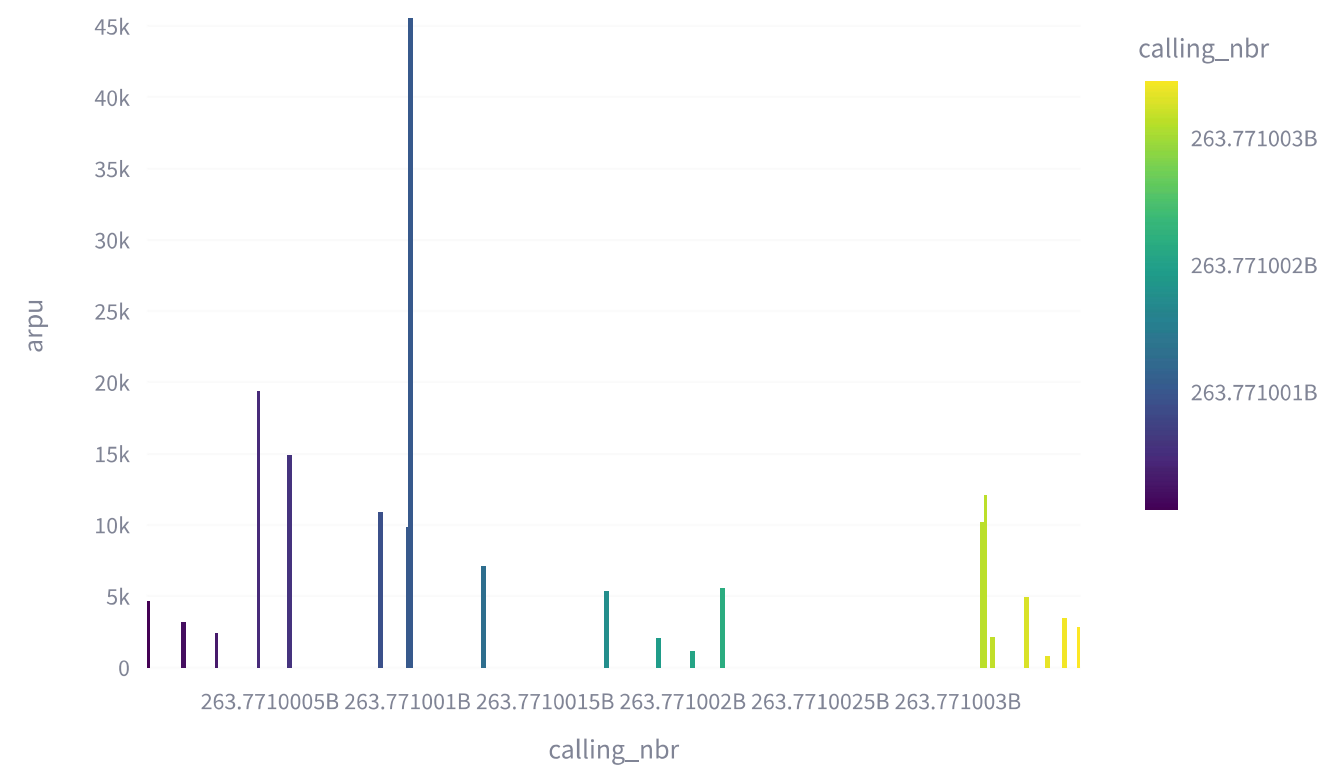
SQL Query: SELECT t.calling_nbr, AVG(t.total_revenue) AS arpu FROM telecom_data_v3 t WHERE t.part_month = 'Mar-23' GROUP BY t.calling_nbr LIMIT 20;

Query Result:

	calling_nbr	arpu
0	263,771,000,060	4,616.388
1	263,771,000,185	3,142.8873
2	263,771,000,305	2,371.5829
3	263,771,000,457	19,365.5162
4	263,771,000,566	14,897.8555
5	263,771,000,901	10,876.499
6	263,771,001,002	9,816.1648
7	263,771,001,010	45,554.4277
8	263,771,001,276	7,065.1416
9	263,771,001,723	5,326.1757

Result:

arpu by calling_nbr



Query 6

Question: "Calculate the average revenue per user (ARPU) for plan_code is Prepaid in Mar-23 limit 20."

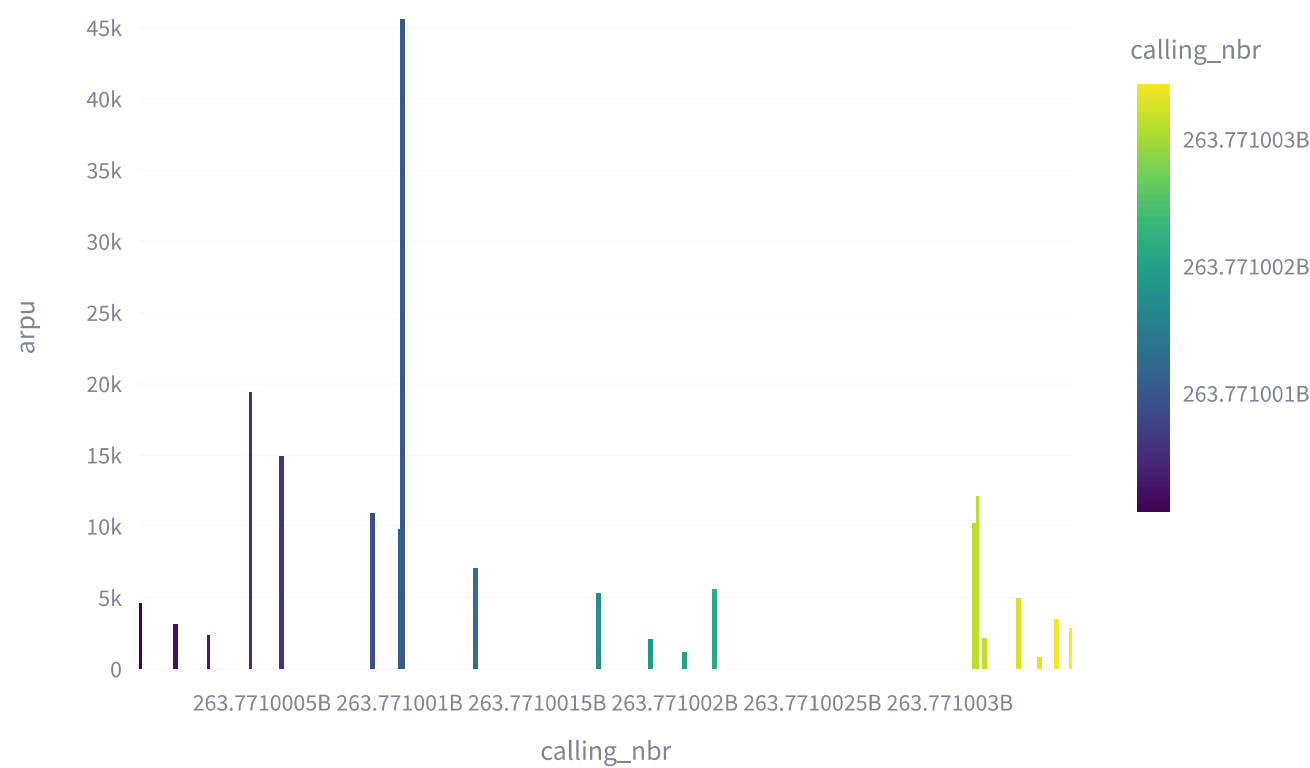
SQL Query: SELECT t.calling_nbr, AVG(t.total_revenue) AS arpu FROM telecom_data_v3 t WHERE t.plan_code = 'Prepaid' AND t.part_month = 'Mar-23' GROUP BY t.calling_nbr LIMIT 20;

Query Result:

	calling_nbr	arpu
0	263,771,000,060	4,616.388
1	263,771,000,185	3,142.8873
2	263,771,000,305	2,371.5829
3	263,771,000,457	19,365.5162
4	263,771,000,566	14,897.8555
5	263,771,000,901	10,876.499
6	263,771,001,002	9,816.1648
7	263,771,001,010	45,554.4277
8	263,771,001,276	7,065.1416
9	263,771,001,723	5,326.1757

Result:

arpu by calling_nbr



Query 7

Question: "List all the different device types and the number of users for each type in dec-23."

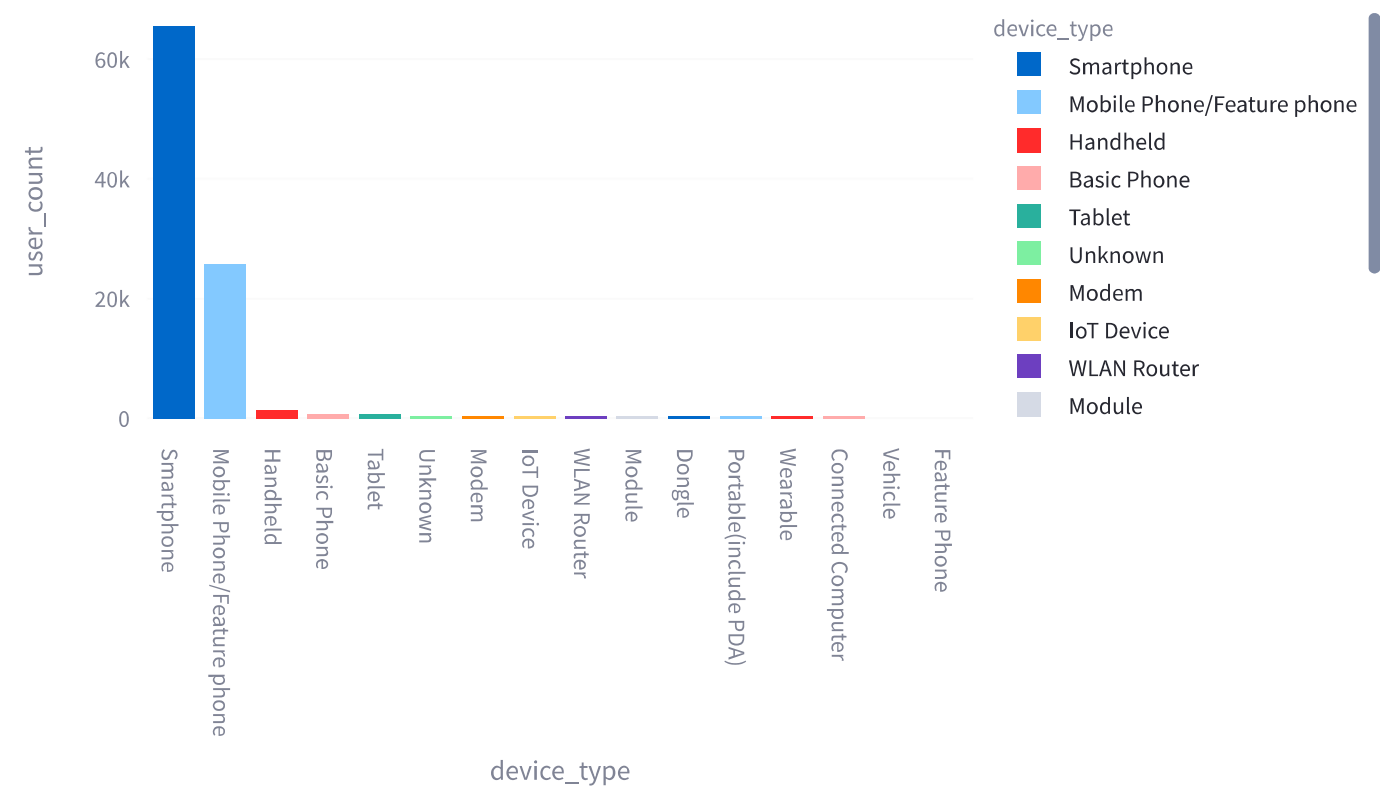
SQL Query: SELECT t.device_type, COUNT(DISTINCT t.calling_nbr) AS user_count FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' GROUP BY t.device_type ORDER BY user_count DESC NULLS LAST;

Query Result:

	device_type	user_count
0	Smartphone	65,617
1	Mobile Phone/F	25,816
2	Handheld	1,304
3	Basic Phone	635
4	Tablet	627
5	Unknown	179
6	Modem	167
7	IoT Device	83
8	WLAN Router	60
9	Module	41

Result:

user_count by device_type

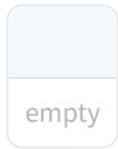


Query 8

Question: "Display the month-over-month growth rate in SMS usage for the year 2023."

SQL Query: `SELECT t.part_month, SUM(t.sms_total_msgs) AS total_sms, (SUM(t.sms_total_msgs) - LAG(SUM(t.sms_total_msgs), 1) OVER (ORDER BY t.part_month)) / NULLIF(LAG(SUM(t.sms_total_msgs), 1) OVER (ORDER BY t.part_month), 0) AS growth_rate FROM telecom_data_v3 t WHERE EXTRACT(YEAR FROM t.part_month::DATE) = 2023 GROUP BY t.part_month ORDER BY t.part_month NULLS`

Query Result:



Result:

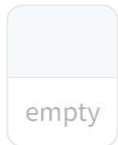
No data to display.

Query 9

Question: "Identify customers who have switched plans between jan-23 and feb-23??"

SQL Query: `SELECT t.calling_nbr, t.plan_code, t.part_month FROM telecom_data_v3 t WHERE t.part_month IN ('Jan-23', 'Feb-23') AND t.plan_code != lag(t.plan_code) OVER (PARTITION BY t.calling_nbr ORDER BY t.part_month)`

Query Result:



Result:

No data to display.

Query 10

Question: "Find the month with the highest voice usage for each month of 2023."

SQL Query: SELECT t.part_month, SUM(t.voice_usage_mins) AS total_voice_minutes FROM telecom_data_v3 t WHERE t.part_month BETWEEN 'Jan-23' AND 'Dec-23' GROUP BY t.part_month ORDER BY total_voice_minutes DESC;

Query Result:

	part_month	total_voice_minutes
empty		

Result:

No data to display.

Query 11

Question: "Find the month with the highest voice usage"

SQL Query: SELECT t.part_month, SUM(t.voice_usage_mins) AS total_voice_minutes FROM telecom_data_v3 t GROUP BY t.part_month ORDER BY total_voice_minutes DESC LIMIT 1;

Query Result:

	part_month	total_voice_minutes
0	Dec-23	14,315,636.9833

Result:

total_voice_minutes by part_month

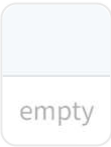


Query 12

Question: "What is the distribution of customers across different regions for the latest month available?"

SQL Query: `SELECT t.homing_bsc, COUNT(t.calling_nbr) AS customer_count, cume_dist() OVER (ORDER BY COUNT(t.calling_nbr)) AS cumulative_distribution FROM telecom_data_v3 t WHERE t.part_month = (SELECT MAX(t.part_month) FROM telecom_data_v3) GROUP BY t.homing_bsc ORDER BY customer_count NULLS LAST;`

Query Result:



Result:

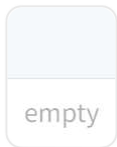
No data to display.

Query 13

Question: "What is the distribution of customers across different regions month wise

SQL Query: SELECT t.part_month, t.homing_bsc, COUNT(t.calling_nbr)::FLOAT /
SUM(COUNT(t.calling_nbr)) OVER (PARTITION BY t.part_month ORDER BY t.homing_bsc) AS proportion
FROM telecom_data_v3 t GROUP BY t.part_month, t.homing_bsc ORDER BY t.part_month, t.homing_bsc
NULLS LAST;

Query Result:



Result:

No data to display.

Query 14

Question: generate a query month wise region wise total customers

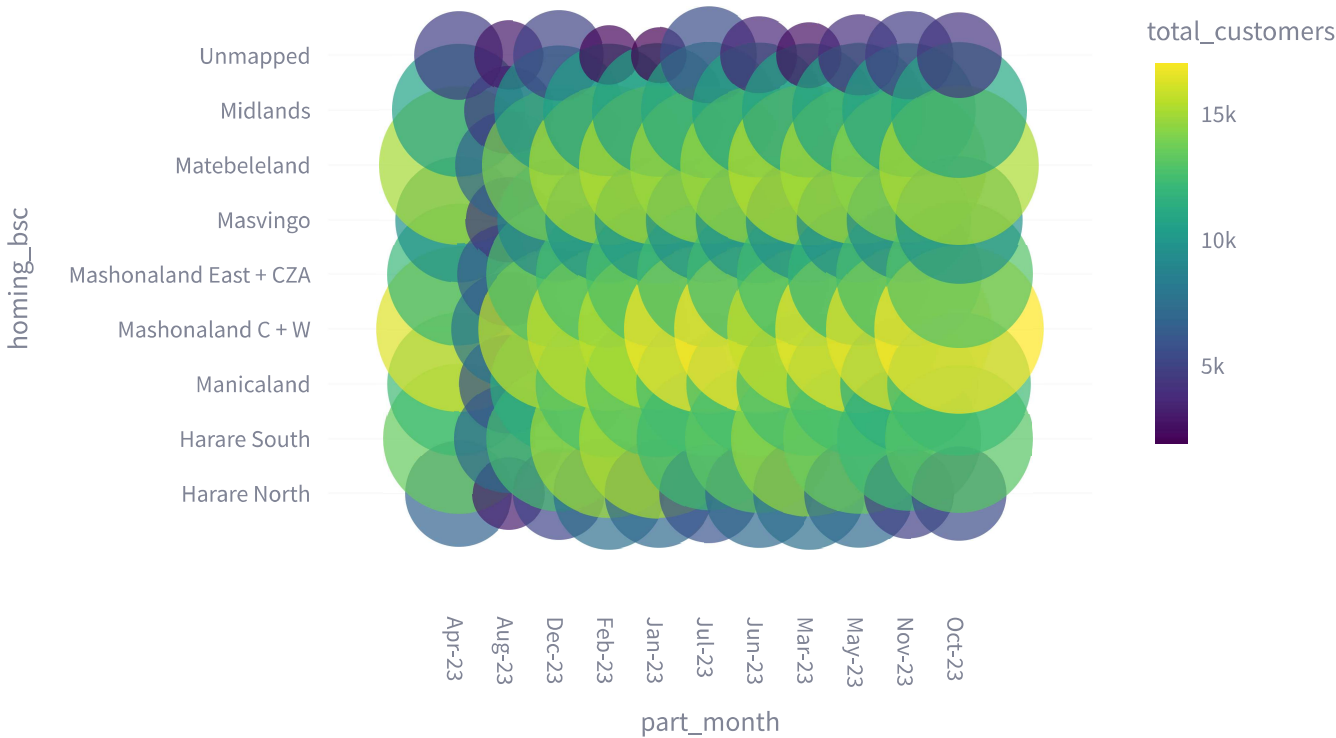
SQL Query: SELECT t.part_month, t.homing_bsc, COUNT(DISTINCT t.calling_nbr) AS total_customers
FROM telecom_data_v3 t GROUP BY t.part_month, t.homing_bsc ORDER BY t.part_month, t.homing_bsc;

Query Result:

	part_month	homing_bsc	total_customers
0	Apr-23	Harare North	6,736
1	Apr-23	Harare South	13,352
2	Apr-23	Manicaland	12,169
3	Apr-23	Mashonaland C + W	16,198
4	Apr-23	Mashonaland East + CZA	12,021
5	Apr-23	Masvingo	9,464
6	Apr-23	Matebeleland	14,927
7	Apr-23	Midlands	10,487
8	Apr-23	Unmapped	4,628
9	Aug-23	Harare North	3,070

Result:

homing_bsc by part_month and Bubble Size by total_customers



Query 15

Question: "Show the total voice usage minutes for customers by plan type for dec-23"

SQL Query: SELECT t.plan_code, SUM(t.voice_usage_mins) AS total_voice_minutes FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' GROUP BY t.plan_code ORDER BY total_voice_minutes DESC NULLS LAST;

Query Result:

	plan_code	total_voice_minutes
0	Prepaid	14,161,031.4
1	Staff & Spouse	77,557.3
2	Postpaid	70,496.55
3	Hybrid	6,485.4167
4	Others	66.3167

Result:

total_voice_minutes by plan_code



Query 16

Question: "Can we see the trend of data usage for high-value customers throughout 2023?"

```
SQL Query: SELECT t.part_month, SUM(t.data_volume_gb) AS total_data_usage FROM telecom_data_v3 t
WHERE t.part_month BETWEEN 'Jan-23' AND 'Dec-23' GROUP BY t.part_month ORDER BY t.part_month
NULLS LAST;
```

Query Result:

	part_month	total_data_usage
empty		

Result:

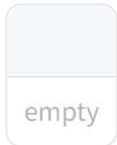
No data to display.

Query 17

Question: "Which customer had the highest percentage increase in total revenue from January to December 2023?"

SQL Query: WITH jan_dec_2023 AS (SELECT customer_id, SUM(total_revenue) AS total_revenue_2023 FROM telecom_data_v3 WHERE part_month IN ('Jan-23', 'Feb-23', 'Mar-23', 'Apr-23', 'May-23', 'Jun-23', 'Jul-23', 'Aug-23', 'Sep-23', 'Oct-23', 'Nov-23', 'Dec-23') GROUP BY customer_id), customer_growth AS (SELECT customer_id, ((total_revenue_2023 - LAG(total

Query Result:



Result:

No data to display.

Query 18

Question: "Which customer had the highest percentage increase in total revenue for the month dec-23"

SQL Query: SELECT t.calling_nbr, t.total_revenue, ((t.total_revenue - lag(t.total_revenue, 1) OVER (PARTITION BY t.calling_nbr ORDER BY t.part_month)) / NULLIF(lag(t.total_revenue, 1) OVER (PARTITION BY t.calling_nbr ORDER BY t.part_month), 0)) * 100 AS percentage_change FROM telecom_data_v3 t WHERE t.part_month = 'Dec-23' ORDER BY percentage_change DESC NULLS LAST LIMIT 1;

Query Result:

	calling_nbr	total_revenue	percentage_change
0	263,771,985,332	66,233.9692	886,622.639

Result:

total_revenue by calling_nbr and Bubble Size by percentage_change

