

KIMIA FARMA BUSINESS PERFORMANCE ANALYTICS

2020 - 2023

Kimia Farma - Big Data Analytics

Presented By **Tasya Syabila**

ABOUT COMPANY

Since 2020, Kimia Farma has been part of the BUMN Pharmaceutical Holding managed by PT Bio Farma (Persero). Kimia Farma remains committed to providing integrated healthcare services and contributing to the improvement of public health in Indonesia.



PROJECT PORTOFOLIO

As a Big Data Analytics Intern at Kimia Farma, I am responsible for analyzing and evaluating the company's business performance from 2020 to 2023. My main project involves **processing and analyzing data using aggregation techniques** from several provided tables. The results are then **presented in a dashboard**.

Goals for Creating an Analytics Table:

- transaction_id : kode id transaksi,
- date : tanggal transaksi dilakukan,
- branch_id : kode id cabang Kimia Farma,
- branch_name : nama cabang Kimia Farma,
- kota : kota cabang Kimia Farma,
- provinsi : provinsi cabang Kimia Farma,
- rating_cabang : penilaian konsumen terhadap cabang Kimia Farma
- customer_name : Nama customer yang melakukan transaksi,
- product_id : kode product obat,
- product_name : nama obat,
- actual_price : harga obat,
- discount_percentage : Persentase diskon yang diberikan pada obat,
- persentase_gross_laba : Persentase laba yang seharusnya diterima dari obat dengan ketentuan berikut:
 - Harga <= Rp 50.000 -> laba 10%
 - Harga > Rp 50.000 - 100.000 -> laba 15%
 - Harga > Rp 100.000 - 300.000 -> laba 20%
 - Harga > Rp 300.000 - 500.000 -> laba 25%
 - Harga > Rp 500.000 -> laba 30%,
- nett_sales : harga setelah diskon,
- nett_profit : keuntungan yang diperoleh Kimia Farma,
- rating_transaksi : penilaian konsumen terhadap transaksi yang dilakukan.

Goals for Creating Dashboard Performance Analytics:

- Judul Dashboard
- Summary Dashboard
- Filter Control
- Snapshot Data
- Perbandingan Pendapatan Kimia Farma dari tahun ke tahun
- Top 10 Total transaksi cabang provinsi
- Top 10 Nett sales cabang provinsi
- Top 5 Cabang Dengan Rating Tertinggi, namun Rating Transaksi Terendah
- Indonesia's Geo Map Untuk Total Profit Masing-masing Provinsi
- Dan analisis lainnya yang dapat anda eksplorasi.

Datasets:

- kf_final_transaction.csv ([link](#))
- kf_inventory.csv ([link](#))
- kf_kantor_cabang.csv ([link](#))
- kf_product.csv ([link](#))

Tools:



Google Sheets



Google Cloud Platform



Google
BigQuery



Github

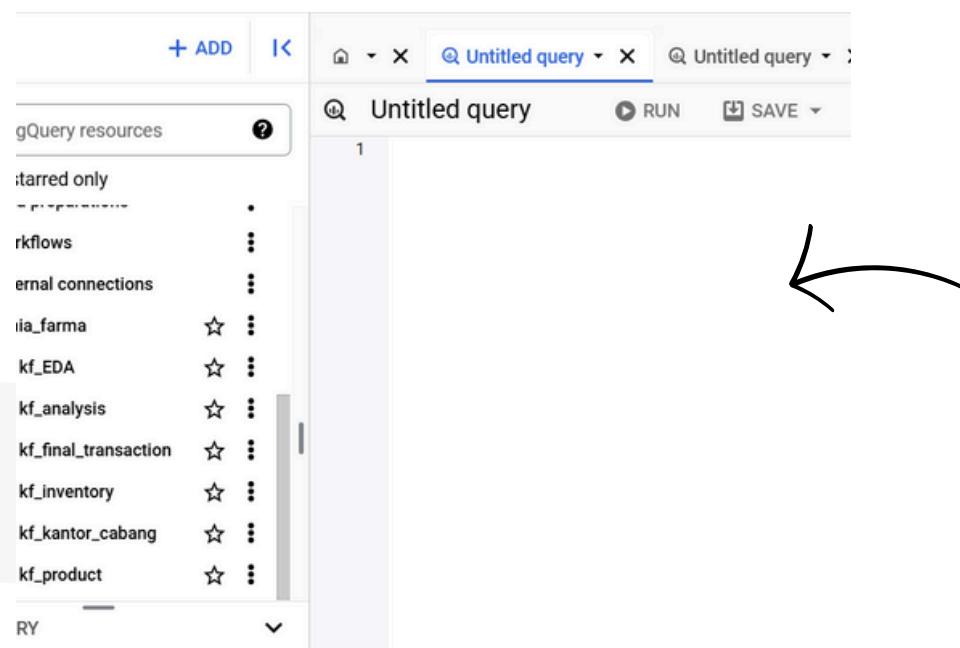
IMPORTING DATASET TO BIGQUERY



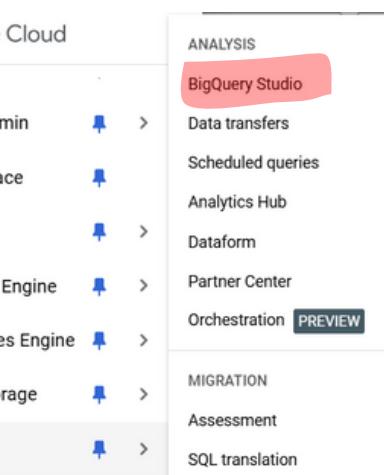
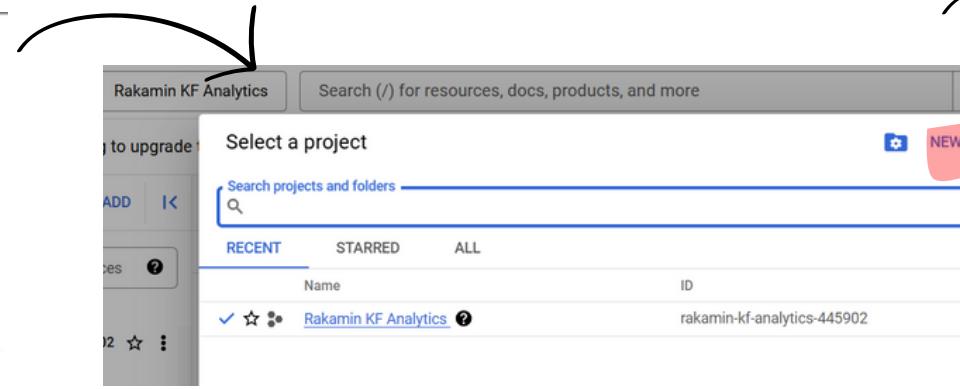
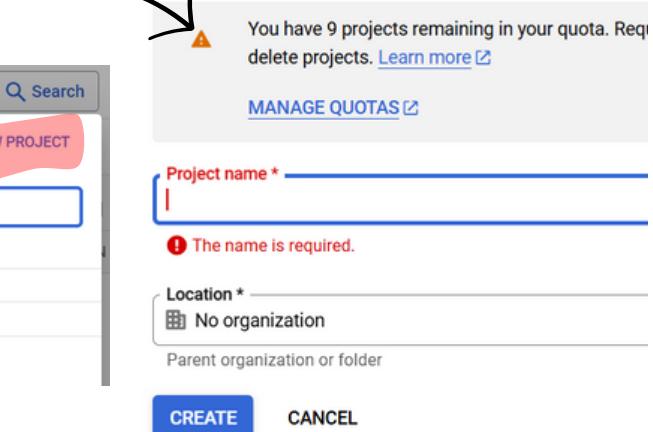
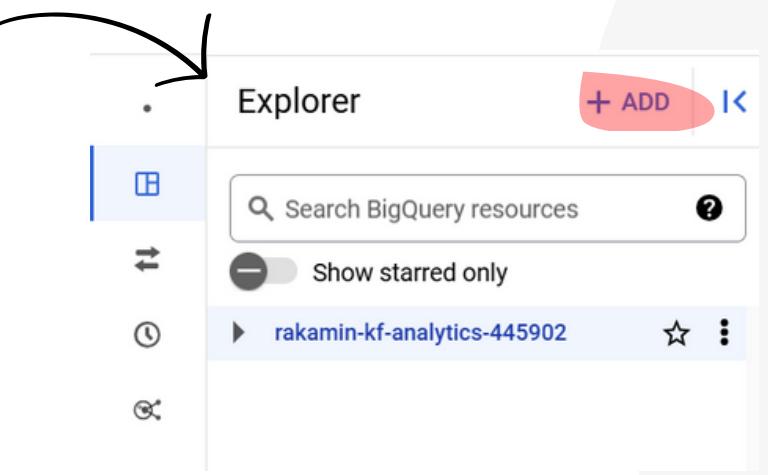
**Google
BigQuery**

1. Go to BigQuery

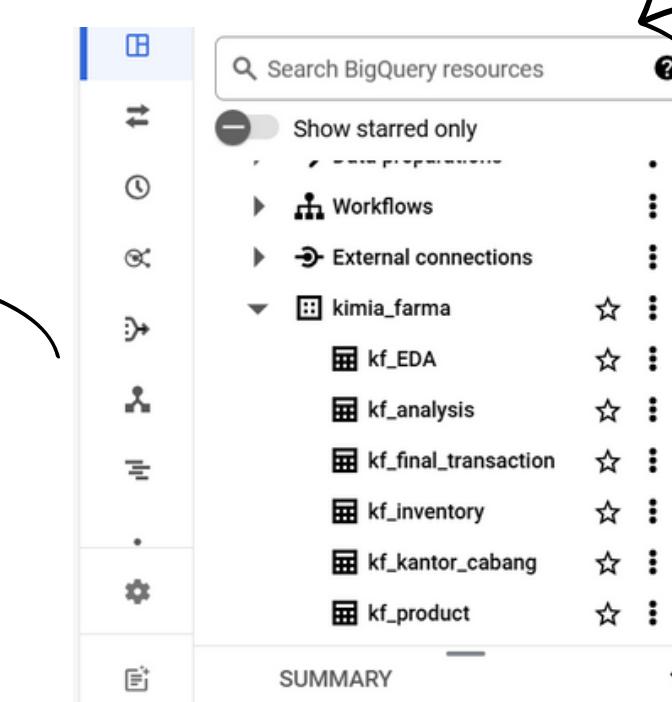
2. On the menu navigation, click BigQuery - BigQuery Studio



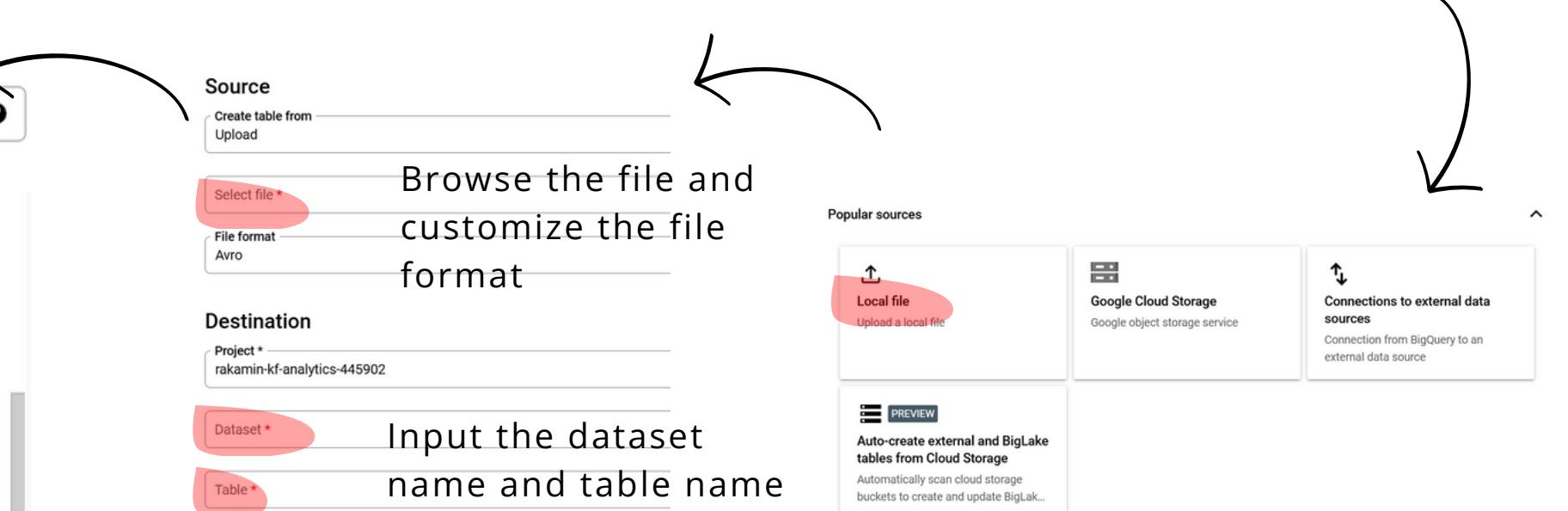
9. input a query to analyze the data, done

5. Click +ADD on the explorer menu



8. The imported tables will be displayed here



7. input the information to create a table.

4. Input your project name, then create

Browse the file and customize the file format

Input the dataset name and table name

6. Add the file

TABEL ANALYTICS

New Table Preview:  kf_analysis

Query results

JOB INFORMATION		RESULTS		CHART		JSON		EXECUTION DETAILS		EXECUTION GRAPH									
Row	transaction_id	date	branch_id	branch_name	kota	provinsi	rating_cabang	customer_name	product_id	product_name	actual_price	discount_percent	percentase_gross	nett_sales	nett_profit	rating_tranche			
1	TRX5103706	2021-08-25	93529	Kimia Farma - Klinik & Apotek	Yogyakarta	DI Yogyakarta	4.3	Derrick Wright III	KF116	Psycholeptics drugs, Hypnotic...	251700	0.1	20	251448.3	50289.66	3.0			
2	TRX5388139	2020-12-29	24832	Kimia Farma - Klinik-Apotek-La...	Pekanbaru	Riau	4.2	Elizabeth Ramos	KF116	Psycholeptics drugs, Hypnotic...	251700	0.12	20	251397.96	50279.592000...	3.0			
3	TRX7251897	2020-02-03	20505	Kimia Farma - Apotek	Cilacap	Jawa Tengah	4.5	Meghan Warner	KF116	Psycholeptics drugs, Hypnotic...	251700	0.09	20	251473.47	50294.694	3.0			
4	TRX4943675	2022-09-09	17678	Kimia Farma - Klinik & Apotek	Subang	Jawa Barat	4.8	Steven Roberts	KF116	Psycholeptics drugs, Hypnotic...	251700	0.1	20	251448.3	50289.66	3.0			
5	TRX3469820	2020-06-20	28315	Kimia Farma - Klinik-Apotek-La...	Sukabumi	Jawa Barat	3.9	Linda Bruce DDS	KF116	Psycholeptics drugs, Hypnotic...	251700	0.07	20	251523.81	50304.762	3.0			
6	TRX1213133	2021-09-17	22280	Kimia Farma - Apotek	Batam	Kepulauan Riau	4.5	Cory Castro	KF116	Psycholeptics drugs, Hypnotic...	251700	0.11	20	251423.13	50284.626000...	3.0			
7	TRX2020131	2020-12-16	40028	Kimia Farma - Klinik-Apotek-La...	Balikpapan	Kalimantan Timur	4.0	Stephanie Boone	KF116	Psycholeptics drugs, Hypnotic...	251700	0.03	20	251624.490000...	50324.898000...	3.0			
8	TRX5015870	2022-08-17	41343	Kimia Farma - Apotek	Semarang	Jawa Tengah	4.0	Mary Hughes	KF116	Psycholeptics drugs, Hypnotic...	251700	0.03	20	251624.490000...	50324.898000...	3.0			
9	TRX7064077	2021-06-21	86546	Kimia Farma - Klinik & Apotek	Pematangsiantar	Sumatera Utara	4.5	Tamara Bruce	KF116	Psycholeptics drugs, Hypnotic...	251700	0.04	20	251599.32	50319.864	3.0			
10	TRX5979742	2020-12-31	18235	Kimia Farma - Klinik & Apotek	Pekanbaru	Riau	4.8	Aaron Reed	KF116	Psycholeptics drugs, Hypnotic...	251700	0.11	20	251423.13	50284.626000...	3.0			
11	TRX2209141	2021-03-20	59571	Kimia Farma - Klinik-Apotek-La...	Tarakan	Kalimantan Utara	4.9	Nancy Kennedy	KF116	Psycholeptics drugs, Hypnotic...	251700	0.1	20	251448.3	50289.66	3.0			
12	TRX5385534	2023-03-17	69280	Kimia Farma - Klinik-Apotek-La...	Purwakarta	Jawa Barat	4.0	Paul Morales	KF116	Psycholeptics drugs, Hypnotic...	251700	0.11	20	251423.13	50284.626000...	3.0			
13	TRX9155202	2020-04-11	29626	Kimia Farma - Klinik & Apotek	Bitung	Sulawesi Utara	4.6	Stephen Jones	KF116	Psycholeptics drugs, Hypnotic...	251700	0.02	20	251649.66	50329.932	3.0			
14	TRX1702542	2022-09-15	48590	Kimia Farma - Klinik & Apotek	Garut	Jawa Barat	4.9	Zachary White	KF116	Psycholeptics drugs, Hypnotic...	251700	0.12	20	251397.96	50279.592000...	3.0			
15	TRX8205780	2022-10-19	37915	Kimia Farma - Klinik & Apotek	Cianjur	Jawa Barat	3.9	Jennifer Larsen	KF116	Psycholeptics drugs, Hypnotic...	251700	0.13	20	251372.79	50274.558000...	3.0			
16	TRX3208671	2023-12-20	66935	Kimia Farma - Klinik & Apotek	Madiun	Jawa Timur	4.3	Michael Mccoy	KF116	Psycholeptics drugs, Hypnotic...	251700	0.05	20	251574.150000...	50314.830000...	3.0			
17	TRX2085415	2022-02-11	17678	Kimia Farma - Klinik & Apotek	Subang	Jawa Barat	4.8	Anthony Rice	KF116	Psycholeptics drugs, Hypnotic...	251700	0.07	20	251523.81	50304.762	3.0			
18	TRX1384968	2020-07-01	33691	Kimia Farma - Klinik-Apotek-La...	Palu	Sulawesi Tengah	4.9	Marissa Patterson	KF116	Psycholeptics drugs, Hypnotic...	251700	0.03	20	251624.490000...	50324.898000...	3.0			
19	TRX7358419	2020-01-19	19224	Kimia Farma - Apotek	Purwakarta	Jawa Barat	4.4	James Sanchez	KF116	Psycholeptics drugs, Hypnotic...	251700	0.15	20	251322.45	50264.490000...	3.0			
20	TRX5628390	2021-01-15	58219	Kimia Farma - Apotek	Magelang	Jawa Tengah	4.3	Jennifer Oliver	KF116	Psycholeptics drugs, Hypnotic...	251700	0.13	20	251372.79	50274.558000...	3.0			
21	TRX6463209	2021-03-13	96558	Kimia Farma - Apotek	Denpasar	Bali	4.7	Lisa Rosales	KF116	Psycholeptics drugs, Hypnotic...	251700	0.08	20	251498.639999...	50299.728	3.0			
22	TRX1588524	2023-03-06	20554	Kimia Farma - Klinik-Apotek-La...	Cirebon	Jawa Barat	4.2	Erin Villanueva	KF116	Psycholeptics drugs, Hypnotic...	251700	0.06	20	251548.979999...	50309.796	3.0			
23	TRX6976260	2022-06-23	73596	Kimia Farma - Klinik-Apotek-La...	Subang	Jawa Barat	4.8	Lori Parks	KF116	Psycholeptics drugs, Hypnotic...	251700	0.09	20	251473.47	50294.694	3.0			
24	TRX7535559	2021-11-20	18250	Kimia Farma - Klinik-Apotek-La...	Jakarta	DKI Jakarta	4.4	Monique Griffith	KF116	Psycholeptics drugs, Hypnotic...	251700	0.08	20	251498.639999...	50299.728	3.0			
25	TRX4712362	2023-02-19	60936	Kimia Farma - Apotek	Subang	Jawa Barat	4.8	Mr. Timothy Turner	KF116	Psycholeptics drugs, Hypnotic...	251700	0.15	20	251322.45	50264.490000...	3.0			
26	TRX5721137	2020-08-09	54078	Kimia Farma - Apotek	Purwokerto	Jawa Tengah	4.7	Joshua Santiago	KF116	Psycholeptics drugs, Hypnotic...	251700	0.12	20	251397.96	50279.592000...	3.0			
27	TRX1101446	2022-07-02	28211	Kimia Farma - Klinik-Apotek-La...	Medan	Sumatera Utara	4.6	Richard Suarez	KF116	Psycholeptics drugs, Hypnotic...	251700	0.14	20	251347.620000	50269.524000	3.0			

BIGQUERY SYNTAX

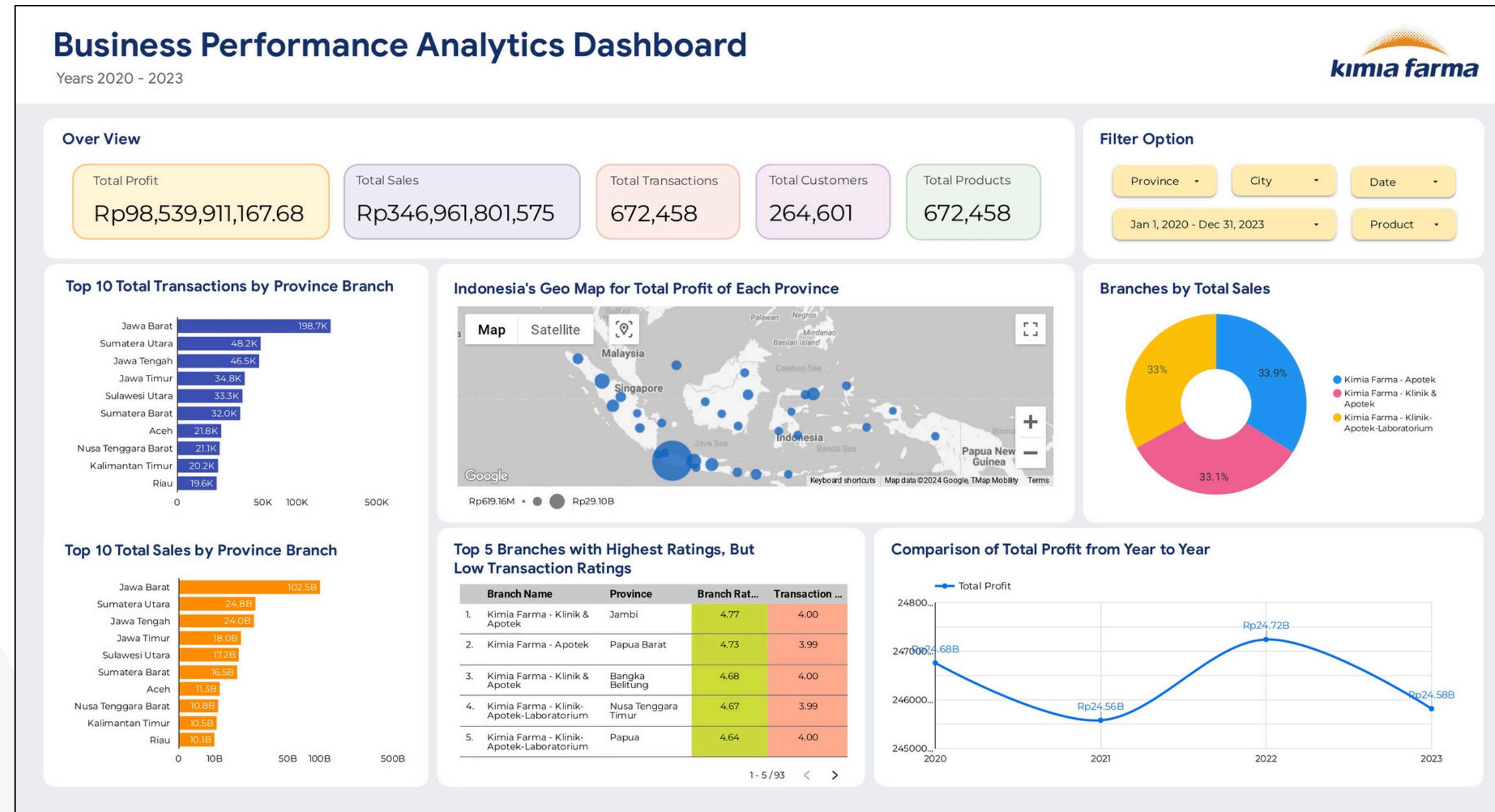
This SQL syntax is used to create a new table named **kf_analysis** in the **kimia_farma** dataset. The new table is populated with data selected from the existing tables: **kf_final_transactions**, **kf_inventory**, **kf_branch_offices**, and **kf_product**.

Untitled query RUN SAVE DOWNLOAD SHARE SCHEDULE OPEN IN MORE

```
1 CREATE TABLE `kimia_farma.kf_analysis` AS
2 SELECT ft.transaction_id, ft.date, kc.branch_id, kc.branch_name, kc.kota, kc.provinsi, kc.rating as rating_cabang,
3     ft.customer_name, p.product_id, p.product_name, p.price as actual_price, ft.discount_percentage,
4     CASE
5         WHEN p.price <= 50000 THEN 10
6         WHEN p.price > 50000 AND p.price <= 100000 THEN 15
7         WHEN p.price > 100000 AND p.price <= 300000 THEN 20
8         WHEN p.price > 300000 AND p.price <= 500000 THEN 25
9         ELSE 30
10    END AS persentase_gross_laba,
11    p.price * (1 - (ft.discount_percentage / 100)) AS nett_sales,
12    (p.price * (1 - (ft.discount_percentage / 100))) *
13    (CASE
14        WHEN p.price <= 50000 THEN 0.1
15        WHEN p.price > 50000 AND p.price <= 100000 THEN 0.15
16        WHEN p.price > 100000 AND p.price <= 300000 THEN 0.2
17        WHEN p.price > 300000 AND p.price <= 500000 THEN 0.25
18        ELSE 0.3
19    END) AS nett_profit,
20    ft.rating as rating_transaksi
21 FROM `kimia_farma.kf_final_transaction` AS ft
22 JOIN `kimia_farma.kf_kantor_cabang` AS kc ON ft.branch_id = kc.branch_id
23 JOIN `kimia_farma.kf_product` AS p ON ft.product_id = p.product_id;
```

DASHBOARD PERFORMANCE ANALYTICS

This dashboard was created with Looker Studio ([here](#))



THANK YOU



[Click here](#) to visit GitHub Repository.