

# PORTFOLIO

ARIANTY SIAHAAN, SKM, MKM

Start Slide Now



# ABOUT ME

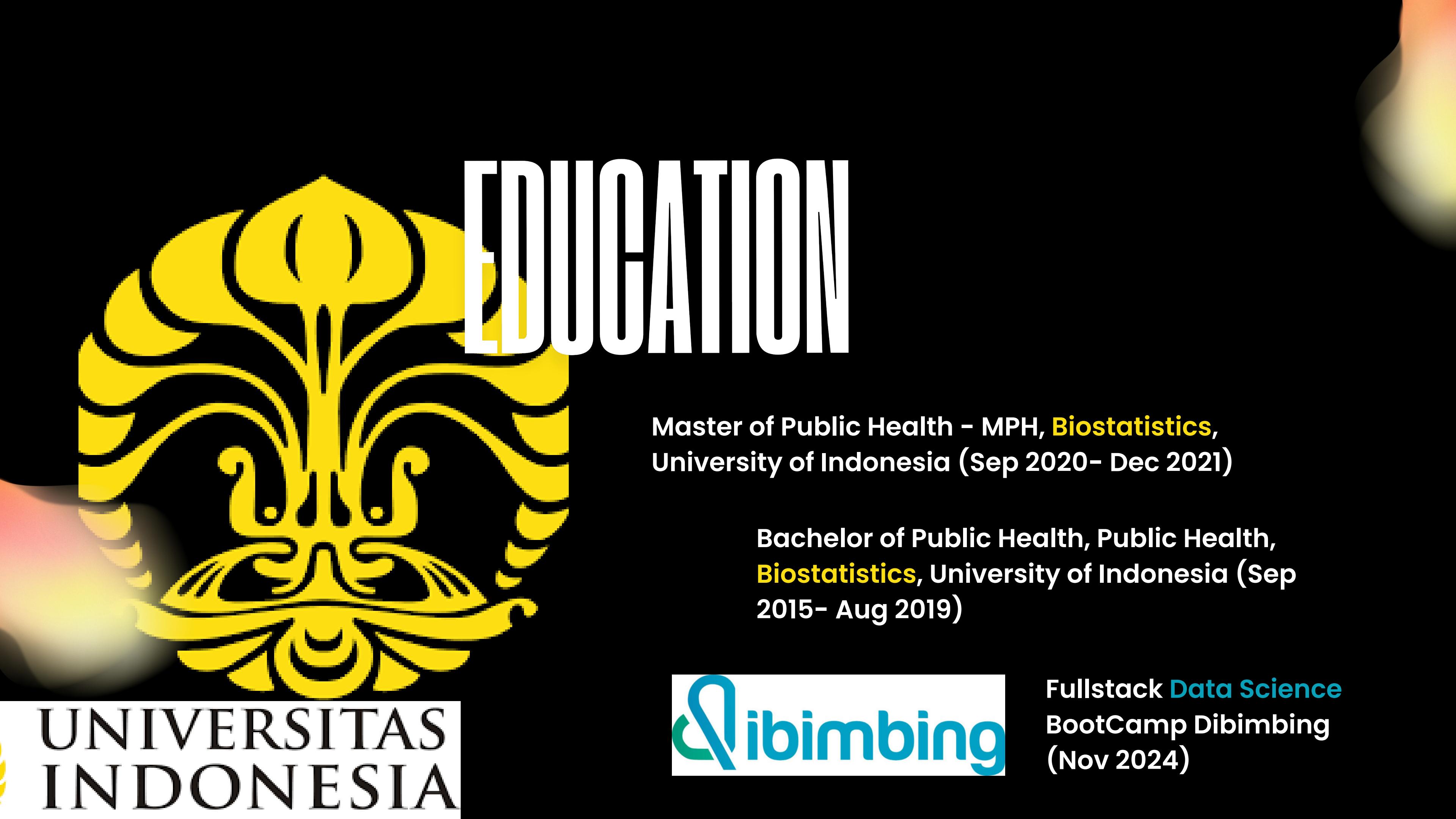
## Hi, I am Arianty.



I am a Biostatistician with a Master's degree and specialized expertise in data analysis, focusing on maternal and infant mortality research. With proven experience in data entry, cleaning, merging, and analysis. I have contributed to impactful health initiatives at reputable organizations, including BKKBN, Yayasan KNCV Indonesia, Dinas Kesehatan DKI Jakarta, and Save the Children Indonesia.

Passionate about the data field, I bring 4+ years of experience as a Data Officer, specializing in managing and analyzing large datasets to derive actionable insights. I am skilled in tools such as SPSS, STATA, Excel, Tableau, Power BI, Python, SQL, QGIS , and have a strong ability to turn complex data into meaningful outcomes.

Highly motivated and adaptable, I thrive in collaborative environments with diverse teams, always striving to leverage data to address real-world problems and drive positive change.



UNIVERSITAS  
INDONESIA

# EDUCATION

Master of Public Health - MPH, **Biostatistics**,  
University of Indonesia (Sep 2020- Dec 2021)

Bachelor of Public Health, Public Health,  
**Biostatistics**, University of Indonesia (Sep  
2015- Aug 2019)



Fullstack **Data Science**  
BootCamp Dibimbing  
(Nov 2024)

# SOFT & HARD SKILLS



Power BI



python



SQL

Visualization Tools

Programming  
Language



Excel



SPSS®

STATA®

QGIS

Statistics Tools

# PROJECTS



# ACCELERATION OF STUNTING REDUCTION 2024- BKKBN (PENDATAAN KELUARGA)



Forum Data Keluarga Nasional:  
Diseminasi dan Rilis Hasil Pemutakhiran Pendataan Keluarga Tahun 2024

Ruang Auditorium Kementerian Kependidikan dan Pembangunan Keluarga/BKKBN, Gedung Halim 1 Lt 1  
Jumat, 29 November 2024  
Live Youtube BKKBN Official

WWW.BKKBN.GO.ID DIREKTORAT PELAPORAN DAN STATISTIK @BKKBNOfficial



Ditlaptik on Event  
Diseminasi dan Rilis Hasil Pemutakhiran Pendataan Keluarga Tahun 2024

@ditlaptik\_bkkbn @ppsditlaptik ppdatastunting@gmail.com

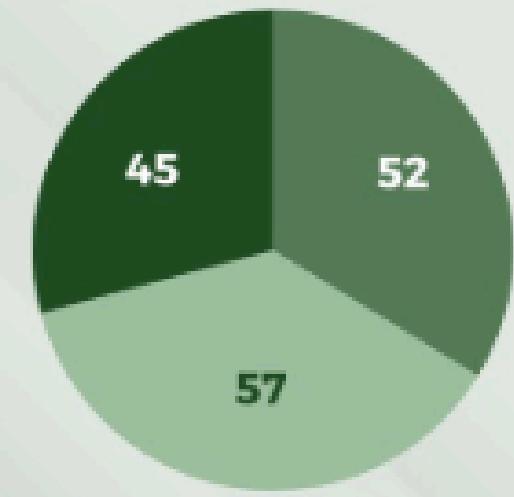
Entry; Cleaning;  
Analysis SPSS,  
STATA, Excel;  
Visualization;  
Action Plan

## LAPORAN PEMANFAATAN DATA TAHUN 2024

### BERDASARKAN ASAL INSTANSI

INTERNAL PUSAT	68
INTERNAL PROVINSI	27
K/L	21
PEMDA	18
MITRA	3
PERGURUAN TINGGI	14

### BERDASARKAN JENIS DATA



## JUMLAH BERDASARKAN BENTUK DATA

AGREGAT 85

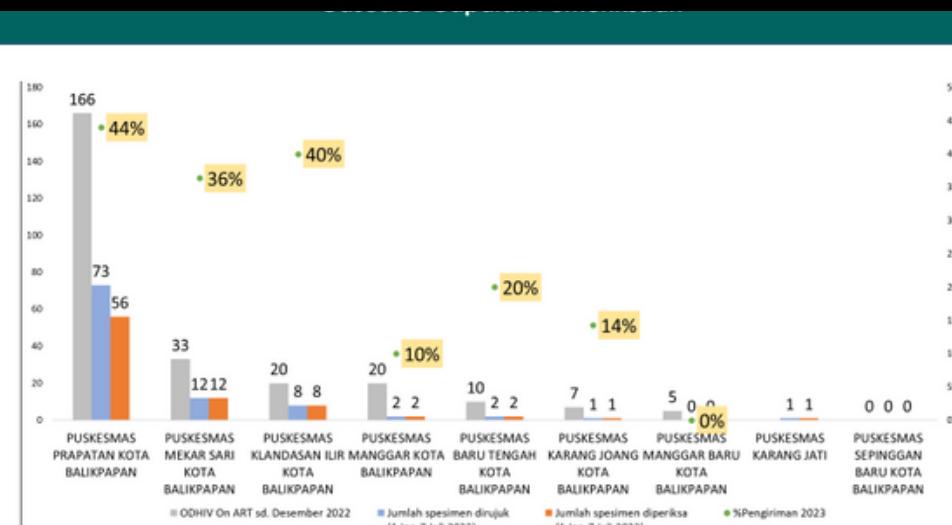
BNBA 61

## JUMLAH LAYANAN KONSULTASI HOTLINE BERDASARKAN ASAL INSTANSI

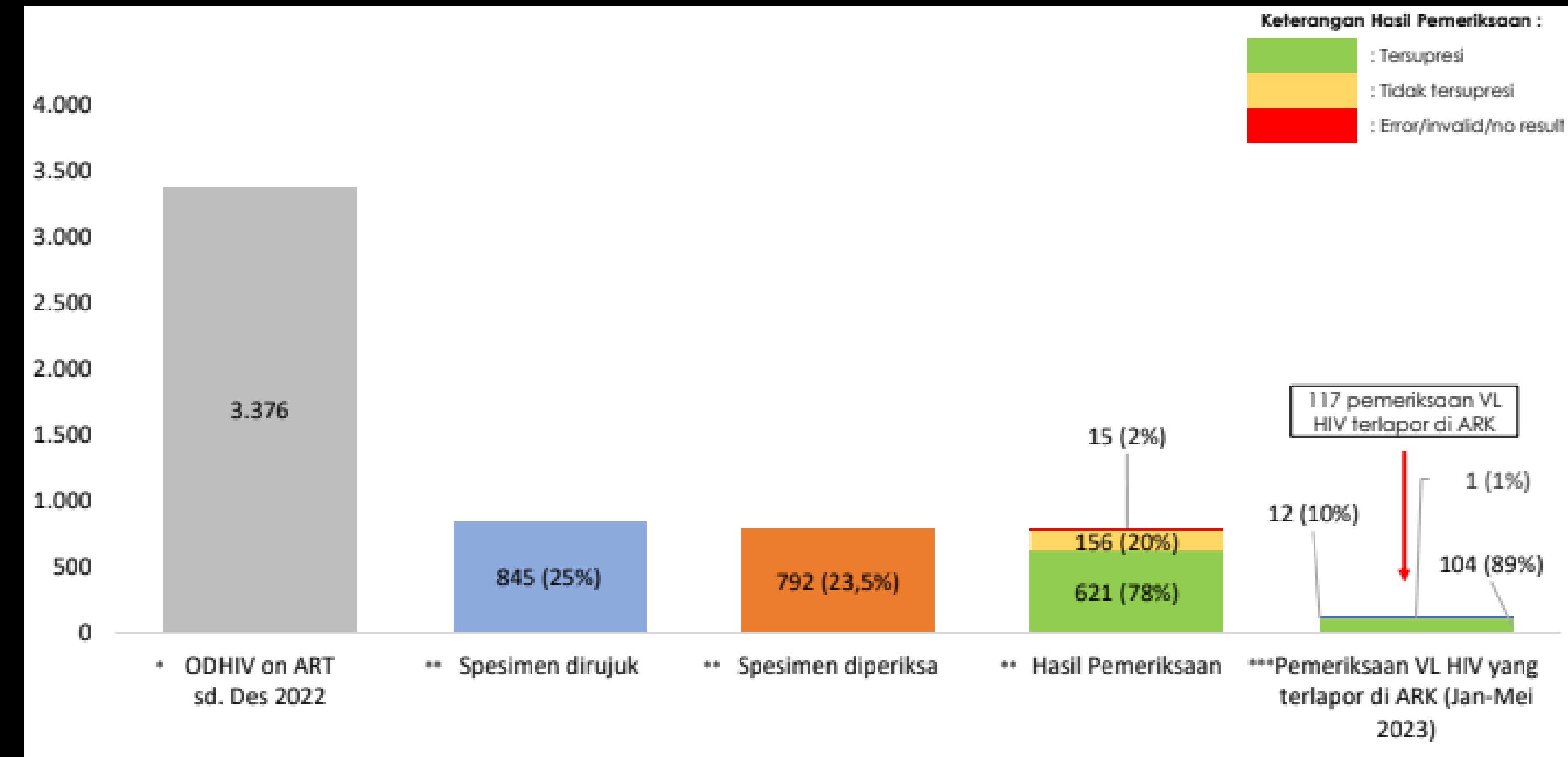
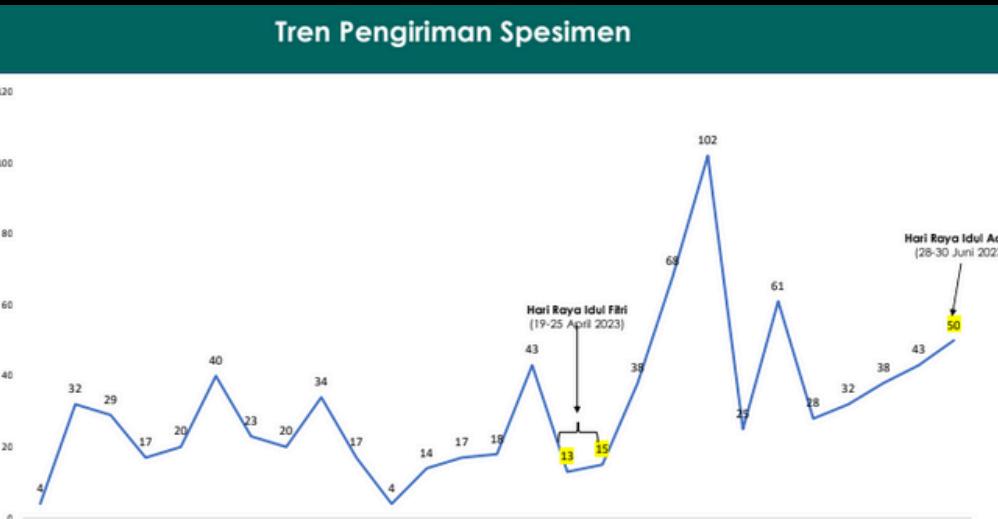


# AKSES VL PROJECT- YAYASAN KNCV INDONESIA

Entry; Cleaning;  
Analysis Excel, Stata;  
Visualization; Action  
Plan



Tren Pengiriman Spesimen



AKSES VL: Pengenalan Kegiatan AKSES VL Pada Pertemuan Monitoring Pemeriksaan Viral Load HIV

21 May 2022

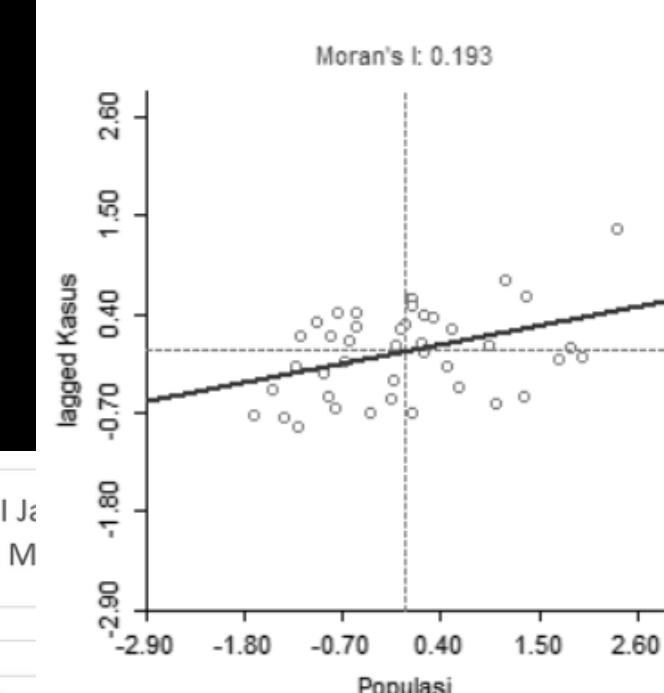
Indonesia berkomitmen untuk melakukan berbagai upaya dalam pencegahan dan pengendalian HIV untuk mencapai "Ending AIDS" tahun 2030. Untuk mewujudkan komitmen tersebut maka pemerintah menetapkan target capaian sesuai Rencana Aksi Nasional Pencegahan dan Pengendalian HIV dan Penyakit Infeksi Menular Seksual tahun 2020-2024. Tes viral load (VL) adalah tes untuk mengukur jumlah virus HIV dalam darah. Tes viral load dapat memproduksikan efektivitas terapi antiretroviral (ART) bagi orang dengan HIV (ODHIV). Algoritma yang berlaku saat ini mencantumkan pemeriksaan



# ACCELERATION OF COVID-19 DKI JAKARTA PROVINCE

Entry; Merging;  
Cleaning Data;  
Analysis Excel,  
stata, Ms.  
Access, SPSS,  
QGIS, Geoda;  
Visualization;  
Action Plan

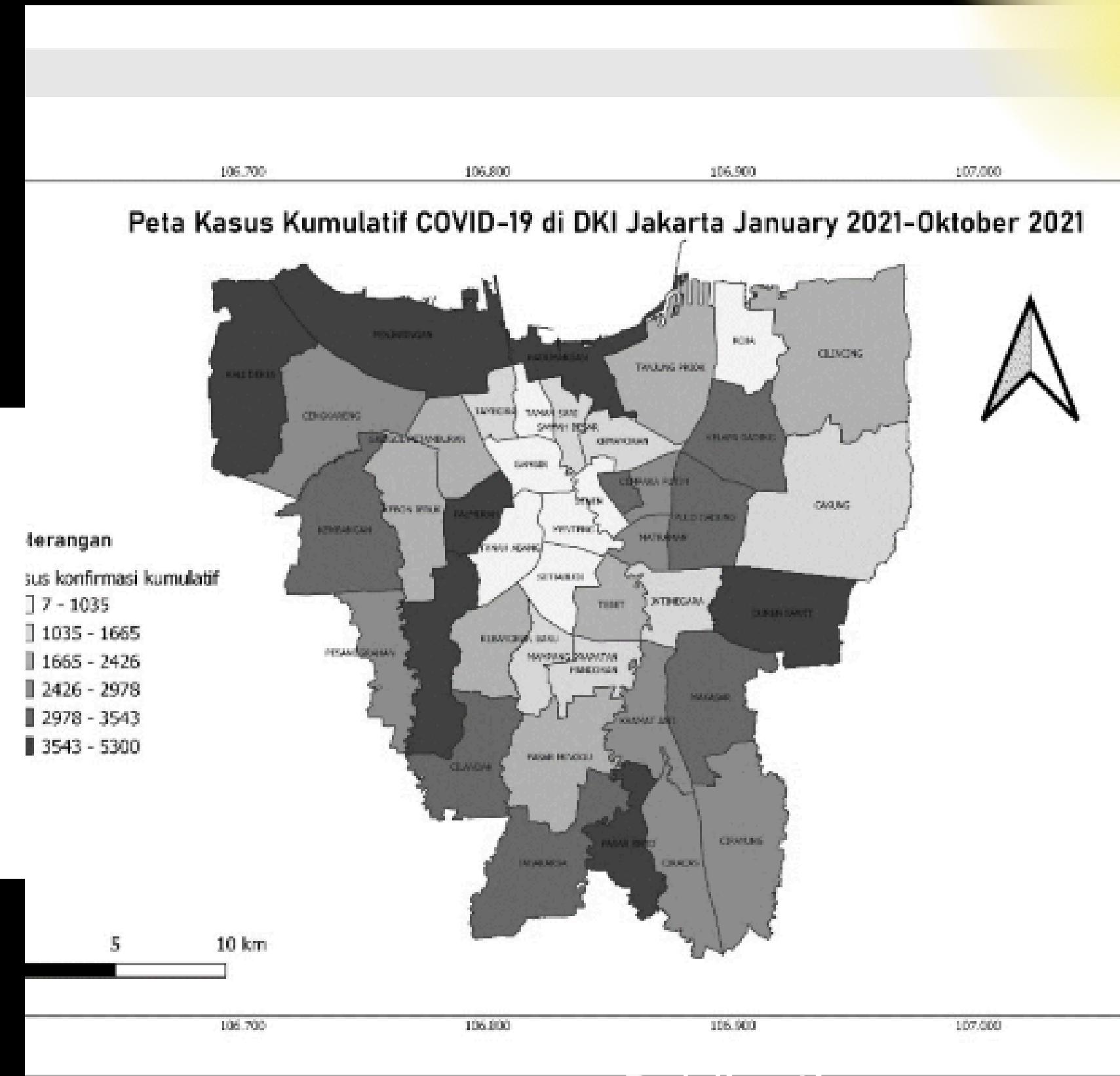
Kasus COVID19 JKT-24 (16.03.22) [Repaired] - Excel																		
L	M	N	O	P	Q	R	S	T	U	V	D	R	D	R	D	R	D	R
ELURAHAN / KECAMATAN LUAR DKI	KELURAHAN	KECAMATAN	KABUPATEN/ KOTA	No. HP	Kewarganegaraan	Negara	Active / Tracing / Passive	Faskes Pelapor	Faskes Pelapor Tidak Terdaftar (Khusus EIS)	Tanggal Onset	D	R	D	R	D	R	D	R
INTEN	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 85785350870	WNI	INDONESIA	PASSIVE	RS DR. SUTOTO PUSREHAB KEMHAN													
GR	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 6229326872	WNI	INDONESIA	PASSIVE	RSUD PASAR MINGGU	6/12/21	0											
GOR	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 611843319	WNI	INDONESIA	PASSIVE	KLINIK CITO JAKARTA													
TAPANG	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 953661+13	WNI	INDONESIA	TRACING	PKC CENGKARENG													
PO	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 161917858	WNI	INDONESIA	PASSIVE	LABORATORIUM GENOMIK SOLIDARITAS INDON													
EKASI	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 8139824617	WNI	INDONESIA	TRACING	PKC CAKUNG													
	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 8128175837	WNI	INDONESIA	PASSIVE	LABORATORIUM BUMAME FARMASI													
KASI	ALAMAT LUAR ALAMAT LUAR ALAMAT LUAR 81210926060	WNI	INDONESIA	PASSIVE	RS MOH. RIDWAN MEURAKSA													



Tren Kasus Konfirmasi COVID-19 DKI Ja  
Usia 1-4 tahun Periode 26 Maret-11 M



Visualitation



Publication

# FINAL PROJECT DATA ANALYST

## BOOTCAMP

DATA ANALYST-FINAL PROJECT

**CUSTOMER PERSONALITY ANALYST**

Arianty Siahaan

ariantysiahaan@gmail.com

Power BI Python

### Table of Content

1. DATA UNDERSTANDING AND GOALS
2. MASALAH DAN TUJUAN
3. DATA CLEANING & MANIPULATION
4. EXPLORATORY DATA ANALYSIS
5. DASHBOARD
6. A/B TESTING
7. REKOMENDASI AKSI



**EXPLORATORY DATA ANALYSIS (4)**

GAMBARAN VARIABEL ACCEPTED CAMPAIGNS

- Tidak menerima kampanye di semua kampanye: jumlah terbesar, dengan frekuensi lebih dari 2000 di setiap kampanye.
- Menerima kampanye di semua kampanye: jumlah terkecil, dengan frekuensi yang dibawah 170.

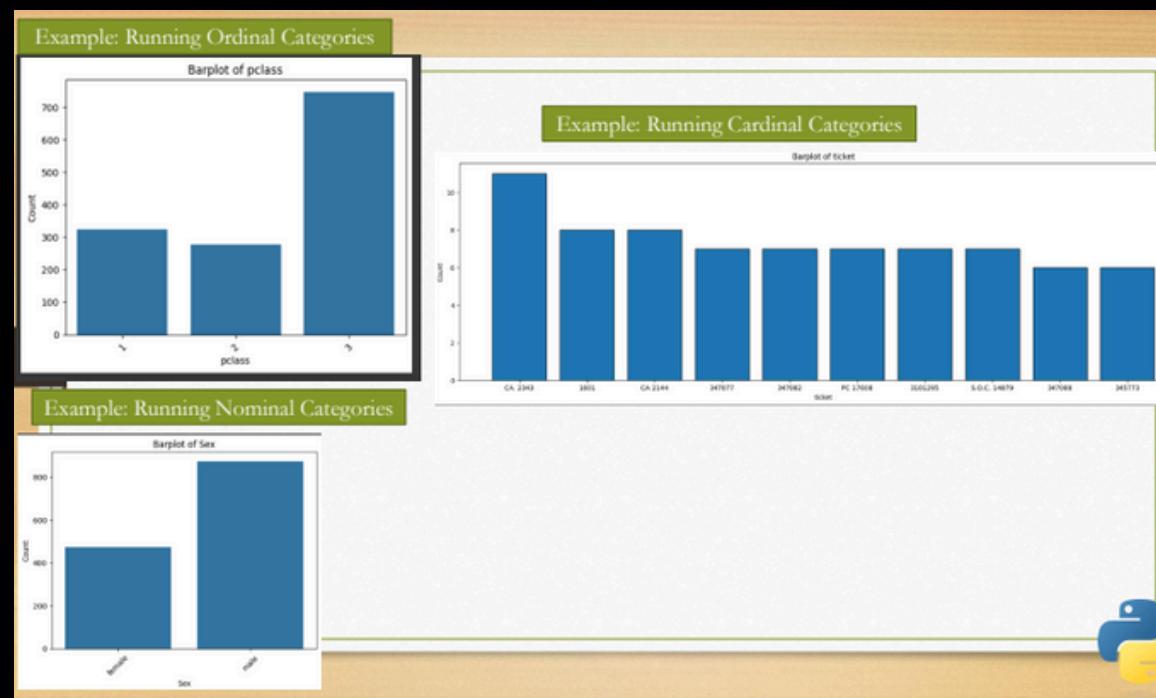
Histogram of Accepted Campaigns (Category 0 and 1)

Data Understanding, Cleaning, Manipulation, EDA, Dashboard, A/B Testing, Action Plan

Analysis with Python, Power BI

# WEEKLY PROJECT BOTCAMP

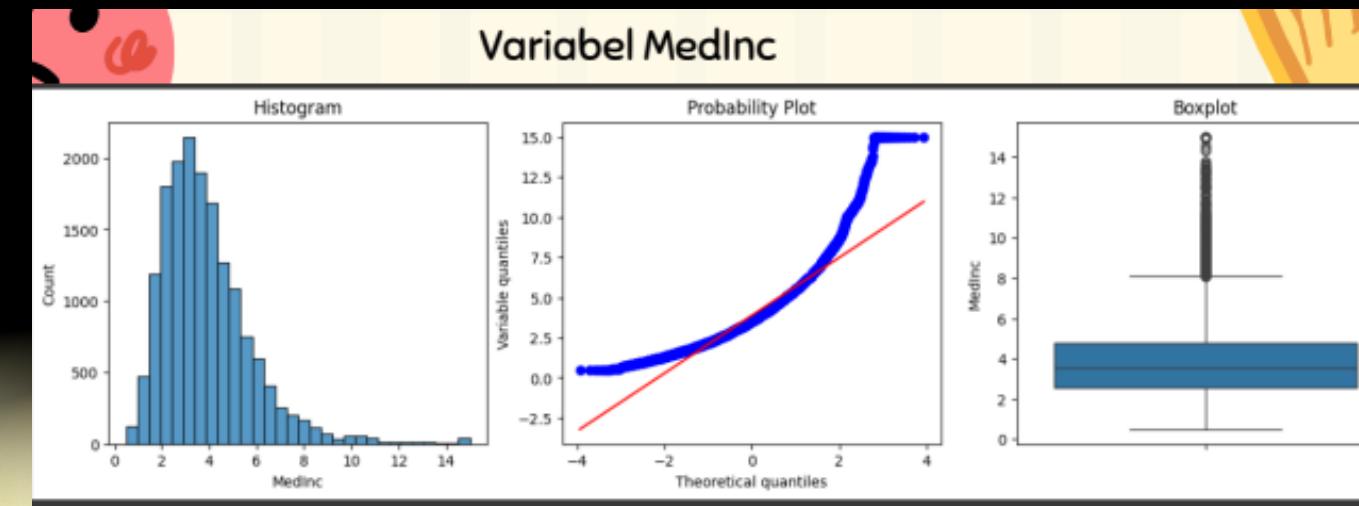
## 1. Data Type and Structure



## 2. Hipotesis Testing



## 3. Data Cleaning



## 4. Data Manipulation

penjualan\_terendah = df.sort\_values(by='Total', ascending=True)  
penjualan\_terendah

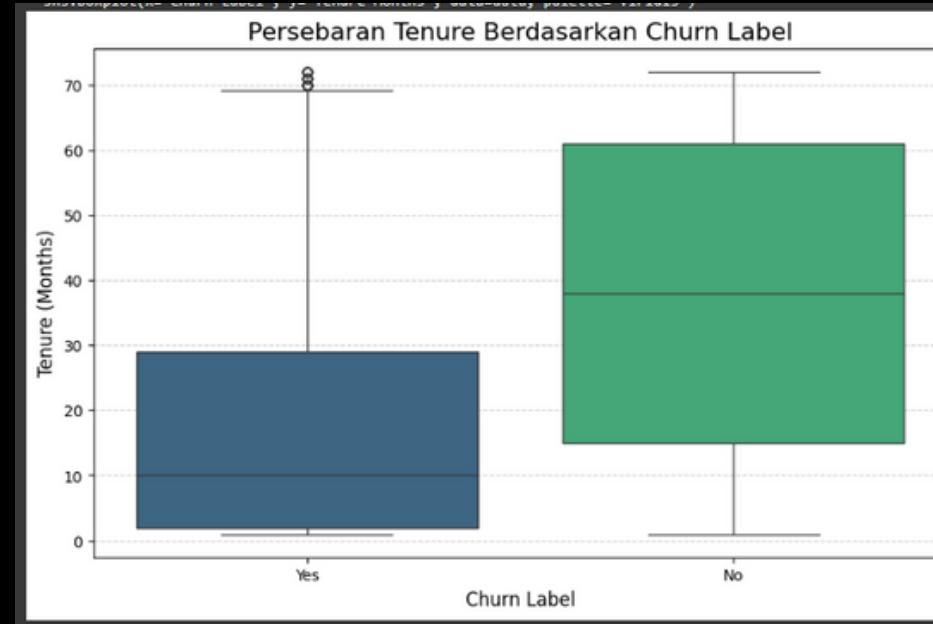
The lowest total sales

Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total
822	784-21-9238	C Naypyitaw	Member	Male	Sports and travel	10.17	1	0.5085	10.6785
629	308-39-1707	A Yangon	Normal	Female	Fashion accessories	12.09	1	0.6045	12.6945
223	279-62-1445	C Naypyitaw	Member	Female	Fashion accessories	12.54	1	0.6270	13.1670
443	192-98-7397	C Naypyitaw	Normal	Male	Fashion accessories	12.78	1	0.6390	13.4190
402	236-86-3015	C Naypyitaw	Member	Male	Home and lifestyle	13.98	1	0.6990	14.6790
282	490-29-1201	A Yangon	Normal	Female	Sports and travel	15.34	1	0.7670	16.1070

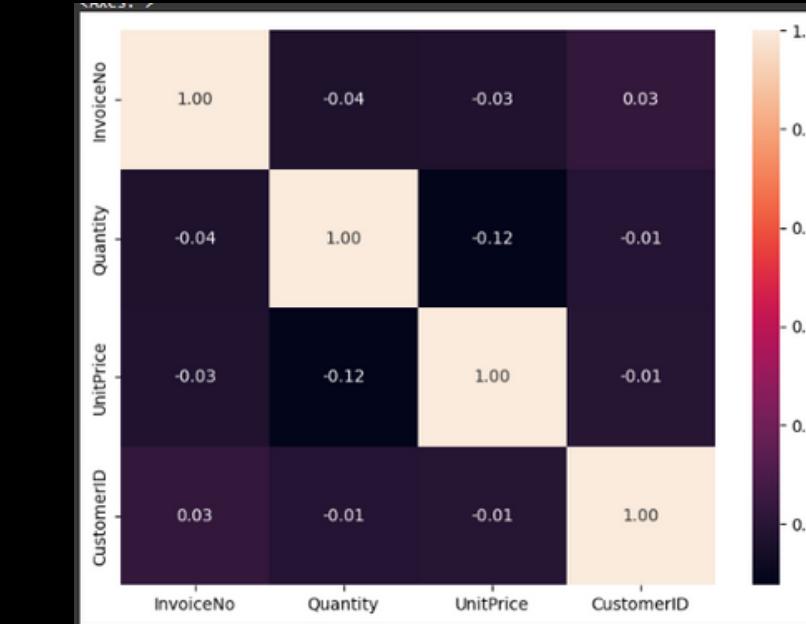
Sorting ascending

Analysis  
with Python

## 5. Data Visualization



## 6. Advanced EDA Techniques



## 7. Web Scrapping

```
[ ] df_hotel = pd.concat([df_nama_hotel, df_harga_hotel, df_rating_hotel, df_alamat], axis=1)
print('total properties yang didapat : ', len(df_hotel))
df_hotel.head()

total properties yang didapat : 14
```

	nama hotel	harga hotel	rating hotel	alamat
0	LABERSA TOBA HOTEL & CONVENTION CENTER	Rp 1.349.959	8.5	Balige, Toba Lake
1	PURNAMA BALIGE HOTEL	Rp 532.351	8.7	Balige, Toba Lake
2	Mutiara Balige Hotel	Rp 614.251	8.3	Balige, Toba Lake
3	Lago Hotel and Resto	Rp 528.256	8.6	Balige, Toba Lake
4	Nabasa Hotel Balige	Rp 303.030	8.1	Balige, Toba Lake

## 8. A/B Testing

```
[ ] # Memisahkan data berdasarkan 'High Discount' dan 'Low Discount'
high_discount_sales = df[df['High Discount'] == True]['sales']
low_discount_sales = df[df['Low Discount'] == True]['sales']

# Uji Mann-Whitney U untuk membandingkan Sales antara high discount dan low discount
stat, p_value = stats.mannwhitneyu(high_discount_sales, low_discount_sales)

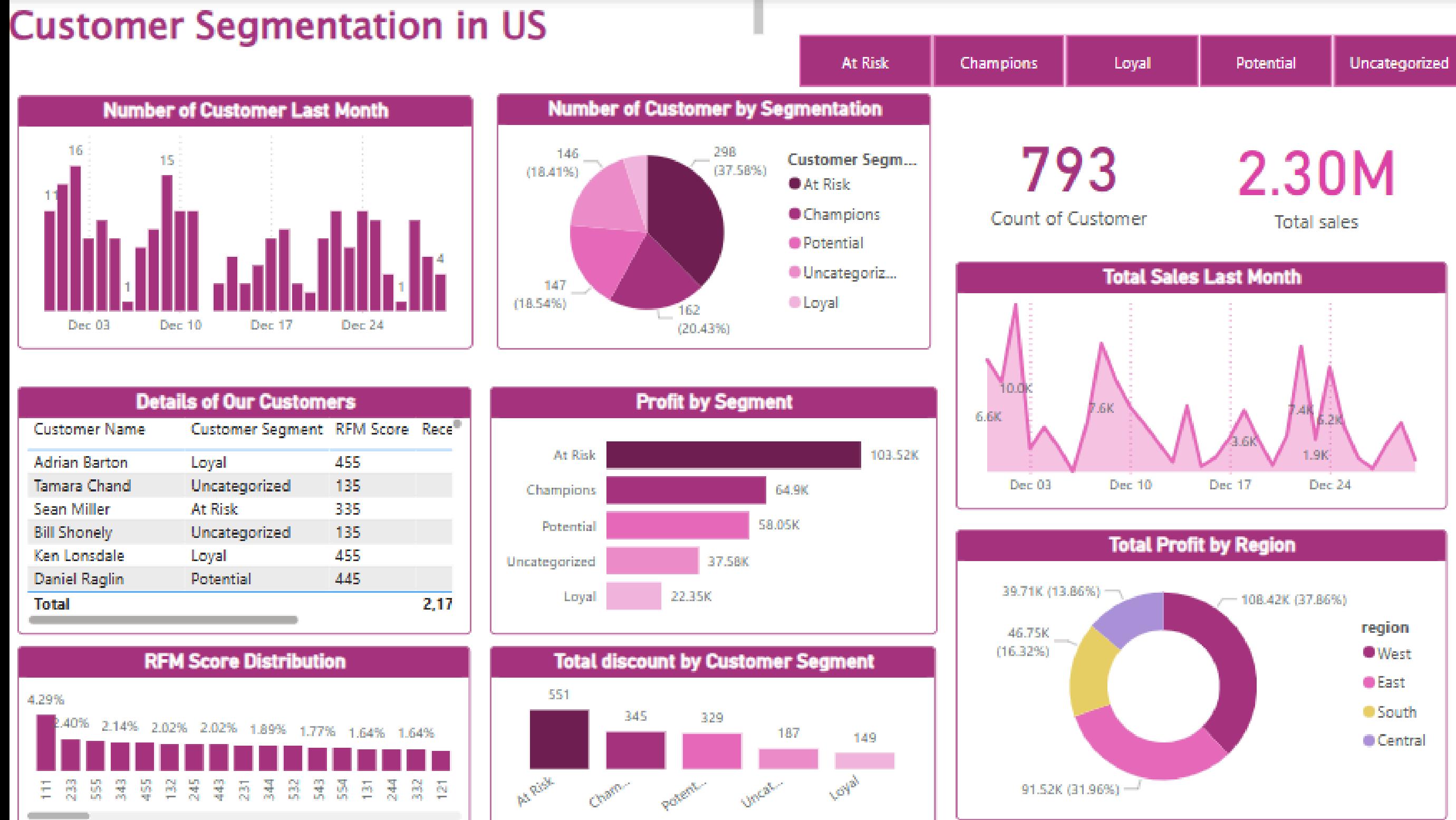
# Output nilai statistik dan p-value
print('Mann-Whitney U statistic:', stat)
print('p-value:', p_value)

Mann-Whitney U statistic: 3220882.5
p-value: 0.04059519388141165
```

Analysis  
with Python

# DASHBOARD POWER BI WEEKLY

## PROJECT BOOTCAMP



DAX queries,  
Manipulation,  
Visualitation

## Dashboard Marketing Campaign

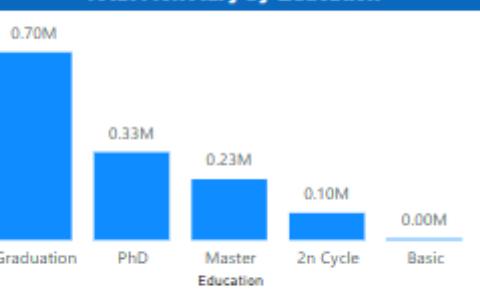
Education

Select all    2n Cycle    Basic    Graduation    Master    PhD

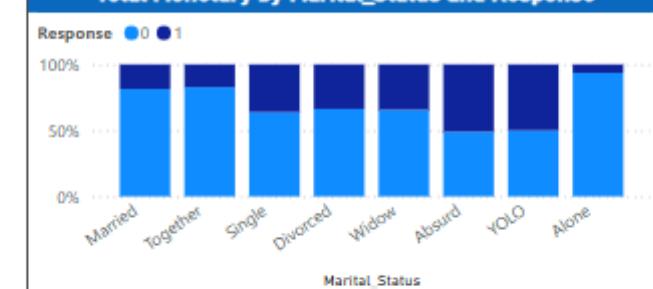
2240  
Count of ID

1bn  
Total Income

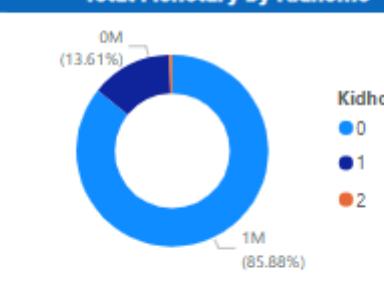
Total Monetary by Education



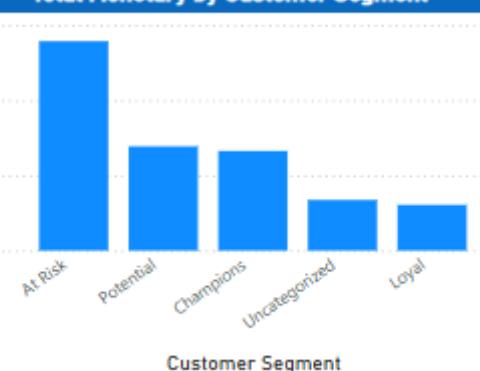
Total Monetary by Marital\_Status and Response



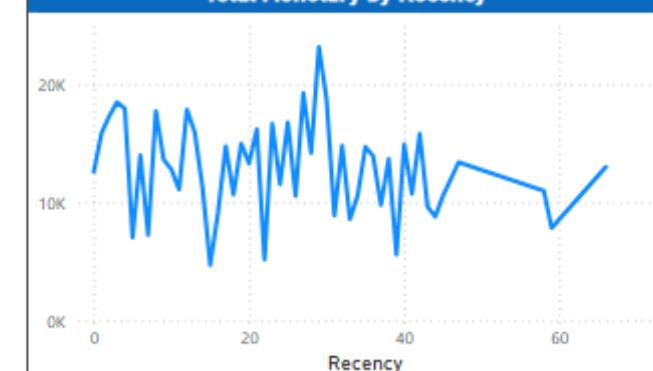
Total Monetary by Kidhome



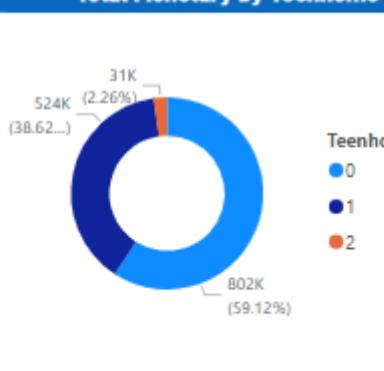
Total Monetary by Customer Segment



Total Monetary by Recency



Total Monetary by Teenhome



## Dashboard RFM in US

Choose one

about to sleep

average

cannot loose them

champion

loyal

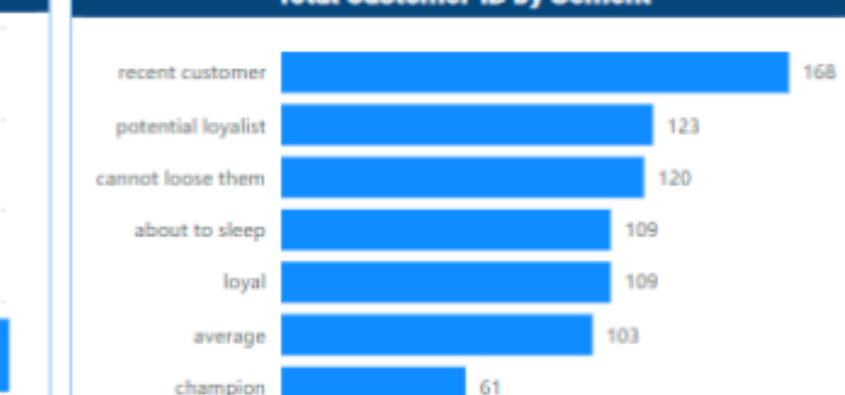
potential loyalist

recent customer

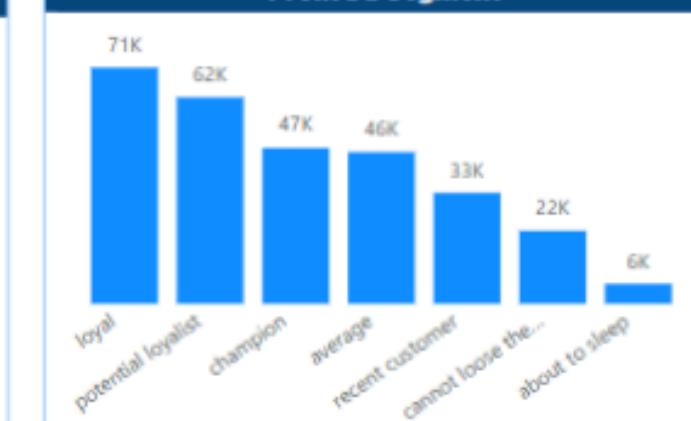
Number of Customer Last Month



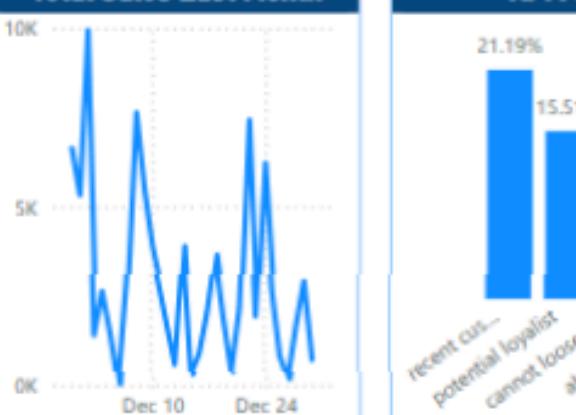
Total Customer ID by Sement



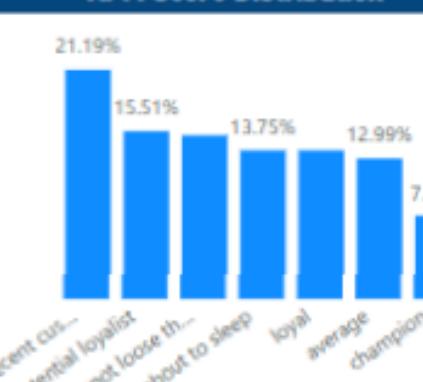
Profit bu Segment



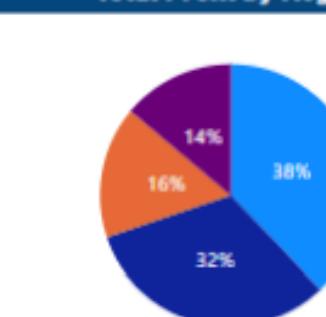
Total Sales Last Month



RFM Score Distribution



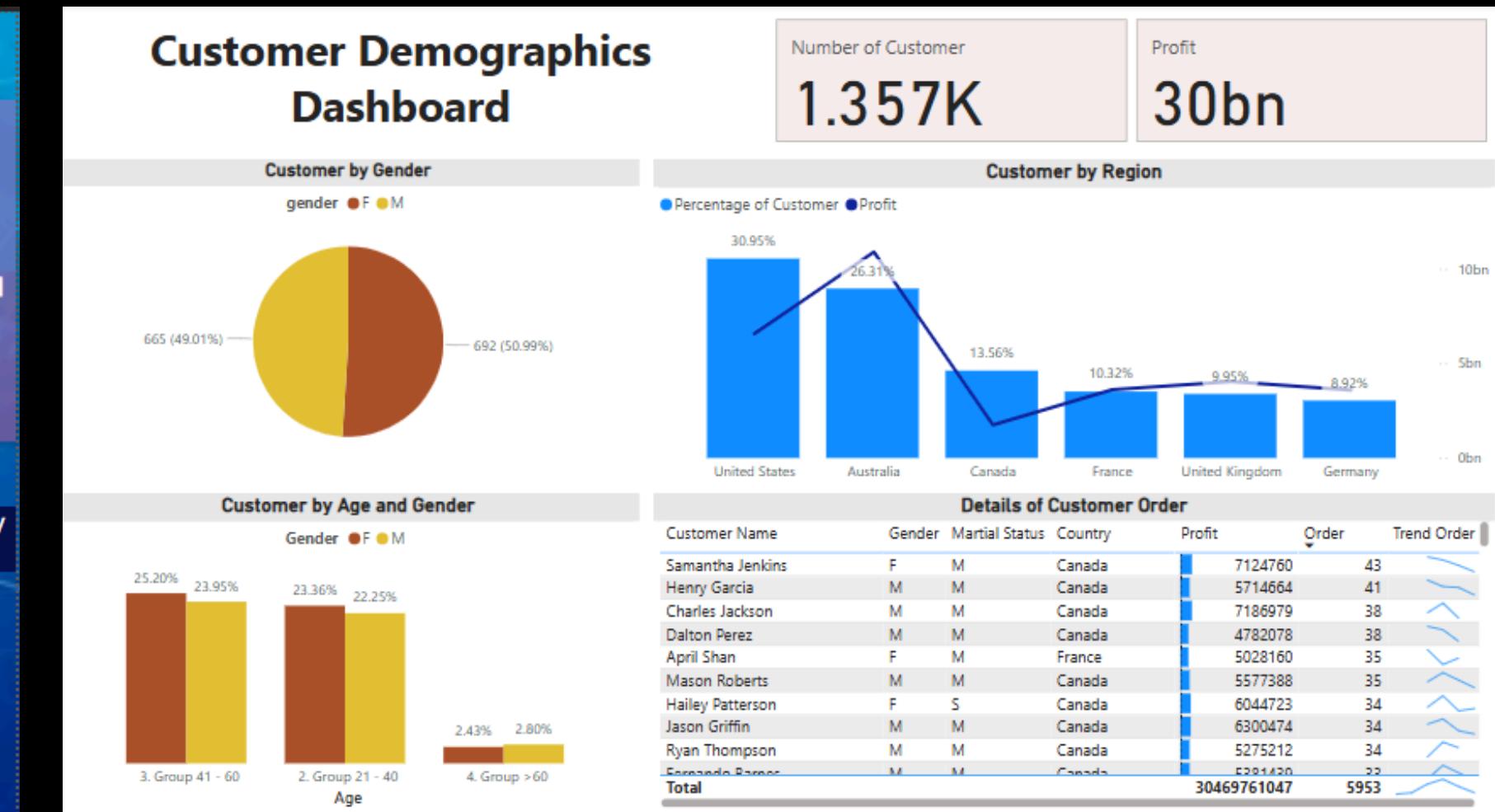
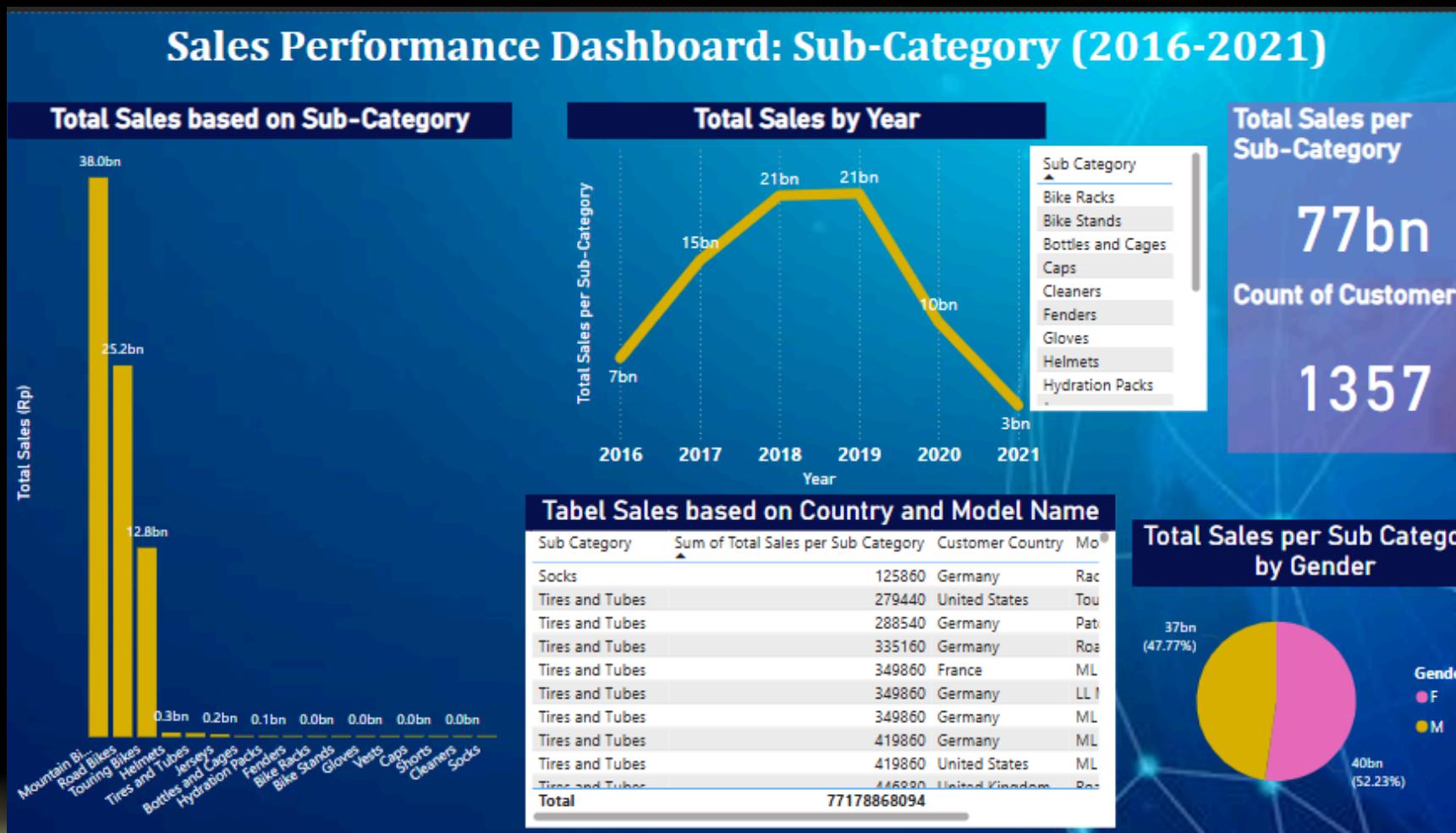
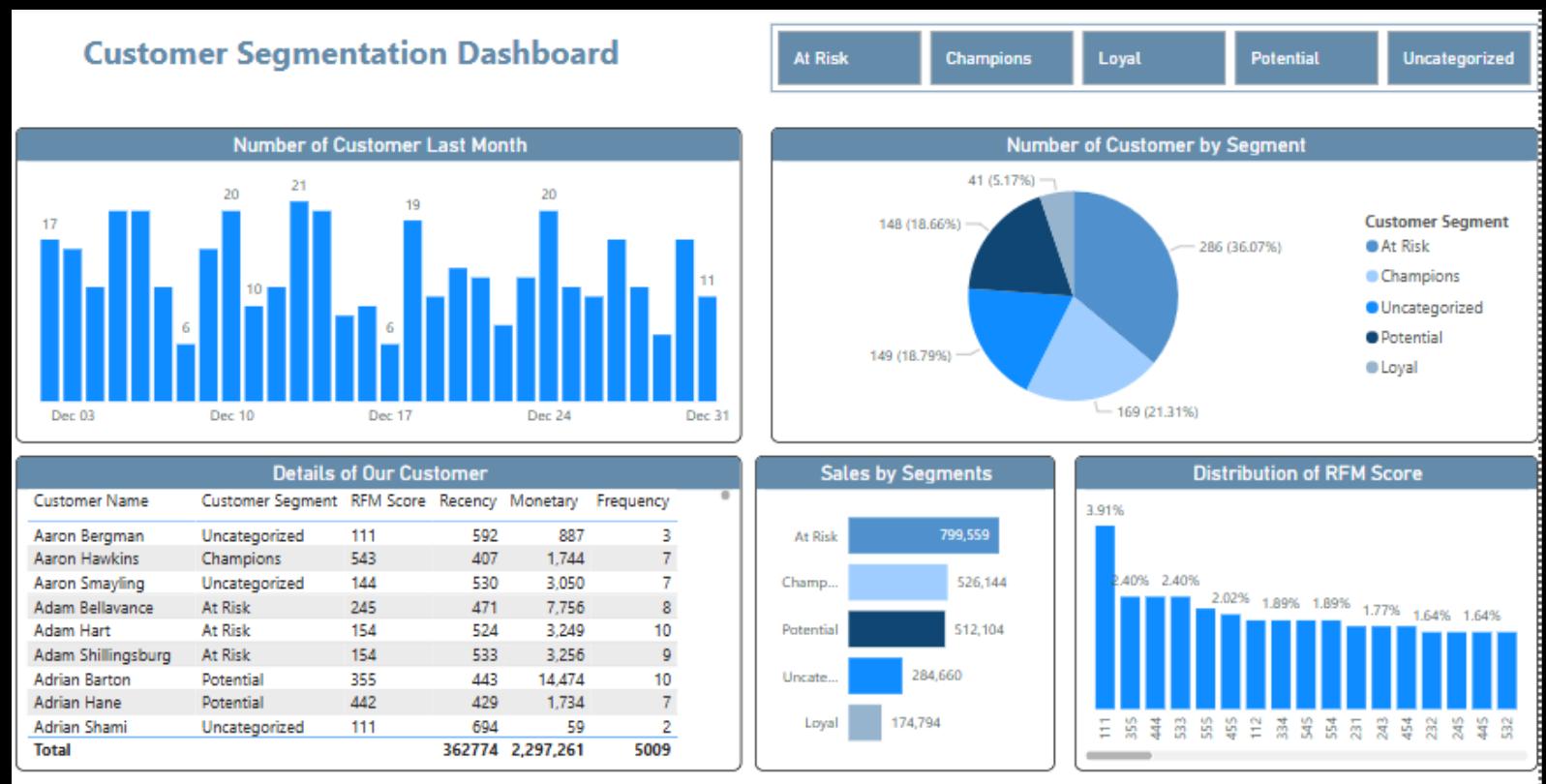
Total Profit by Region



Details of Our Customers

Customer Name	RFM	Total Recency	Total Frequency
Aaron Bergman	111	10931	704
Alyssa Crouse	111	10931	704
Andy Gerbode	111	10931	704
Anemone Ratner	111	10931	704
Anna Chung	111	10931	704
Anthony O'Donnell	111	10931	704
Art Foster	111	10931	704
Barry Weirich	111	10931	704
Ben Wallace	111	10931	704
<b>Total</b>		<b>71651</b>	<b>9994</b>

DAX queries,  
Manipulation,  
Visualization



# SQL WEEKLY PROJECT BOOTCAMP

6. Provide the sales ranking based on customer ID (top 5 sales).

## Query No 6

```
select customer_id, customer_name, sum(sales) as total_sales
from sample s
group by customer_id, customer_name
order by total_sales desc
limit 5;
```

### Output

A-Z customer_id	A-Z customer_name	123 total_sales
SM-20320	Sean Miller	25,035
TC-20980	Tamara Chand	19,046
RB-19360	Raymond Buch	15,107
TA-21385	Tom Ashbrook	14,589
AB-10105	Adrian Barton	14,460

7. Provide the customer ranking based on sales, partitioned by segment.

## Query No 7

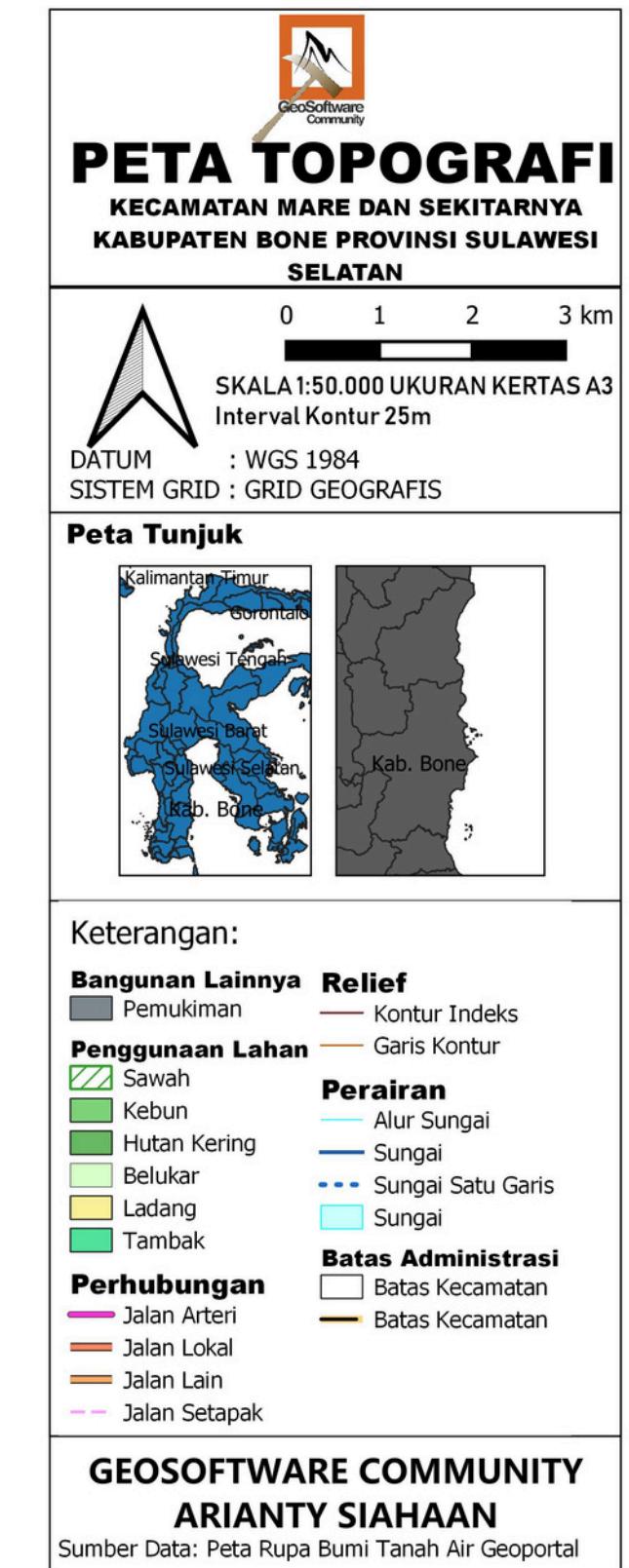
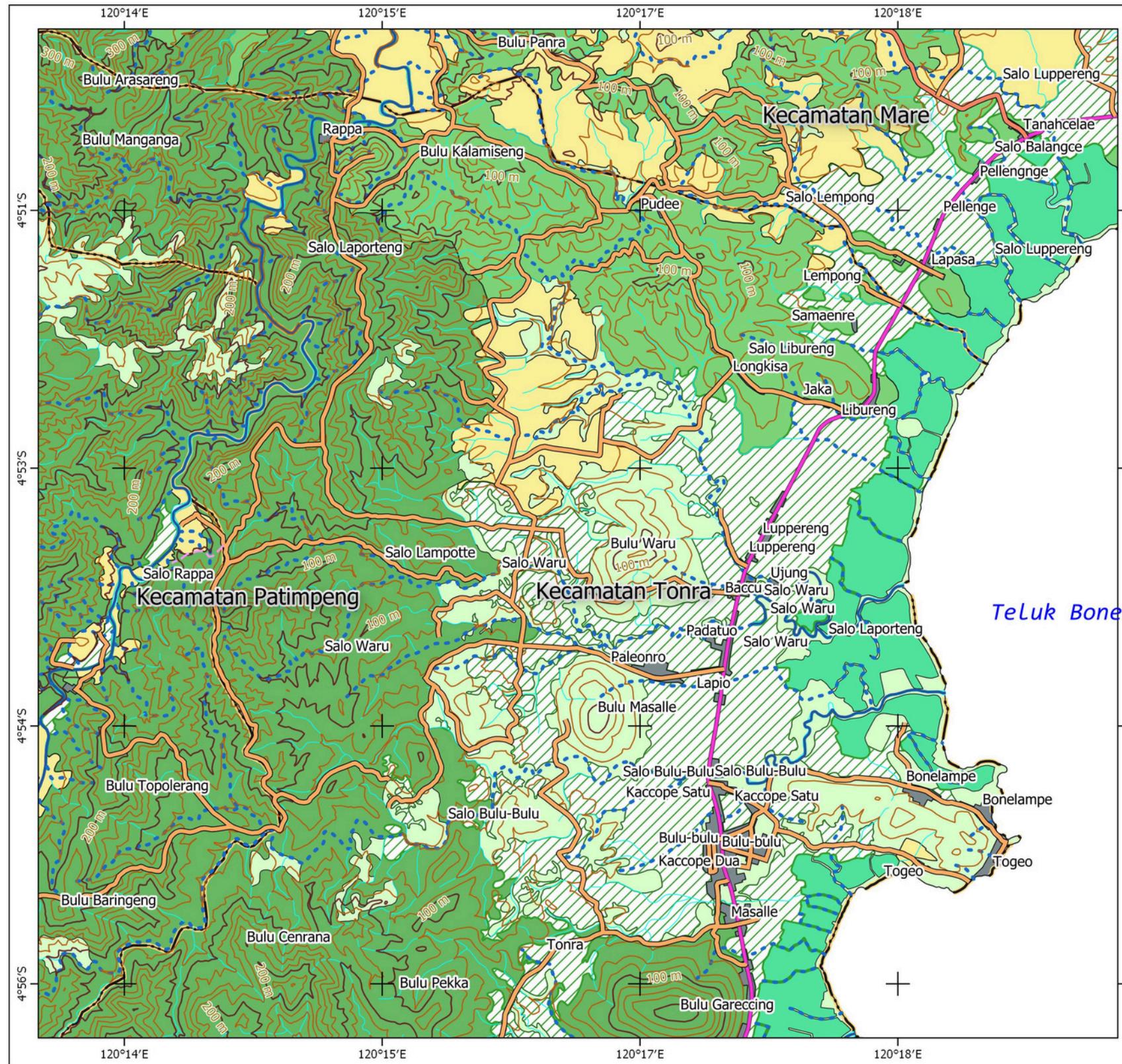
```
with ranking_customer as (select customer_id, segment, sum(sales) as total_sales
                           from sample
                           group by customer_id, segment) -- CTE
select customer_id, segment, total_sales,
       rank() over(partition by segment order by total_sales desc) as ranked
from ranking_customer;
```

### Output

A-Z customer_id	A-Z segment	123 total_sales	123 ranked
RB-19360	Consumer	15,107	1
AB-10105	Consumer	14,460	2
KL-16645	Consumer	14,157	3
SC-20095	Consumer	14,127	4
HL-15040	Consumer	12,865	5
SE-20110	Consumer	12,198	6
CC-12370	Consumer	12,122	7
GT-14710	Consumer	11,803	8
BM-11140	Consumer	11,778	9
SM-20265	Consumer	11,451	10

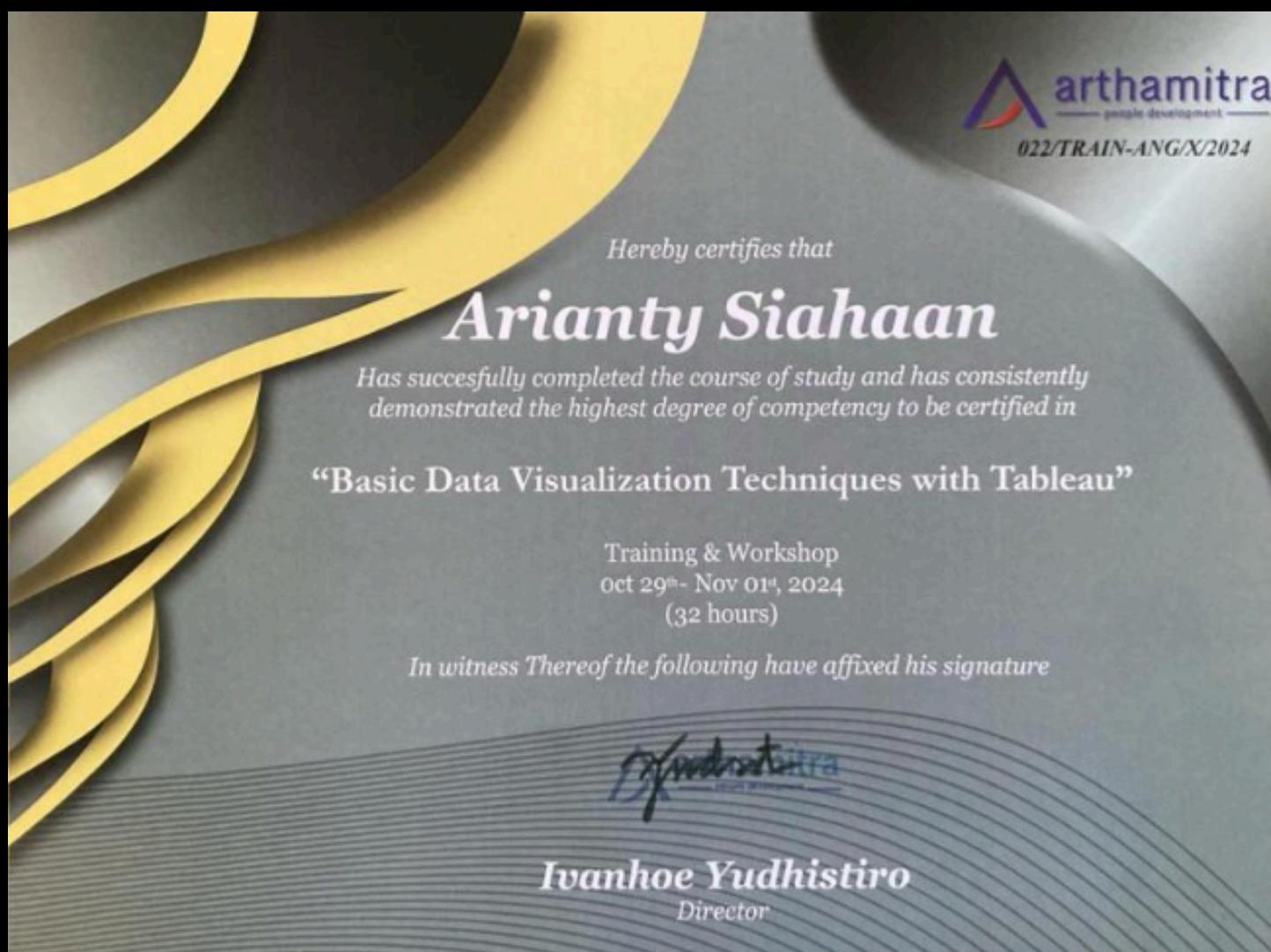


# QGIS BY GEOSOFTWARE COMMUNITY



# CERTIFICATES

# Tableau



# Data Analyst



# STATA



## Speaker at Coaching Clinic FKM UI "Goes to UAS Data Management"



# SPSS



# QGIS



# Excel



# R-PROGRAM



# Public Speaking



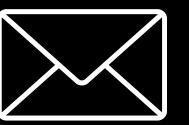
## TOEFL & Grammar



# CONTACT ME



Portfolio: [linktr.ee/AriantySiahaan](https://linktr.ee/AriantySiahaan)



Email: [ariantysiahaan@gmail.com](mailto:ariantysiahaan@gmail.com)



Linkedin:

[linkedin.com/in/ariantysiahaan/](https://linkedin.com/in/ariantysiahaan/)



Medium:

[medium.com/@ariantysiahaan](https://medium.com/@ariantysiahaan)

Thank You