

Zywa data analyst assingment

By

gourav verma

20118032

Monthly transactions

- WITH DateProcessed AS (SELECT DATE_FORMAT(STR_TO_DATE(transaction_timestamp, '%m/%d/%y %H:%i'), '%Y-%m') AS processed_month, transaction_amount FROM transactions WHERE transaction_timestamp IS NOT NULL AND transaction_amount IS NOT NULL), MonthlyTotals AS (SELECT processed_month, SUM(transaction_amount) AS monthly_transaction_sum FROM DateProcessed GROUP BY processed_month), CumulativeTotals AS (SELECT processed_month, monthly_transaction_sum, SUM(monthly_transaction_sum) OVER (ORDER BY processed_month) AS cumulative_amount FROM MonthlyTotals) SELECT processed_month AS month, cumulative_amount, monthly_transaction_sum FROM CumulativeTotals ORDER BY month;

Result Grid Filter Rows: Export: Wrap Cell Content:			
	month	cumulative_amount	monthly_transaction_sum
▶	2023-01	11923560704	11923560704

Most Popular Products/Services:

- WITH MerchantTransactions AS (SELECT merchant_name, COUNT(*) AS total_transactions
 - FROM transactions GROUP BY merchant_name
 -),
 - MerchantRankings AS (SELECT merchant_name, total_transactions,
 - DENSE_RANK() OVER (ORDER BY total_transactions DESC) AS rank_position FROM MerchantTransactions
 -)SELECT merchant_name, total_transactions AS transaction_count
 - FROM MerchantRankings
- WHERE rank_position <= 5;

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	merchant_name	transaction_count		
►	Tech Touch	509		
	Beauty Bliss	504		
	Home Harmony	503		
	Tech Trends	464		
	Hobby Haven	462		

Daily Revenue Trend:

- WITH DailyTransactions AS (SELECT
- DATE_FORMAT(STR_TO_DATE(transaction_timestamp, '%m/%d/%y %H:%i'), '%Y-%m-%d') AS transaction_day,
- transaction_amount FROM transactions WHERE transaction_timestamp IS NOT NULL AND transaction_amount IS NOT NULL
-)SELECT
- transaction_day AS day,
- SUM(transaction_amount) AS daily_revenue
- FROM
- DailyTransactions
- GROUP BY
- transaction_day
- ORDER BY
- transaction_day;

Result Grid			Filter Rows:	
	day	daily_revenue		
▶	2023-01-01	725017008		
	2023-01-02	724684587		
	2023-01-03	712722676		
	2023-01-04	714804361		
	2023-01-05	716760504		

Average Transaction Amount by Product Category:

- `SELECT merchant_type, AVG(transaction_amount) AS avg_transaction_amount FROM transactions GROUP BY merchant_type;`

Result Grid		Filter Rows:	Export:
merchant_type	avg_transaction_amount		
Business Services	473977.3752		
Sports & Fitness	504352.2688		
Eco-friendly Products	504914.6221		
Smart Home	499480.8445		
Luxury Products	483378.0883		

Transaction Funnel Analysis:

- `SELECT transaction_status, COUNT(*) AS transaction_count FROM transactions GROUP BY transaction_status ORDER BY transaction_status;`

	transaction_status	transaction_count
▶	0	4035
	1002	4056
	1006	4124
	1022	3894
	1829	3921

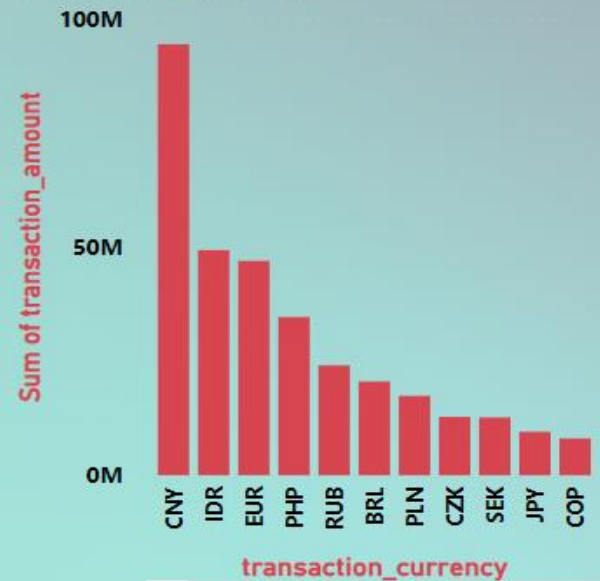
Monthly Retention Rate:

- WITH UserCohorts AS (SELECT user_id, MIN(DATE_FORMAT(STR_TO_DATE(transaction_timestamp, '%m/%d/%y %H:%i'), '%Y-%m')) AS cohort_month FROM transactions GROUP BY user_id) SELECT uc.cohort_month, COUNT(DISTINCT uc.user_id) AS cohort_size, COUNT(DISTINCT CASE WHEN DATEDIFF(STR_TO_DATE(uc.transaction_timestamp, '%m/%d/%y %H:%i'), MIN_ACTIVITY_DATE) <= 30 THEN uc.user_id END) AS retained_users, COUNT(DISTINCT CASE WHEN DATEDIFF(STR_TO_DATE(uc.transaction_timestamp, '%m/%d/%y %H:%i'), MIN_ACTIVITY_DATE) <= 30 THEN uc.user_id END) / COUNT(DISTINCT uc.user_id) AS retention_rate, GROUP_CONCAT(DISTINCT uc.user_id ORDER BY uc.user_id) AS user_ids FROM (SELECT t.user_id, t.transaction_timestamp, DATE_FORMAT(STR_TO_DATE(t.transaction_timestamp, '%m/%d/%y %H:%i'), '%Y-%m') AS cohort_month, MIN(STR_TO_DATE(t.transaction_timestamp, '%m/%d/%y %H:%i')) AS MIN_ACTIVITY_DATE FROM transactions t INNER JOIN UserCohorts uc ON t.user_id = uc.user_id GROUP BY t.user_id, t.transaction_timestamp, cohort_month) AS uc GROUP BY uc.cohort_month ORDER BY uc.cohort_month;

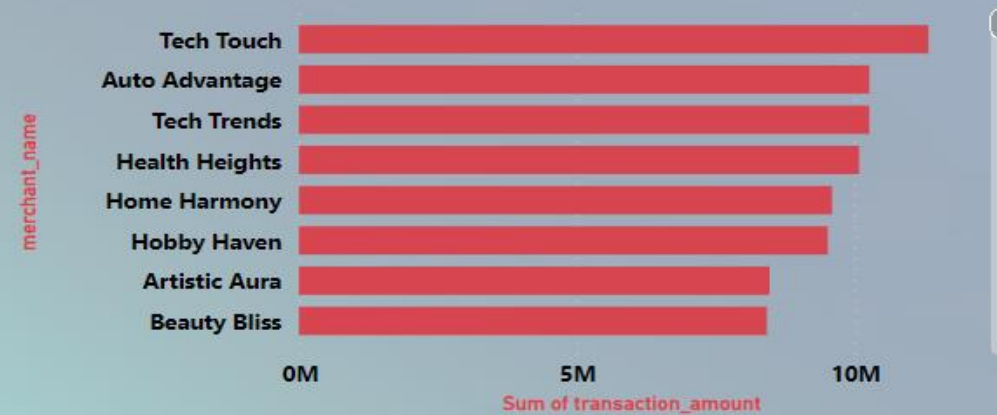
cohort_month	cohort_size	retained_users	retention_rate	user_ids
2023-01	22743	22743	1.0000	0-0002-aaee-1674-daed,0-0003-ebbb-4215-dc...

analysis and feedback

Sum of transaction_amount by transaction_currency



Sum of transaction_amount by merchant_name



Sum of transaction_amount by merchant_name

