A. Exploratory Analysis:

1. Data type of all columns in the "customers" table.

Query –

```
SELECT
        table_name,
        column_name,
        data_type
FROM
        `target`.INFORMATION_SCHEMA.COLUMNS
WHERE
        table_name = 'customers';
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	table_name	column_name	data_type
1	customers	customer_id	STRING
2	customers	customer_unique_id	STRING
3	customers	customer_zip_code_prefix	INT64
4	customers	customer_city	STRING
5	customers	customer_state	STRING

Results per page: 50 1 – 5 of 5

Insights –

- We queried the database to retrieve details such as the datatype of each column in the customer's table. This ensures data integrity and provides useful insights into the table's structure, which is important for designing queries, validating data, and performing analysis.
- Customer ID is generally a unique identifier assigned to each customer within a company's database. It allows the company to maintain records of customer information, purchase history, and other relevant details. This ID can also be used to track order shipments and fulfil requirements where customer credentials are needed.
- Customer Unique ID represents an even more specific identifier assigned to a customer. Unlike a general customer ID, this unique ID distinguishes one customer from another at a more detailed level. It is often used internally within Target's systems for operational purposes, data analysis, or as a reference in the databases.

2. Time range between which the orders were placed.

Query –

```
SELECT
        MIN(order_purchase_timestamp) AS first_order,
        MAX(order_purchase_timestamp) AS last_order
FROM
        `target.orders`;
```

Output –

Insights –

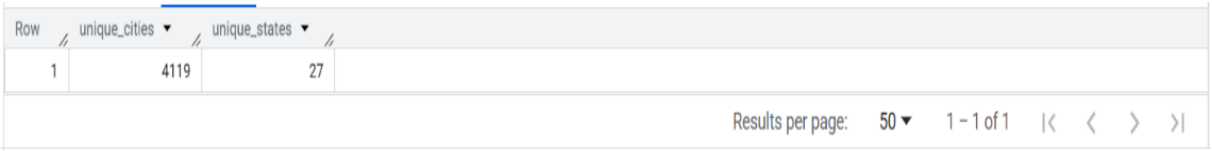
- We extracted the date and time of both the first and the most recent orders placed. The available data spans a period of approximately two years.
- This timeframe is analysed to evaluate sales performance and identify patterns such as trends, peak periods, and seasonal variations. It also supports optimizing seasonal management, marketing strategies, promotions, and customer behaviour analysis (including purchasing habits, order fulfilment rates, feedback, sales growth, and customer reviews). Additionally, factors like customer support response times and annual events can be studied to uncover preferences and seasonal demand. Such insights are valuable for predicting future demand, enhancing customer satisfaction, and improving operational efficiency.

3. Cities & States of customers who ordered during the given period.

Query –

```
SELECT
        COUNT(DISTINCT c.customer_city) AS unique_cities,
        COUNT(DISTINCT c.customer_state) AS unique_states
FROM
        `target.orders` AS o
LEFT JOIN
        `target.customers` AS c
ON
       o.customer_id = c.customer_id;
```

Output –



Insights –

- Target has built a strong presence across multiple regions in Brazil, reflecting a solid market position and a broad customer base nationwide. This demonstrates their wide reach and firm hold in the Brazilian market.
- Tracking the number of cities and states provides valuable insights for geographic analysis, identifying growth opportunities, studying customer behaviour by location, assessing regional performance, and supporting strategic decision-making for resource allocation and market planning.

B. In depth exploration:

1. Is there a growing trend in the no. of orders placed over the past years?

Query-

```
SELECT

        EXTRACT(YEAR FROM order_purchase_timestamp) AS year,
        COUNT(order_id) AS order_count
FROM
        `target.orders`
GROUP BY
        1
ORDER BY
        1;
```

Output-

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	year	order_count
1	2016	329
2	2017	45101
3	2018	54011

Results per page: 50 | 1 – 3 of 3

Insights-

Rapid Growth in Orders:

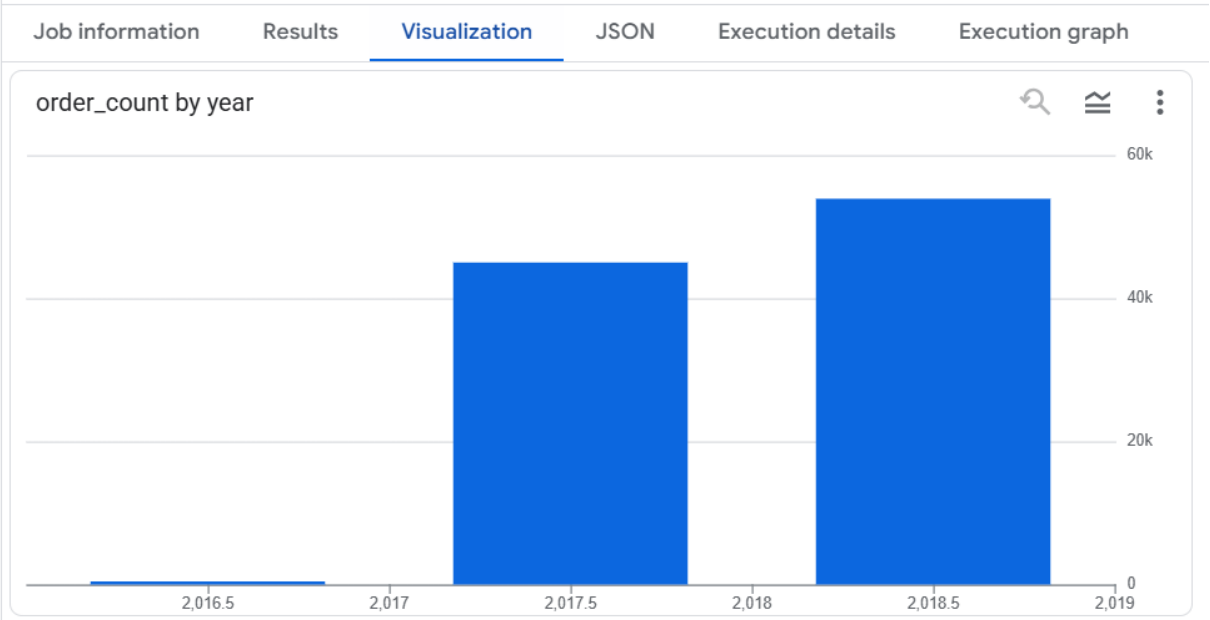
- In 2016, the total order count was 329, indicating either the initial launch year of operations or limited early adoption.
- By 2017, orders skyrocketed to 45,101, marking a massive growth of over 13,600% compared to 2016.
- In 2018, the order volume further increased to 54,011, showing a 20% year-on-year growth from 2017.
- Market Expansion and Customer Adoption
- The sharp rise from 2016 to 2017 suggests successful market penetration, improved brand recognition, and a rapid onboarding of new customers.
- Continued growth in 2018 reflects sustained customer demand and possibly an expansion in product offerings, service reach, or customer loyalty.

Performance Trend:

- The bar chart clearly illustrates exponential growth from 2016 to 2017, followed by stable but slower growth from 2017 to 2018.
- This suggests that the company transitioned from an early growth phase in 2016 to rapid expansion in 2017, and then into a consolidation and maturity phase by 2018.

Strategic Implications:

- The business should analyse factors driving the surge in 2017 (e.g., marketing campaigns, geographic expansion, or partnerships) to replicate similar growth in future years.
- Since growth slowed in 2018, there may be a need to explore new markets, diversify offerings, or strengthen customer retention strategies to maintain momentum.



2. Can we see some kind of monthly seasonality in terms of the no. of orders being placed?

Query –

```
SELECT
        EXTRACT(MONTH FROM order_purchase_timestamp) AS month,
        COUNT(order_id) AS order_count
FROM
        `target.orders`
GROUP BY
        1
ORDER BY
        1;
```

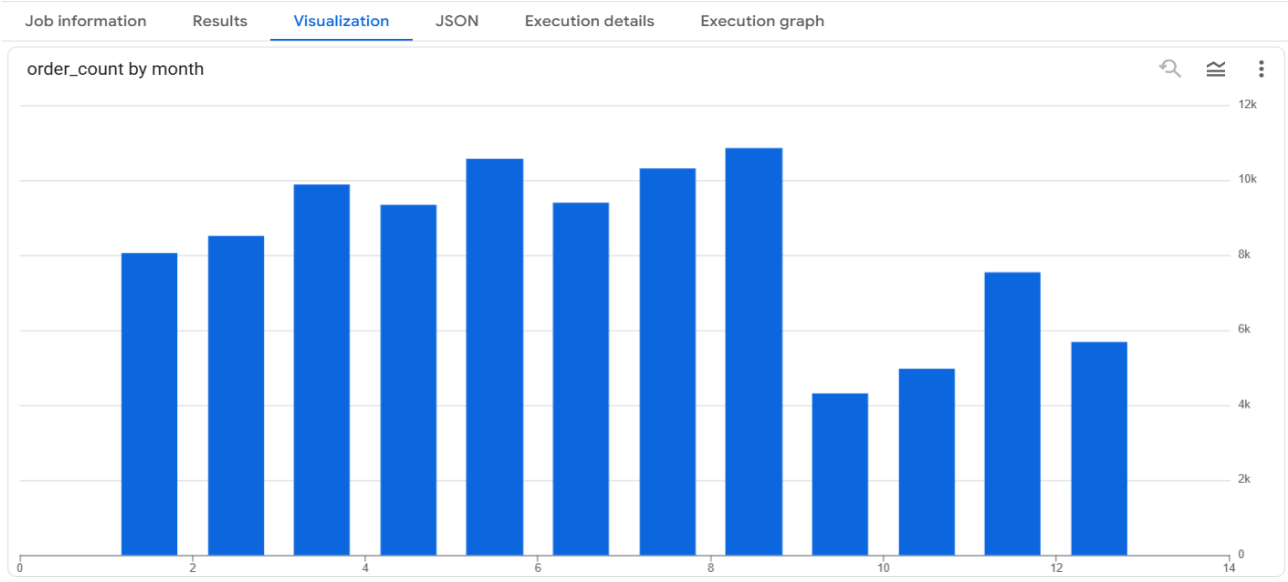
Output

Insights –

Overall Order Distribution

- The data reveals fluctuations in order counts throughout the year, with noticeable peaks between March (9,893 orders) and August (10,843 orders).

- The highest number of orders was recorded in August (10,843), while the lowest was observed in September (4,305).
- Peak Months (March–August):
- Orders remained consistently high during this period, ranging between 9,000–10,800 orders per month.
- This suggests that Q2 and Q3 are strong demand periods, potentially influenced by seasonal factors, marketing campaigns, or customer shopping behaviour patterns.
- Sharp Decline in September:
- September saw a significant dip to 4,305 orders, representing a 60% drop compared to August.
- This drop could be attributed to market seasonality, reduced promotional activity, or external factors such as holidays or economic slowdowns.
- Recovery and Year-End Performance:
- Orders gradually recovered in October (4,959) and showed stronger performance in November (7,544), possibly linked to festive/holiday shopping events.
- December again saw a decline to 5,674, suggesting post-festive demand slowdown.
- Strategic Implications:
- The business should capitalize on the March–August peak period by ensuring adequate inventory, marketing campaigns, and resource allocation.
- Investigating the cause of the September slump can uncover opportunities to stabilize demand. Introducing targeted promotions or loyalty campaigns may help balance sales during this weaker month.
- Leveraging holiday-driven demand in November can further boost year-end performance, with strategies to sustain momentum into December.



3. During what time of the day, do the Brazilian customers mostly place their orders? (Dawn, Morning, Afternoon or Night)
0-6 hours: Dawn
7-12 hours: Mornings
13-18 hours: Afternoon
19-23 hours: Night

Query –

```
SELECT
        CASE
                WHEN EXTRACT(HOUR FROM order_purchase_timestamp) BETWEEN 0
                AND 6 THEN 'Dawn'
                WHEN EXTRACT(HOUR FROM order_purchase_timestamp) BETWEEN 7
                AND 12 THEN 'Mornings'
                WHEN EXTRACT(HOUR FROM order_purchase_timestamp) BETWEEN
                13 AND 18 THEN 'Afternoon'
                ELSE 'Night'
        END AS time_of_day,
        COUNT(order_id) AS number_of_orders
FROM
        `target.orders`
GROUP BY
         1
ORDER BY
         2 DESC;
```

Output –

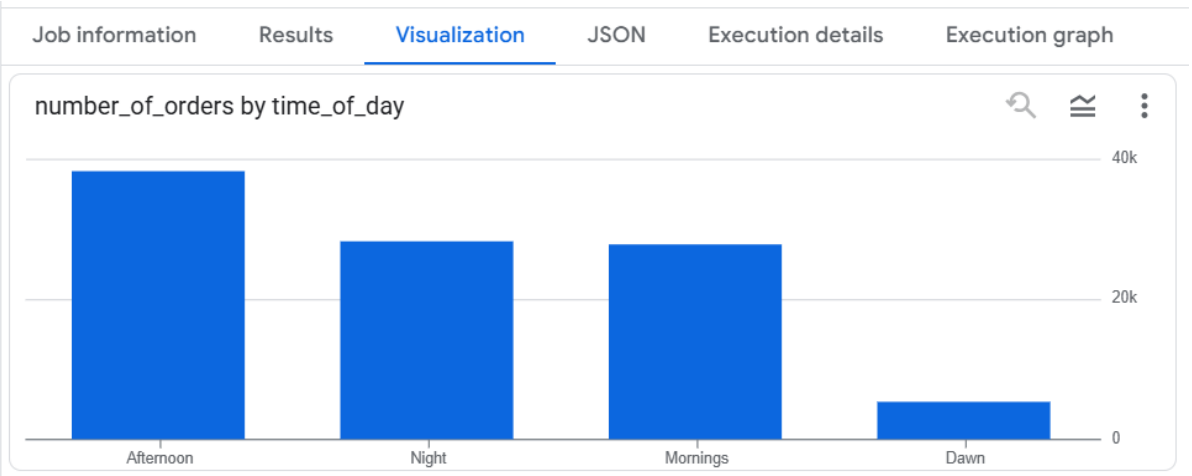
Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	time_of_day	number_of_orders
1	Afternoon	38135
2	Night	28331
3	Mornings	27733
4	Dawn	5242

Results per page: 50 1 – 4 of 4

Insights –
- Order Distribution Across Time of Day
- Afternoon (38,135 orders):
- This time slot has the highest number of orders, contributing the largest share of demand.
- Likely linked to lunch hours, work breaks, or post-office errands where people tend to order food or make purchases.
- Afternoon can be considered a peak business period and may require additional operational readiness (delivery staff, kitchen capacity, inventory).
Night (28,331 orders):
- The second busiest period, indicating strong demand during late hours.
- This could be driven by dinner orders, late-night cravings, or leisure activities.
- Maintaining extended service hours and optimizing delivery fleet during this period could capture more revenue.
- Mornings (27,733 orders):
- Orders are slightly lower than at night, but still significant.

- Likely related to breakfast and early workday purchases.
- Opportunities exist to push morning-specific offerings like breakfast combos, coffee deals, or quick snacks.
- Dawn (5,242 orders):
- The lowest order volume, showing very limited demand in early hours.
- While this period may not require much operational focus, it could be strategically leveraged for niche markets (e.g., early travellers, fitness enthusiasts, or night-shift workers).



C. Evolution of E-commerce orders in the Brazil region:

1. Get the month-on-month no. of orders placed in each state.

Query –

```
SELECT
        c.customer_state,
        EXTRACT(MONTH FROM o.order_purchase_timestamp) AS month,
        COUNT(o.order_id) AS number_of_orders
FROM
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
GROUP BY
        1, 2
ORDER BY
        1, 2;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	customer_state	month	number_of_orders
1	AC	1	8
2	AC	2	6
3	AC	3	4
4	AC	4	9
5	AC	5	10
6	AC	6	7
7	AC	7	9
8	AC	8	7
9	AC	9	5
10	AC	10	6

Results per page: 50 1 – 50 of 322

Insights –

- The state-wise monthly analysis of order counts reveals important patterns in both customer demand and regional performance. By breaking down orders across different states and months, the results highlight which regions consistently generate higher volumes, as well as those with relatively lower activity. The month-level trend further uncovers seasonal variations in purchasing behaviour, such as peak order periods during festivals, holidays, or sales campaigns. These insights are valuable for understanding regional market penetration, planning inventory and logistics according to demand cycles, and designing targeted marketing strategies to boost engagement in underperforming states. Overall, the analysis provides a clear view of how demand shifts geographically and temporally, helping businesses align operations with customer behaviour.

2. How are the customers distributed across all the states?

Query –

```
SELECT
        customer_state,
        COUNT(customer_unique_id) AS number_of_customers
FROM
        `target.customers`
GROUP BY
        1;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

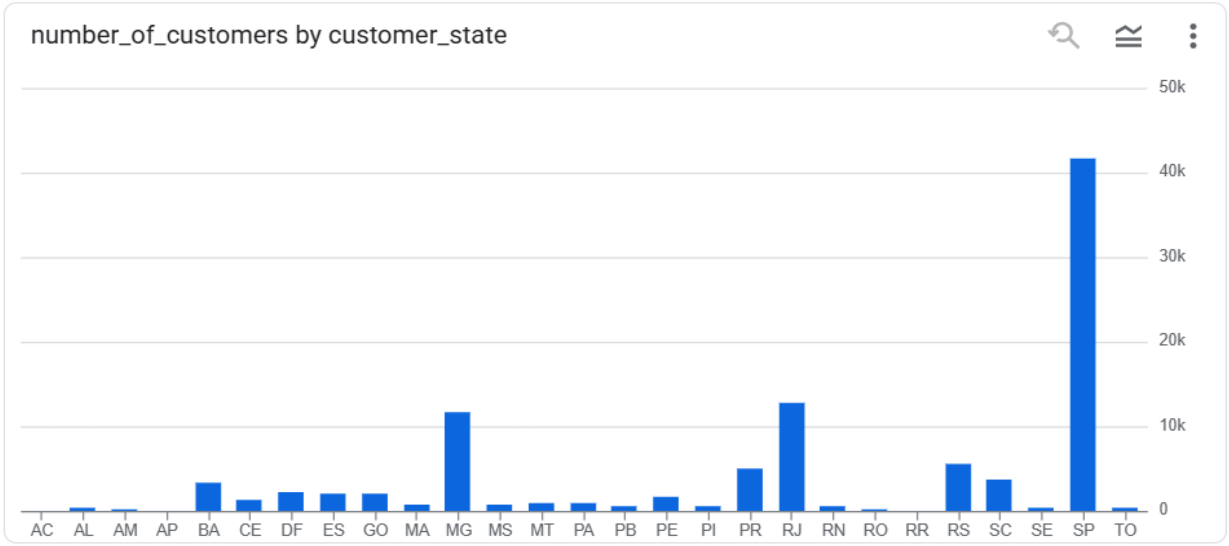
Row	customer_state	number_of_custo...
1	AC	81
2	AL	413
3	AM	148
4	AP	68
5	BA	3380
6	CE	1336
7	DF	2140
8	ES	2033
9	GO	2020
10	MA	747

Results per page: 50 | 1 – 27 of 27

Insights –

- The analysis highlights the distribution of customers across different states by counting the number of unique customers in each region. This state-wise breakdown provides clarity on where the business has the largest customer base and where the presence is comparatively weaker. States with a higher concentration of customers represent key markets where the company has stronger reach and engagement, making them ideal candidates for further investment in targeted campaigns, localized promotions, and enhanced delivery capabilities. Conversely, states with fewer customers indicate potential growth opportunities, suggesting the need for strategies such as awareness campaigns, partnerships, or service expansion to capture a larger share of the market. Overall, this insight serves as a foundation for data-driven decisions around marketing allocation, logistics optimization, and regional growth planning.

Job information | Results | Visualization | JSON | Execution details | Execution graph



D. Impact on Economy: Analyse the money movement by e-commerce by looking at order prices, freight and others:

1. Get the % increase in the cost of orders from year 2017 to 2018 (include months between Jan to Aug only).

Query –

```
WITH cte AS (
        SELECT
                EXTRACT(YEAR FROM o.order_purchase_timestamp) AS year,
                SUM(p.payment_value) as cost
        FROM
                `target.orders` AS o
        INNER JOIN
                `target.payments` AS p
        ON
                o.order_id = p.order_id
        WHERE
                EXTRACT(YEAR FROM o.order_purchase_timestamp) BETWEEN 2017
                AND 2018
                AND EXTRACT(MONTH FROM o.order_purchase_timestamp) BETWEEN
                1 AND 8
        GROUP BY
                1
)

SELECT
        *,
        LEAD(cost, 1) OVER(ORDER BY year) AS     next_year_sales,
        ROUND(100 * (LEAD(cost, 1) OVER(ORDER BY year) - cost) / cost, 2) AS
        percent_cost
FROM
        cte
ORDER BY
        year;
```

Output -

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	year	cost	next_year_sales	percent_cost
1	2017	3669022.119999...	8694733.840000...	136.98
2	2018	8694733.840000...	null	null

Results per page: 50 | 1 – 2 of 2

Insights –

- The analysis measures year-over-year revenue performance by comparing total customer payments between January and August of consecutive years. The results provide clarity on how sales evolved over time, highlighting whether the business experienced growth or decline during this period. An increase in revenue reflects stronger sales momentum, improved customer engagement, or successful marketing and operational strategies, whereas a decline may indicate reduced demand, competitive pressures, or inefficiencies in service

delivery. By quantifying the percentage change between years, this insight enables the business to evaluate past performance, assess the effectiveness of strategic decisions, and build a data-driven foundation for future sales forecasting, budget allocation, and long-term growth planning.

2. Calculate the total & average value of order price for each state.

Query -

```
SELECT
        c.customer_state,
        ROUND(SUM(price), 2) AS total_price,
        ROUND(SUM(price) / COUNT(DISTINCT o.order_id), 2) AS avg_price_per_order
FROM
        `target.orders` AS o
INNER JOIN
        `target.order_items` AS i
ON
        o.order_id = i.order_id
INNER JOIN
        `target.customers` AS c
ON
        o.customer_id = c.customer_id
GROUP BY
        c.customer_state;
```

Output -

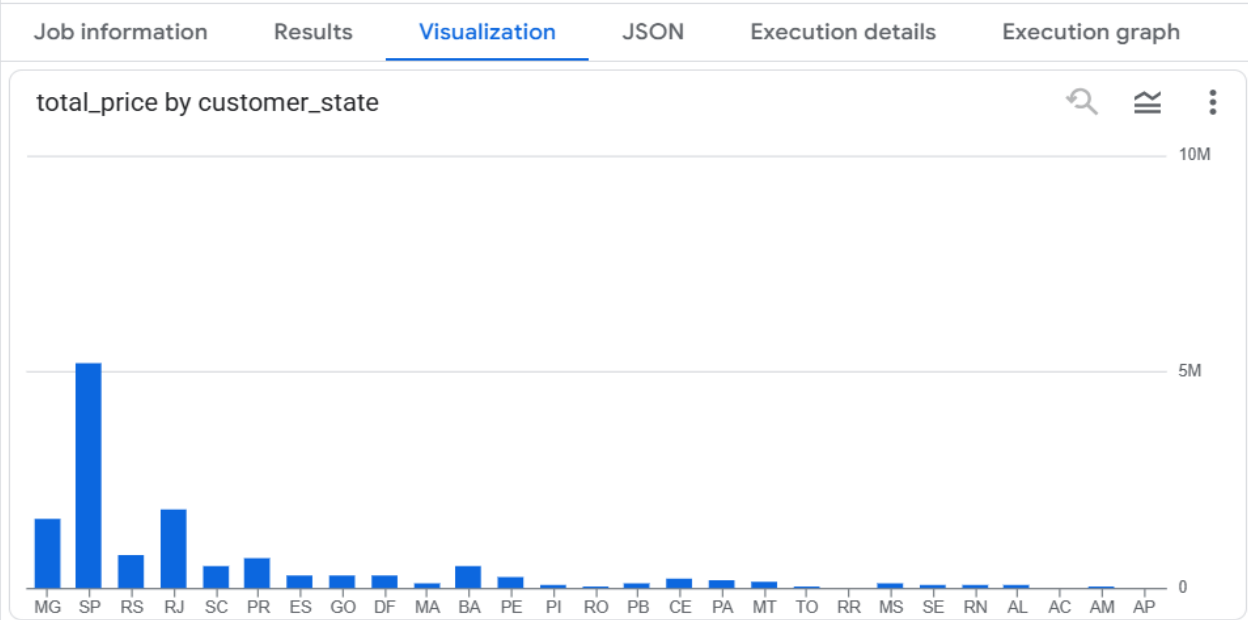
Job information | Results | Visualization | JSON | Execution details | Execution graph

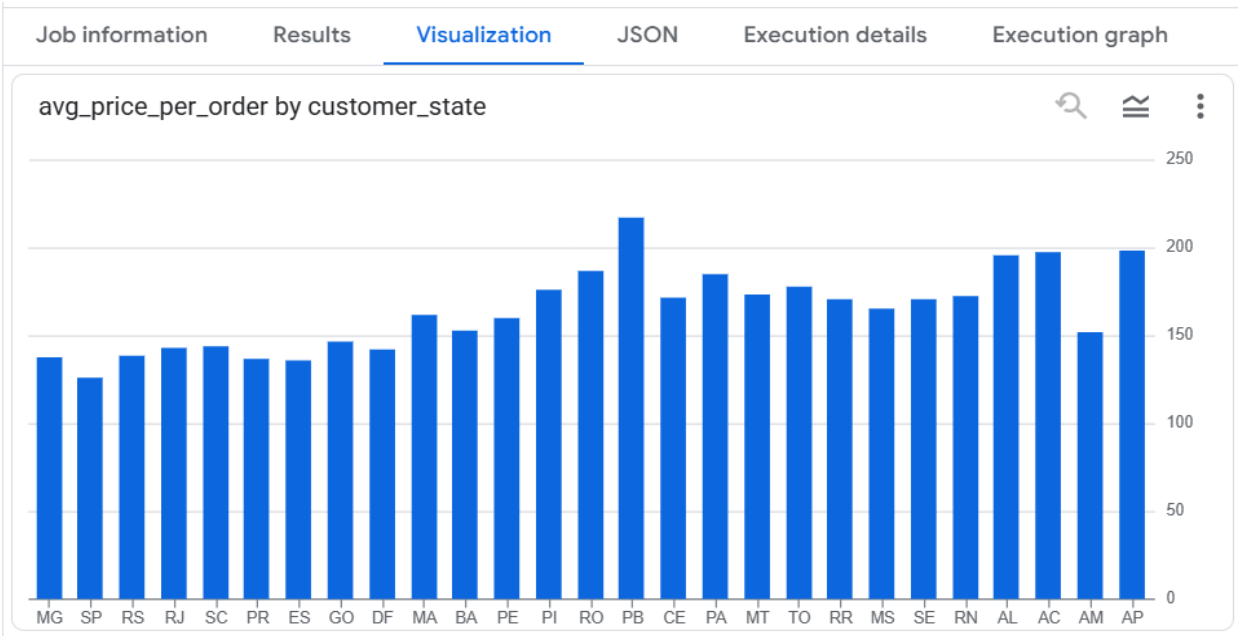
Row	customer_state	total_price	avg_price_per_order
1	MG	1585308.03	137.33
2	SP	5202955.05	125.75
3	RS	750304.02	138.13
4	RJ	1824092.67	142.93
5	SC	520553.34	144.12
6	PR	683083.76	136.67
7	ES	275037.31	135.82
8	GO	294591.95	146.78
9	DF	302603.94	142.4
10	MA	119648.22	161.69

Results per page: 50 1 – 27 of 27

Insights –

- This analysis provides a state-level view of revenue and customer purchasing behaviour by measuring both the total sales generated and the average value per order. States with higher total revenue represent strong markets that significantly contribute to overall business performance, highlighting regions where customer demand and order volume are strongest. Meanwhile, variations in average order value across states reveal differences in customer purchasing patterns - higher averages may suggest greater willingness to spend per transaction, while lower averages could indicate price sensitivity or smaller order sizes.





3. Calculate the total & average value of order freight for each state.

Query –

```
SELECT
        c.customer_state,
        ROUND(SUM(freight_value), 2) AS total_freight,
        ROUND(SUM(freight_value) / COUNT (DISTINCT o.order_id),  2) AS
        avg_freight_per_order
FROM
        `target.orders` AS o
INNER JOIN
        `target.order_items` AS i
ON
```

```
        o.order_id = i.order_id
INNER JOIN
        `target.customers` AS c
ON
        o.customer_id = c.customer_id
GROUP BY
        c.customer_state;
```

Output –

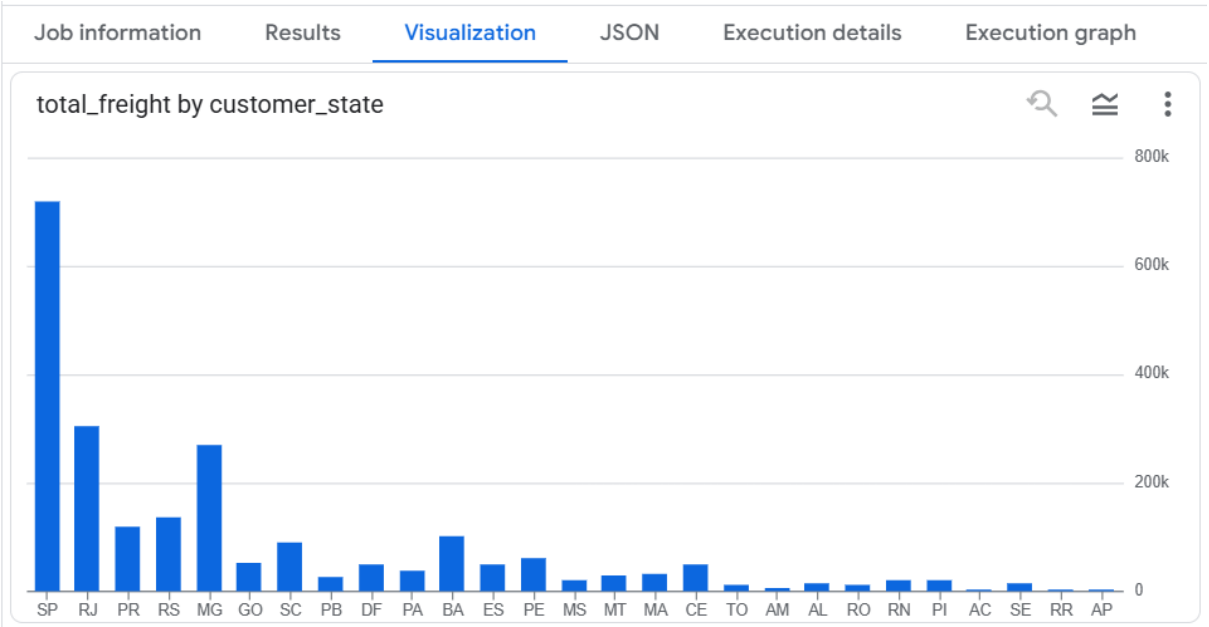
Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	customer_state	total_freight	avg_freight_per_order
1	SP	718723.07	17.37
2	RJ	305589.31	23.95
3	PR	117851.68	23.58
4	RS	135522.74	24.95
5	MG	270853.46	23.46
6	GO	53114.98	26.46
7	SC	89660.26	24.82
8	PB	25719.73	48.35
9	DF	50625.5	23.82
10	PA	38699.3	39.9

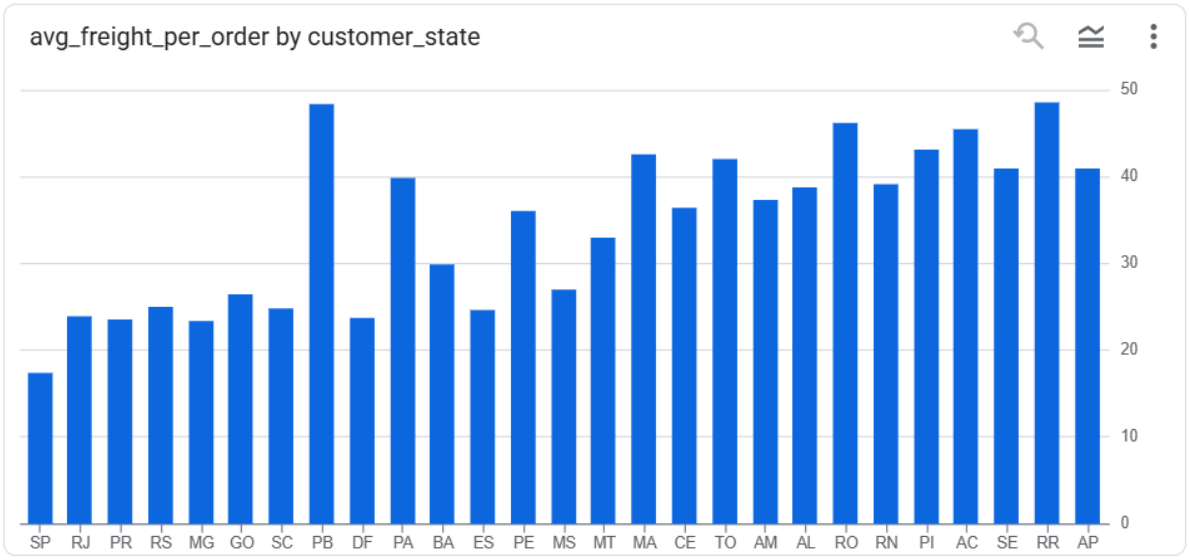
Results per page: 50 1 – 27 of 27

Insights –

- This analysis provides visibility into the logistics and shipping cost distribution across states by calculating both the total freight expenditure and the average freight cost per order. States with higher total freight values represent regions with larger order volumes or higher shipping costs, while variations in average freight per order highlight the efficiency (or inefficiency) of the company's logistics network in different regions.



Job information | Results | Visualization | JSON | Execution details | Execution graph



E. Analysis based on sales, freight and delivery time:

1. Find the no. of days taken to deliver each order from the order's purchase date as delivery time. Also, calculate the difference (in days) between the estimated & actual delivery date of an order. Do this in a single query.

Query –

```
SELECT
        order_id,
        ABS(TIMESTAMP_DIFF(order_delivered_customer_date,
        order_purchase_timestamp, DAY)) AS days_to_deliver,
        ABS(TIMESTAMP_DIFF(order_estimated_delivery_date,
        order_delivered_customer_date, DAY)) AS diff_estimated_actual_delivery
FROM
        `target.orders`
WHERE
        order_status = 'delivered';
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	order_id	days_to_deliver	diff_estimated_actual_delivery
1	bfbd0f9bdef84302105ad712db...	54	36
2	98974b076b01553d49ee64679...	43	6
3	c4b41c36dd589e901f6879f25a...	36	14
4	d2292ff2201e74c5db154d1b7a...	29	20
5	95e01270fcbae986342340010...	30	19
6	ed8c7b1b3eb256c70ce0c7423...	44	5
7	5cc475c7c03290048eb2e742c...	68	18
8	6b3ee7697a02619a0ace2b3f0a...	47	2
9	3b2ca3293a7ce539ea2379d70...	43	7
10	b2f92b2f7047cd8b35580d629d...	43	7

Results per page: 50 | 1 – 50 of 96478

Insights –

- Based on the query analysis, the "days_to_deliver" column reflects the number of days required to deliver an order to the customer from the purchase date. The "diff_estimated_actual_delivery" column shows the variance between the estimated delivery date and the actual delivery date.
- Analyzing this data enables us to identify orders that experienced longer delivery times and compare them against the average delivery timeline to evaluate delivery efficiency. A negative value in the " diff_estimated_actual_delivery " column signifies a delayed delivery, whereas a positive value indicates an early delivery.
- Further investigation into the causes of these variations can help optimize delivery timelines and minimize the gap between estimated and actual delivery dates, ultimately enhancing logistics and delivery operations.

2. Find out the top 5 states with the highest & lowest average freight value.

Query –

States with highest average freight value

```
SELECT
```

```
        c.customer_state,
        ROUND(AVG(oi.freight_value), 2) AS avg_freight_value
FROM
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
INNER JOIN
        `target.order_items` AS oi
ON
        o.order_id = oi.order_id
GROUP BY
        1
ORDER BY
        2 DESC
LIMIT
        5;
```

States with highest average freight value

```
SELECT
        c.customer_state,
        ROUND(AVG(oi.freight_value), 2) AS avg_freight_value
FROM
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
INNER JOIN
        `target.order_items` AS oi
ON
        o.order_id = oi.order_id
GROUP BY
        1
ORDER BY
        2
LIMIT
        5;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	customer_state	avg_freight_value
1	RR	42.98
2	PB	42.72
3	RO	41.07
4	AC	40.07
5	PI	39.15

Results per page: 50 1 – 5 of 5

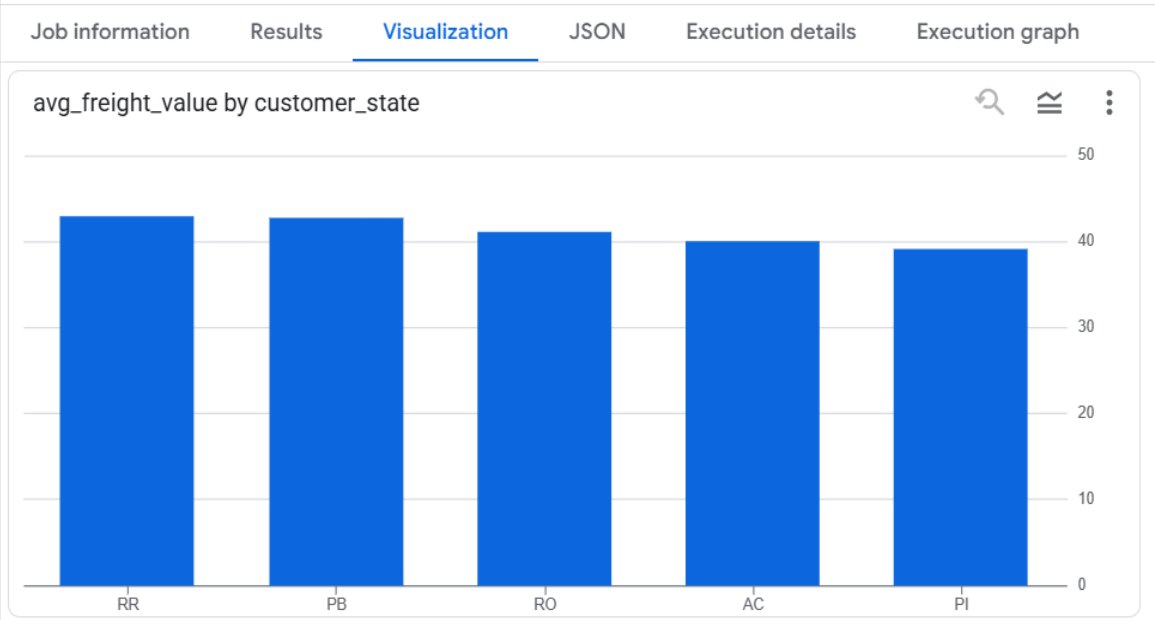
Job information | Results | Visualization | JSON | Execution details | Execution graph

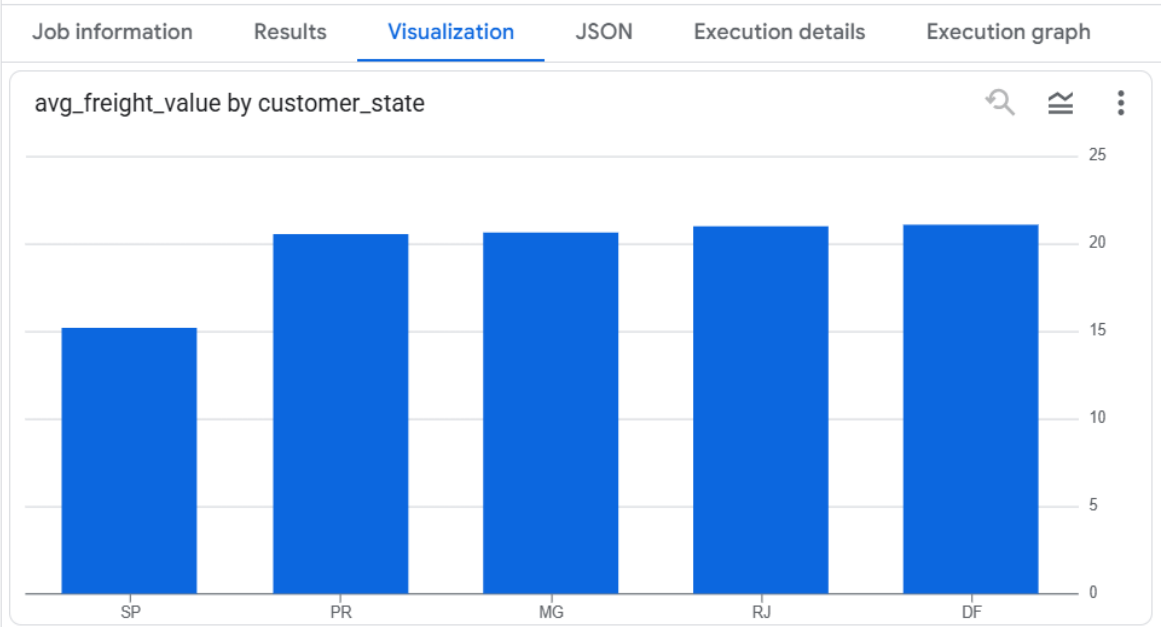
Row	customer_state	avg_freight_value
1	SP	15.15
2	PR	20.53
3	MG	20.63
4	RJ	20.96
5	DF	21.04

Results per page: 50 1 – 5 of 5

Insights –

- Certain states show higher average freight costs, reflecting unique characteristics or logistical challenges that drive up expenses. In contrast, some states record lower average freight costs, likely due to stronger logistics infrastructure or other cost-reducing factors. Overall, there is a clear and significant variation in average freight costs across states.
- These insights provide businesses with valuable guidance for optimizing shipping and logistics operations. They support informed decision-making in areas such as pricing strategies, supply chain efficiency, and resource allocation.
- States with the lowest average freight costs such as SP, DF, RJ, MG and PR offer opportunities to further reduce costs through better rate negotiations, shipment consolidation, and route optimization.
- Conversely, states with the highest average freight costs such as PI, AC, RO, RR and PB present opportunities to address cost drivers by collaborating with local logistics providers, refining supply chain practices, and identifying efficiency improvements.





3. Find out the top 5 states with the highest & lowest average delivery time.

Query –

States with highest delivery time

```
SELECT
        c.customer_state,
        ROUND(AVG(TIMESTAMP_DIFF(order_delivered_customer_date,
        order_purchase_timestamp, DAY)), 2) AS delivery_time
FROM
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
INNER JOIN
        `target.order_items` AS oi
ON
        o.order_id = oi.order_id
GROUP BY
        1
ORDER BY
        2 DESC
LIMIT
        5;
```

States with highest delivery time

```
SELECT
        c.customer_state,
        ROUND(AVG(TIMESTAMP_DIFF(order_delivered_customer_date,
        order_purchase_timestamp, DAY)), 2) AS delivery_time
FROM
```

```
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
INNER JOIN
        `target.order_items` AS oi
ON
        o.order_id = oi.order_id
GROUP BY
        1
ORDER BY
        2
LIMIT
        5;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	customer_state	delivery_time
1	RR	27.83
2	AP	27.75
3	AM	25.96
4	AL	23.99
5	PA	23.3

Results per page: 50 | 1 – 5 of 5

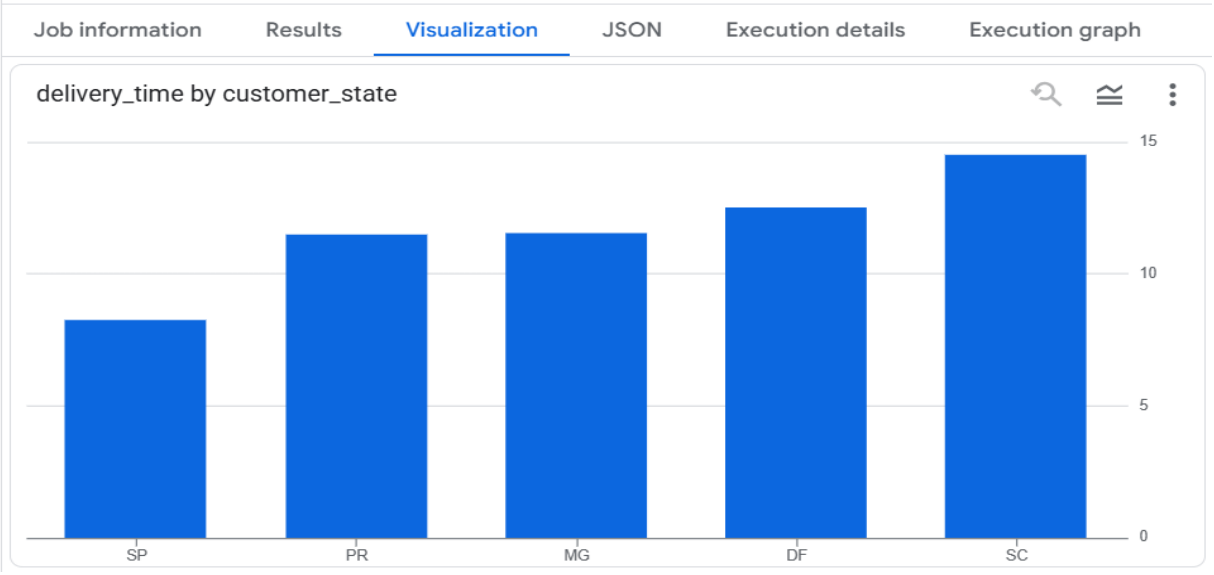
Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	customer_state	delivery_time
1	SP	8.26
2	PR	11.48
3	MG	11.52
4	DF	12.5
5	SC	14.52

Results per page: 50 | 1 – 5 of 5

Insights –

- From the analysis, states with the fastest average delivery times such as AL, PA, AM, AP and RR demonstrate efficient logistics performance. In contrast, states with slower deliveries, including SC, MG, DF, PR and SP, require closer attention.
- It is crucial to identify and address the factors contributing to extended delivery durations. Businesses should assess their logistics networks, transportation routes, and last-mile delivery processes to improve efficiency. Partnering with local logistics providers or forming strategic collaborations can enhance delivery performance in these regions. Additionally, adopting technology solutions such as real-time tracking systems and advanced delivery scheduling tools can streamline last-mile operations.
- Maintaining open communication and strong collaborative relationships with shipping carriers and logistics partners is essential for promptly identifying and resolving issues. By optimizing last-mile delivery processes and nurturing efficient partnerships, businesses can reduce delivery times, enhance customer experience, and improve overall satisfaction.



4. Find out the top 5 states where the order delivery is really fast as compared to the estimated date of delivery.

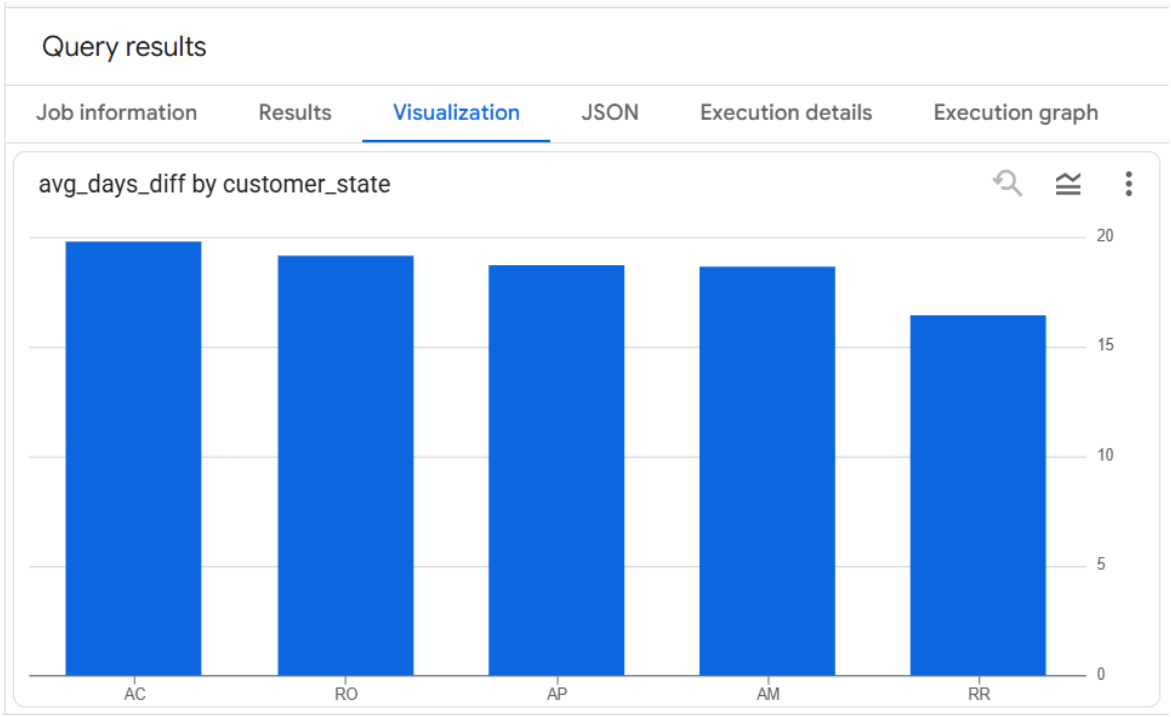
Query –

```
SELECT
        c.customer_state,
        ROUND(AVG(DATE_DIFF(o.order_estimated_delivery_date,
        o.order_delivered_customer_date, DAY)), 2) AS avg_days_diff
FROM
        `target.customers` AS c
INNER JOIN
        `target.orders` AS o
ON
        c.customer_id = o.customer_id
WHERE
        o.order_status = 'delivered'
GROUP BY
        c.customer_state
ORDER BY
        avg_days_diff DESC
LIMIT
        5;
```

Output –

Insights –

- From the query analysis, the top five states AM, AP, RR, AC and RO show faster-than-estimated order deliveries, with an average lead time of 16 to 19 days earlier than projected. This reflects efficient delivery systems, robust transportation networks, optimized routing strategies, and strong coordination with shipping partners.
- Reliable and timely deliveries significantly enhance customer satisfaction. Businesses can leverage these insights to showcase their logistics efficiency and strengthen their competitive advantage. Additionally, comparing these high-performing states with regions that experience longer delivery times can help identify opportunities for improving overall delivery performance.



F. Analysis based on the payments:

1. Find the month-on-month no. of orders placed using different payment types.

Query –

```
SELECT
        EXTRACT(MONTH FROM o.order_purchase_timestamp) AS month,
        p.payment_type,
        COUNT(o.order_id) AS number_of_orders
FROM
        `target.payments` AS p
INNER JOIN
        `target.orders` AS o
ON
        p.order_id = o.order_id
GROUP BY
        1, 2
ORDER BY
        1;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	month	payment_type	number_of_orders
1	1	voucher	477
2	1	credit_card	6103
3	1	UPI	1715
4	1	debit_card	118
5	2	voucher	424
6	2	credit_card	6609
7	2	UPI	1723
8	2	debit_card	82
9	3	voucher	591
10	3	credit_card	7707

Results per page: 50 1 – 50 of 50

Insights –

- Credit cards have become the preferred mode of payment due to their convenience, security, and wide acceptance. To enhance the customer experience, businesses should ensure smooth credit card processing and build strong relationships with payment service providers. Studying payment trends enables companies to improve the checkout process, offer diverse payment choices, and boost overall customer satisfaction.

2. Find the no. of orders placed on the basis of the payment instalments that have been paid.

Query –

```
SELECT
        payment_installments,
        COUNT(order_id) AS number_of_orders
FROM
        `target.payments`
```

```
WHERE
        payment_installments BETWEEN 1 AND 24
GROUP BY
        1;
```

Output –

Job information | Results | Visualization | JSON | Execution details | Execution graph

Row	payment_installments	number_of_orders
1	1	49060
2	2	12389
3	3	10443
4	4	7088
5	5	5234
6	6	3916
7	7	1623
8	8	4253
9	9	644
10	10	5315

Results per page: 50 1 – 23 of 23

Insights –

- The query results display the number of unique orders for each payment installment option, reflecting how customers choose different installment plans. The most common choice is a single installment, meaning at least one payment has been completed. The data also reveals a notable preference for installment plans in the 9–10 range.
- To capitalize on this trend and drive sales, businesses should offer customers flexible payment and installment options. Allowing payments to be split into multiple installments not only improves affordability but also aligns with customer preferences, enhances satisfaction, and can help expand the customer base. Integrating installment plans into payment options is therefore a powerful strategy to boost sales and improve overall customer experience.