

Kimia Farma Performance Analytics Business Year 2021 - 2023

Kimia Farma - Big Data Analytics

Presented by
Atha Ezrafi

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Highly motivated Gunadarma University graduate with a degree in Computer Systems.

With a strong tech background, I have developed my skills through various projects while working as a lab assistant, coupled with hands-on robotics experience, has finely tuned my problem-solving skills. Additionally, I have involved in various projects to develop lab. As a Computer Enthusiast, I am eager to apply my analytical skills and contribute to diverse projects, bringing a unique blend of technical expertise and adaptability to this company.



Pekanbaru, Riau



Athaezrafi20@gmail.com



<https://www.linkedin.com/in/athaezrafi/>

Courses and Certification

Data Analytics Mini Course by Revou| [Click to Review](#)

***notes: just a sample page**

About Company

Kimia Farma adalah perusahaan industri farmasi pertama di Indonesia yang didirikan oleh Pemerintah Hindia

Belanda tahun 1817. Nama perusahaan ini pada awalnya adalah NV Chemicalien Handle Rathkamp & Co.

Berdasarkan kebijaksanaan nasionalisasi atas eks perusahaan Belanda di masa awal kemerdekaan, pada tahun

1958, Pemerintah Republik Indonesia melakukan peleburan sejumlah perusahaan farmasi menjadi PNF (Perusahaan

Negara Farmasi) Bhinneka Kimia Farma. Kemudian pada tanggal 16 Agustus 1971, bentuk badan hukum PNF diubah

menjadi Perseroan Terbatas, sehingga nama perusahaan berubah menjadi PT Kimia Farma (Persero).

Visi

Menjadi perusahaan Healthcare pilihan utama yang terintegrasi dan menghasilkan nilai yang berkesinambungan.

Misi

1. Melakukan aktivitas usaha di bidang-bidang industri kimia dan farmasi, perdagangan dan jaringan distribusi, ritel farmasi dan layanan kesehatan serta optimalisasi aset.

2. Mengelola perusahaan secara Good Corporate Governance dan operational excellence didukung oleh Sumber Daya Manusia (SDM) profesional.

3. Memberikan nilai tambah dan manfaat bagi seluruh stakeholder



Project Portfolio

Sebagai seorang Big Data Analytics Intern di Kimia Farma, tugas saya akan mencakup serangkaian tantangan yang memerlukan pemahaman mendalam tentang data dan kemampuan analisis. Salah satu proyek utama saya adalah mengevaluasi kinerja bisnis Kimia Farma dari tahun 2020 hingga 2023. Berikut ini adalah task yang harus saya lakukan.

Challenge

1. Membuat tabel Analisa dari dataset yang disediakan yaitu `kf_final_transaction.csv`, `kf_inventory.csv`, `kf_kantor_cabang.csv`, dan `kf_product.csv`.

2. Membuat visualisas/dashboard Performance Analytics Kimia Farma di Tahun 2020 - 2023, saya menggunakan Looker Studio dan stakeholder ingin mengetahui tentang:

- Perbandingan Pendapatan Kimia Farma dari tahun ke tahun
- Mengetahui Top 10 Total transaksi cabang provinsi
- Mengetahui Top 10 Nett sales cabang provinsi
- Mengetahui Top 5 Cabang dengan rating tertinggi, namun rating transaksi terendah
- Melihat Total Profit Masing-masing Provinsi di Indonesia.

Project explanation video here!

Linkvideo :
<https://drive.google.com/drive/folders/10ZcwsGHGpVmAQN1MYjkgrJ8EoY5XDZe?usp=sharing>

Github : <https://github.com/Ezrafi/PBI-Kimiafarma>

1. Importing Dataset to BigQuery

kf_finaltransaction

| JOB INFORMATION | | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH | | |
|-----------------|----------------|------------|-----------|--------------------|-------------------|-----------------|---------------------|-----|
| Row | transaction_id | date | branch_id | customer_name | product_id | price | discount_percentage | rat |
| 1 | TRX5103706 | 2021-08-25 | 93529 | Derrick Wright III | KF116 | 251700 | 0.1 | |
| 2 | TRX5388139 | 2020-12-29 | 24832 | Elizabeth Ramos | KF116 | 251700 | 0.12 | |
| 3 | TRX7251897 | 2020-02-03 | 20505 | Meghan Warner | KF116 | 251700 | 0.09 | |
| 4 | TRX4943675 | 2022-09-09 | 17678 | Steven Roberts | KF116 | 251700 | 0.1 | |
| 5 | TRX3469820 | 2020-06-20 | 28315 | Linda Bruce DDS | KF116 | 251700 | 0.07 | |
| 6 | TRX1213133 | 2021-09-17 | 22280 | Cory Castro | KF116 | 251700 | 0.11 | |
| 7 | TRX2020131 | 2020-12-16 | 40028 | Stephanie Boone | KF116 | 251700 | 0.03 | |
| 8 | TRX5015870 | 2022-08-17 | 41343 | Mary Hughes | KF116 | 251700 | 0.03 | |
| 9 | TRX7064077 | 2021-06-21 | 86546 | Tamara Bruce | KF116 | 251700 | 0.04 | |
| 10 | TRX5979742 | 2020-12-31 | 18235 | Aaron Reed | KF116 | 251700 | 0.11 | |
| 11 | TRX2209141 | 2021-03-20 | 59571 | Nancy Kennedy | KF116 | 251700 | 0.1 | |
| 12 | TRX5385534 | 2023-03-17 | 69280 | Paul Morales | KF116 | 251700 | 0.11 | |
| 13 | TRX9155202 | 2020-04-11 | 29626 | Stephen Jones | KF116 | 251700 | 0.02 | |

1. Importing Dataset to BigQuery

kf_inventory

| JOB INFORMATION | | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH |
|-----------------|--------------|-----------|------------|-----------------------------------|-------------------|-----------------|
| Row | Inventory_ID | branch_id | product_id | product_name | opname_stock | |
| 1 | INV1828570 | 14724 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 2 | INV6358449 | 30475 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 3 | INV8727436 | 24294 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 4 | INV9842687 | 81965 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 5 | INV6215728 | 67373 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 6 | INV7363800 | 35354 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 7 | INV3163646 | 15943 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 8 | INV5179715 | 37402 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 9 | INV5094212 | 22494 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 10 | INV2346003 | 88089 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 11 | INV1529487 | 85206 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 12 | INV7542367 | 12558 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 13 | INV8432097 | 76476 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |
| 14 | INV8007853 | 47105 | KF116 | Psycholeptics drugs, Hypnotics... | 0 | |

1. Importing Dataset to BigQuery

kf_kantorcabang

| JOB INFORMATION | | RESULTS | CHART | JSON | EXECUTION DETAILS | EXECUTION GRAPH | |
|-----------------|-----------|-----------------|----------------------|-------|---------------------|-----------------|--|
| Row | branch_id | branch_category | branch_name | kota | provinsi | rating | |
| 1 | 36121 | Apotek | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 4.9 | |
| 2 | 32325 | Apotek | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 4.4 | |
| 3 | 37191 | Apotek | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 3.9 | |
| 4 | 23248 | Apotek | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 4.1 | |
| 5 | 46468 | Apotek | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 4.7 | |
| 6 | 49606 | Apotek | Kimia Farma - Apotek | Palu | Sulawesi Tengah | 4.6 | |
| 7 | 99669 | Apotek | Kimia Farma - Apotek | Palu | Sulawesi Tengah | 4.2 | |
| 8 | 76351 | Apotek | Kimia Farma - Apotek | Palu | Sulawesi Tengah | 4.4 | |
| 9 | 82636 | Apotek | Kimia Farma - Apotek | Palu | Sulawesi Tengah | 4.7 | |
| 10 | 78158 | Apotek | Kimia Farma - Apotek | Palu | Sulawesi Tengah | 4.1 | |
| 11 | 39578 | Apotek | Kimia Farma - Apotek | Ambon | Maluku | 4.7 | |
| 12 | 55171 | Apotek | Kimia Farma - Apotek | Ambon | Maluku | 5.0 | |

1. Importing Dataset to BigQuery

kf_product

| Row | product_id ▼ | product_name ▼ | product_category ▼ | price ▼ | |
|-----|--------------|---|--------------------|---------|--|
| 1 | KF378 | Drugs for obstructive airway di... | R03 | 283100 | |
| 2 | KF141 | Drugs for obstructive airway di... | R03 | 221100 | |
| 3 | KF957 | Psycholeptics drugs, Anxiolytic... | R03 | 953000 | |
| 4 | KF557 | Psycholeptics drugs, Anxiolytic... | R03 | 411900 | |
| 5 | KF460 | Psycholeptics drugs, Anxiolytic... | R03 | 334300 | |
| 6 | KF933 | Psycholeptics drugs, Anxiolytic... | R03 | 86500 | |
| 7 | KF513 | Psycholeptics drugs, Hypnotics... | R03 | 665800 | |
| 8 | KF132 | Psycholeptics drugs, Hypnotics... | R03 | 6400 | |
| 9 | KF540 | Other analgesics and antipyretics, Salicylic acid and derivatives | R03 | 744200 | |
| 10 | KF545 | Other analgesics and antipyretics, Salicylic acid and derivatives | R03 | 801700 | |

2. Tabel Analisa

Result tabel menghasilkan 16 kolom dengan jumlah baris **2688327**, dengan preview seperti gambar dibawah.

analisis_transaksi

QUERY

SHARE

COPY

SNAPSHOT

DELETE

EXPORT

REFRESH

SCHEMA

DETAILS

PREVIEW

LINEAGE

DATA PROFILE

DATA QUALITY

| Row | transaction_id | date | branch_id | branch_name | kota | provinsi | rating_cabang | customer_name | product_id | product_name |
|-----|----------------|------------|-----------|----------------------|------------------|---------------------|---------------|--------------------|------------|--------------|
| 1 | TRX3678735 | 2021-05-23 | 36256 | Kimia Farma - Apotek | Sukabumi | Jawa Barat | 4.1 | Oscar Valdez | KF601 | Psycholeptic |
| 2 | TRX9751260 | 2023-02-25 | 63673 | Kimia Farma - Apotek | Sorong | Papua Barat | 4.8 | Debra Diaz | KF601 | Psycholeptic |
| 3 | TRX1911013 | 2022-12-04 | 50288 | Kimia Farma - Apotek | Ternate | Maluku Utara | 4.4 | Andrew Dillon | KF601 | Psycholeptic |
| 4 | TRX7922368 | 2021-03-30 | 62312 | Kimia Farma - Apotek | Cianjur | Jawa Barat | 4.5 | Bobby Hudson | KF601 | Psycholeptic |
| 5 | TRX8034100 | 2021-11-15 | 14495 | Kimia Farma - Apotek | Banjarmasin | Kalimantan Selatan | 4.8 | Thomas Perez | KF601 | Psycholeptic |
| 6 | TRX3678735 | 2021-05-23 | 36256 | Kimia Farma - Apotek | Sukabumi | Jawa Barat | 4.1 | Oscar Valdez | KF601 | Psycholeptic |
| 7 | TRX1054883 | 2022-05-01 | 60481 | Kimia Farma - Apotek | Pekanbaru | Riau | 4.1 | Andrew Clark | KF601 | Psycholeptic |
| 8 | TRX8034100 | 2021-11-15 | 14495 | Kimia Farma - Apotek | Banjarmasin | Kalimantan Selatan | 4.8 | Thomas Perez | KF601 | Psycholeptic |
| 9 | TRX6806967 | 2022-07-08 | 82202 | Kimia Farma - Apotek | Jambi | Jambi | 4.1 | Erin Little | KF601 | Psycholeptic |
| 10 | TRX1747393 | 2022-10-08 | 17469 | Kimia Farma - Apotek | Lubuklinggau | Sumatera Selatan | 3.9 | Suzanne Gutierrez | KF601 | Psycholeptic |
| 11 | TRX3670814 | 2021-06-07 | 40222 | Kimia Farma - Apotek | Purwokerto | Jawa Tengah | 4.1 | Christopher Wood | KF601 | Psycholeptic |
| 12 | TRX1747393 | 2022-10-08 | 17469 | Kimia Farma - Apotek | Lubuklinggau | Sumatera Selatan | 3.9 | Suzanne Gutierrez | KF601 | Psycholeptic |
| 13 | TRX9173715 | 2022-04-03 | 12558 | Kimia Farma - Apotek | Kendari | Sulawesi Tenggara | 4.4 | Thomas Ward | KF601 | Psycholeptic |
| 14 | TRX2967006 | 2021-12-08 | 87938 | Kimia Farma - Apotek | Samarinda | Kalimantan Timur | 4.5 | Amy Brandt | KF601 | Psycholeptic |
| 15 | TRX1054883 | 2022-05-01 | 60481 | Kimia Farma - Apotek | Pekanbaru | Riau | 4.1 | Andrew Clark | KF601 | Psycholeptic |
| 16 | TRX6906361 | 2022-01-28 | 23248 | Kimia Farma - Apotek | Bima | Nusa Tenggara Barat | 4.1 | Elizabeth Thompson | KF601 | Psycholeptic |
| 17 | TRX9462816 | 2021-07-20 | 12560 | Kimia Farma - Apotek | Padang Sidempuan | Sumatera Utara | 4.4 | Kyle Williams | KF601 | Psycholeptic |
| 18 | TRX9884060 | 2020-06-27 | 65584 | Kimia Farma - Apotek | Semarang | Jawa Tengah | 5.0 | Michael Novak | KF601 | Psycholeptic |
| 19 | TRX4662458 | 2020-04-27 | 29922 | Kimia Farma - Apotek | Purwokerto | Jawa Tengah | 3.9 | Sydney Gutierrez | KF601 | Psycholeptic |
| 20 | TRX1666930 | 2022-05-29 | 28557 | Kimia Farma - Apotek | Jambi | Jambi | 4.5 | Christina Mathews | KF601 | Psycholeptic |
| 21 | TRX3912645 | 2020-07-18 | 47175 | Kimia Farma - Apotek | Bekasi | Jawa Barat | 4.9 | Jasmine Jackson | KF601 | Psycholeptic |

3. BigQuery Syntax

query table_analisa

 RUN

 SAVE QUERY (CLASSIC) ▾

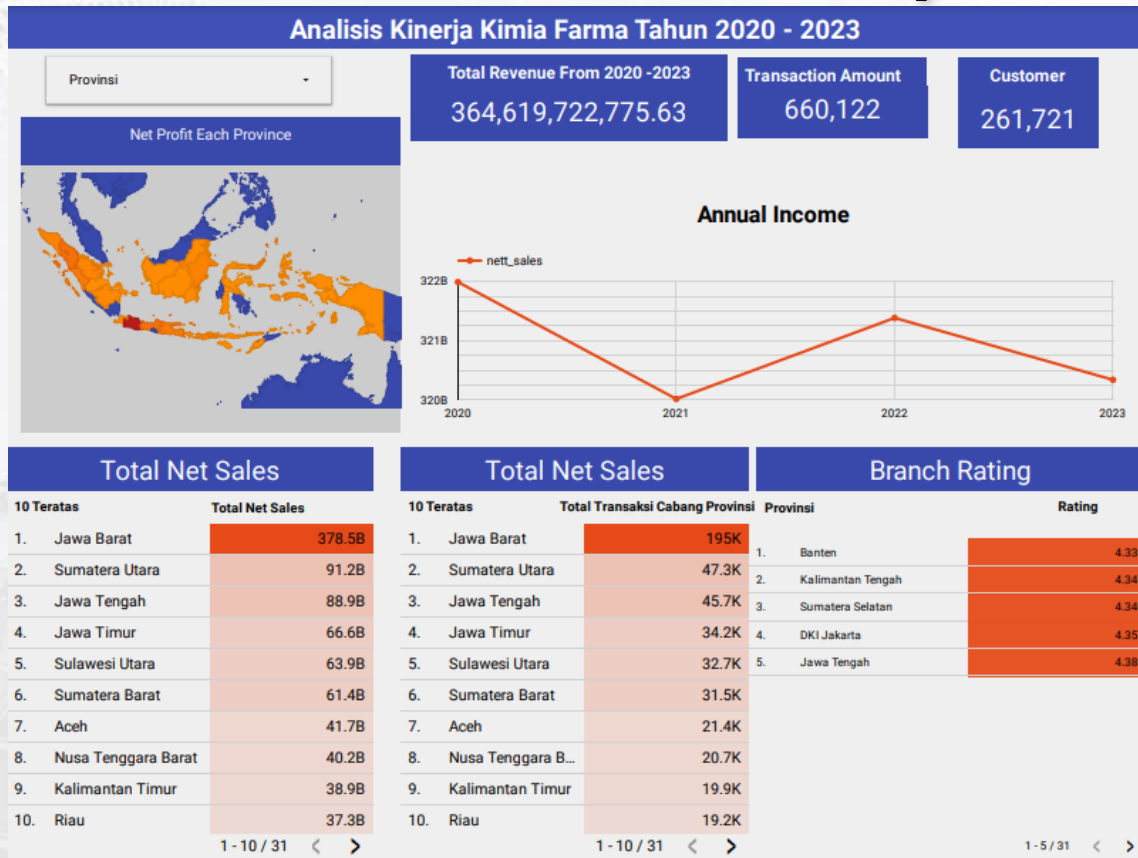
 SHARE ▾

 SCHEDULE

 MORE ▾

```
1 CREATE TABLE data.analisis_transaksi AS
2 SELECT
3     t.transaction_id,
4     t.date,
5     t.branch_id,
6     k.branch_name,
7     k.kota,
8     k.provinsi,
9     k.rating AS rating_cabang,
10    t.customer_name,
11    t.product_id,
12    p.product_name,
13    p.price AS actual_price,
14    t.discount_percentage,
15    CASE
16        WHEN p.price <= 50000 THEN 0.1
17        WHEN p.price <= 100000 THEN 0.15
18        WHEN p.price <= 300000 THEN 0.2
19        WHEN p.price <= 500000 THEN 0.25
20        ELSE 0.3
21    END AS persentase_gross_laba,
22    (p.price - (p.price * t.discount_percentage)) AS nett_sales,
23    (p.price * (1 - t.discount_percentage) * CASE
24        WHEN p.price <= 50000 THEN 0.1
25        WHEN p.price <= 100000 THEN 0.15
26        WHEN p.price <= 300000 THEN 0.2
27        WHEN p.price <= 500000 THEN 0.25
28        ELSE 0.3
29    END) AS nett_profit,
30    t.rating AS rating_transaction
31 FROM
32     data.kf_final_transaction t
33 JOIN
34     data.kf_inventory i ON t.branch_id = i.branch_id AND t.product_id = i.product_id
35 JOIN
36     data.kf_kantor_cabang k ON t.branch_id = k.branch_id
37 JOIN
38     data.kf_product p ON t.product_id = p.product_id;
```

4. Dashboard Performance Analytics



Thank You



Rakamin
Academy



kimia farma