PORTOFOLIO

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ABOUT ME

Hi, I'm Hamdan. I'm Highly motivated data enthusiast with experience in building and maintaining data pipelines, conducting data analysis, and creating insightful dashboards. Seeking a challenging role where I can leverage my skills to drive data-driven decision making. I am interested in education, finance, cyber security and blockchain technology.

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EDUCATION

Universitas Negeri Jakarta

Sociology Education | 2017 - 2024

Pacmann.ai

Data Engineering Bootcamp Program | 2023

WORK EXPERIENCE

Infradigital Foundation
Project Data Officer (2023-Now)
Part-time Project Support (2022-2023)
Freelance Facilitator (2021-2022)

Dampak Sosial Indonesia x Warung Pintar
Freelance Data Collection Team Coordinator
Area (2021)

Laboratory of Sociology Universitas Negeri Jakarta
Part-time Laboratory Assistant (2020-2021)

SCOPE OF PROJECT

Data Engineering

Project Management for NGO

Infradigital Foundation

My responsibility as a Project Officer mostly working in data engineering and data analysis field such as
- Build and maintain RDBMS using PostgreSQL by using data engineering processes (ETL & ELT) to support data-driven decisions for organization.
- Developed and implemented a new data management system that improved efficiency by 15%.
- Develop data integration from internal source and external source using Airbyte and Apache Airflow
- Develop business intelligent infrastructure using metabase to support data-driven program
- Identify and resolve data quality issues, working with cross-functional teams as necessary
- Conduct data profiling to identify pattern of data anomalies and to assess the quality of data
- Collaborated with team members to identify areas for improvement the program

I leverage my expertise in data engineering and data analysis to provide valuable insights on performance and effectiveness for cybersecurity training. By working closely with the project team and implementing data-driven strategies, I was able to drive improvements in performance and help ensure the success of the project. As a result, the organisation's data measurement assessment score from data.org improved 22% by 2023 from 6.3 to 7.7

DATA MATURITY SCORE (DMA) FROM DATA.ORG
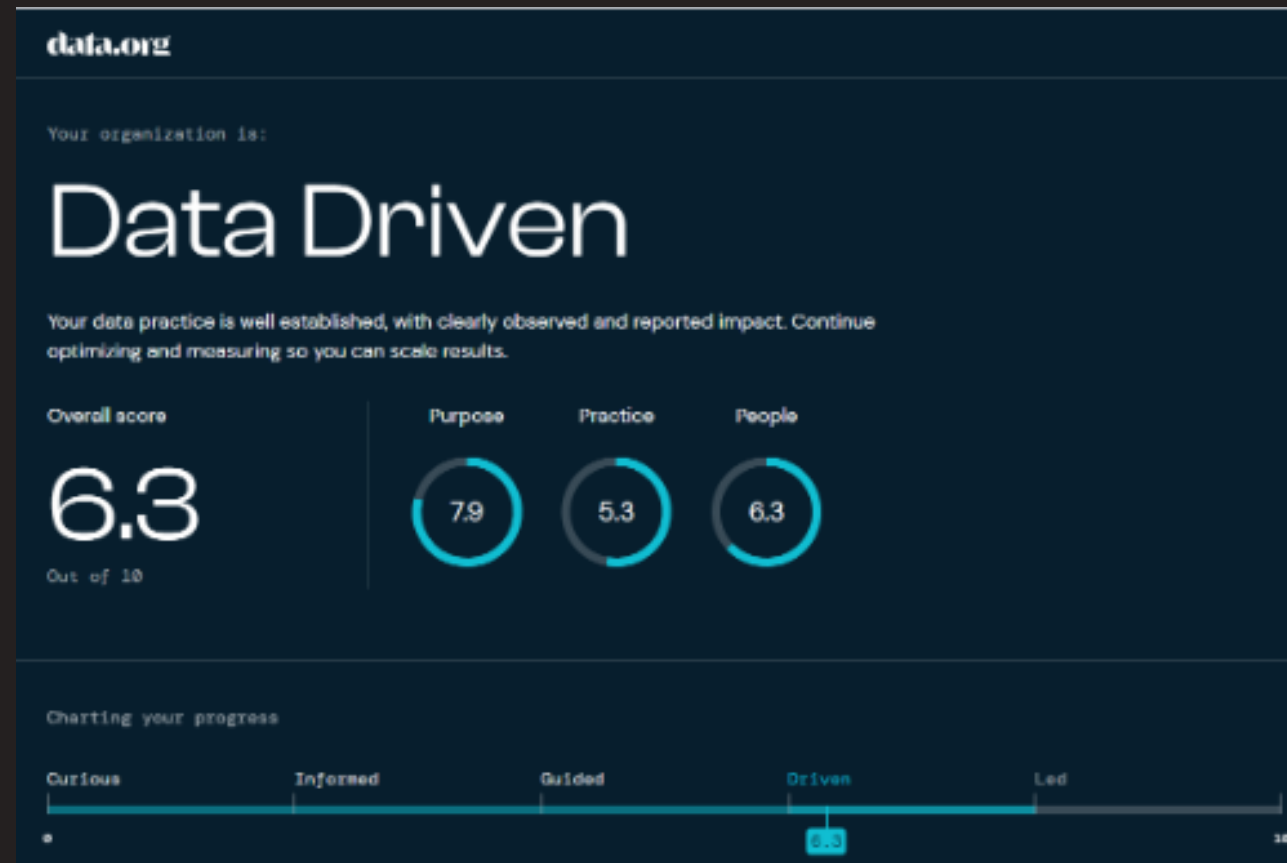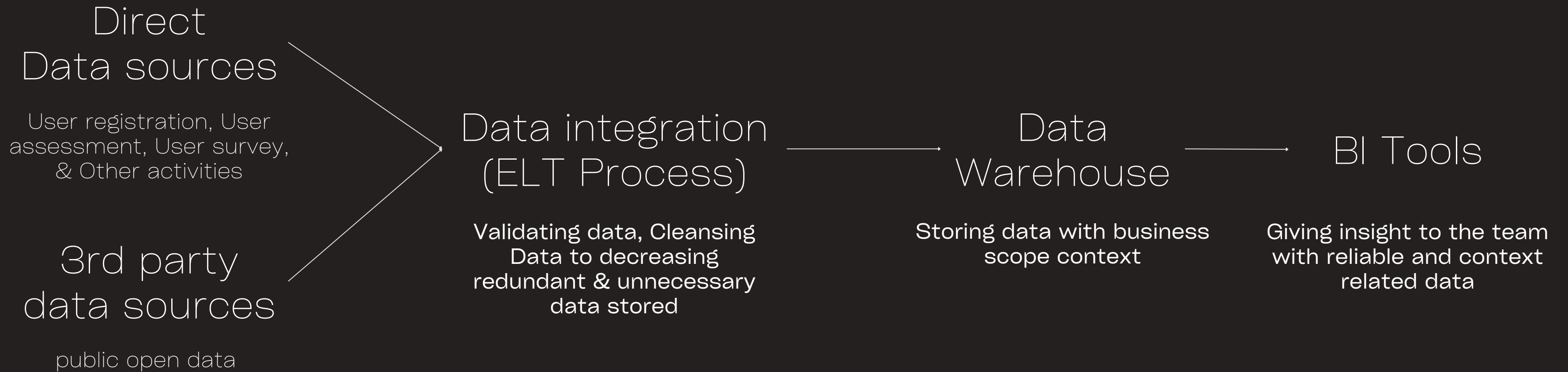

2022
Taken in March 2023
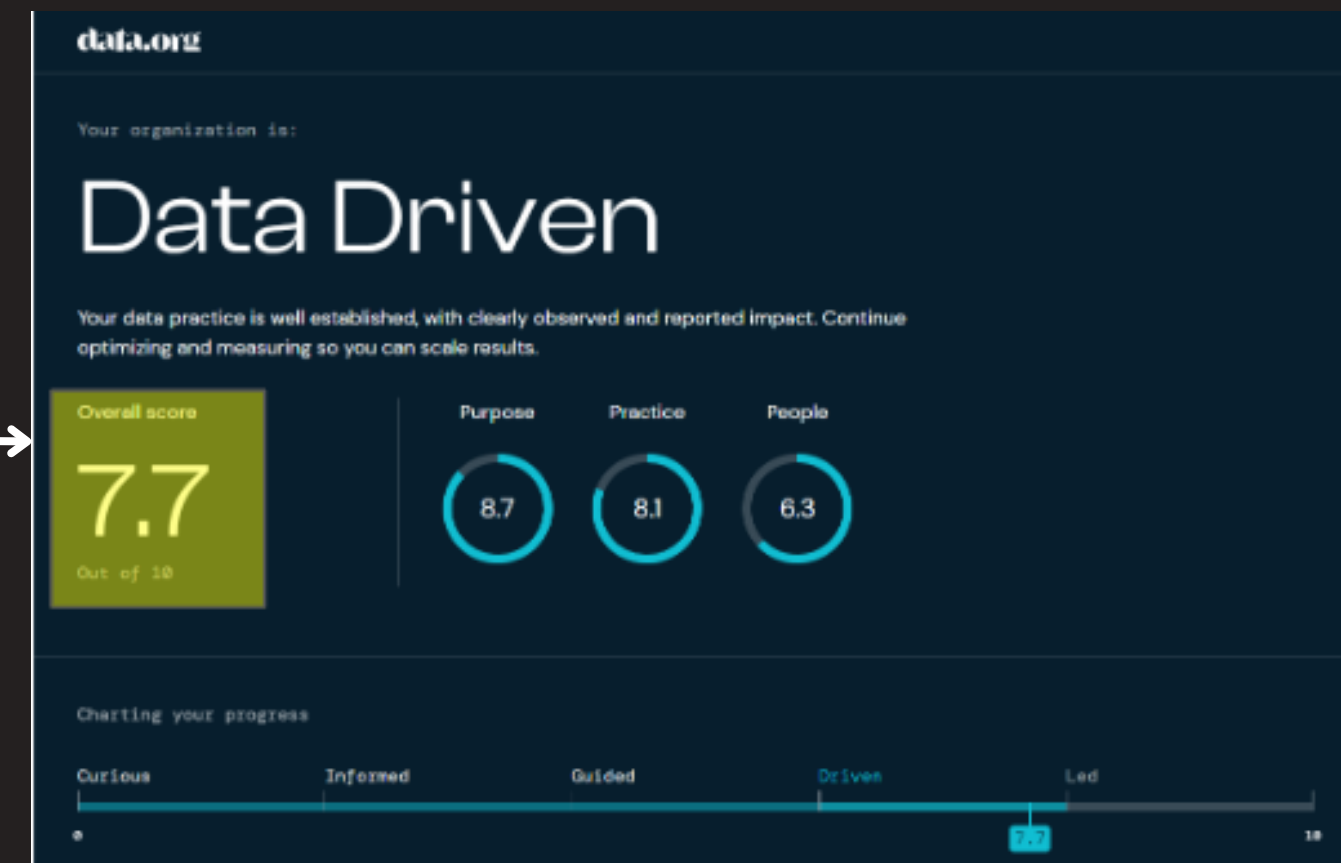
2023
Taken in March 2024

Data maturity assessment offers snapshot view of social impact organizations (SIOs) based on of data journey today, relevant tools, and resources

I helped organization to improve their best practice of data and management of data along 2023 by developing data storing guide (SOP). As the results, DMA Score improved 22% during 2023

INFRADIGITAL DATA PROCESSING

Direct
Data sources

User registration, User
assessment, User survey,
& Other activities

3rd party
data sources

public open data

Data integration
(ELT Process)

Validating data, Cleansing
Data to decreasing
redundant & unnecessary
data stored

Data
Warehouse

Storing data with business
scope context

BI Tools

Giving insight to the team
with reliable and context
related data

Tech stack used

INFRADIGITAL ANNUAL REPORT

As a Project Officer specialized in data, I am deeply involved in both project and organizational reporting. In my role as a Project Data Officer, I am responsible for collecting, processing, and analyzing large volumes of data to generate insightful reports that support data-driven decision-making within the organization.

This involves creating detailed project reports that track progress, measure outcomes, and identify areas for improvement, as well as developing comprehensive organizational reports that summarize impact assessments.

Through my expertise in data management tools like Python, SQL, Excel, and Tableau, I have streamlined data workflows and enhanced reporting efficiency, ultimately contributing to the overall success and strategic goals of the organization.
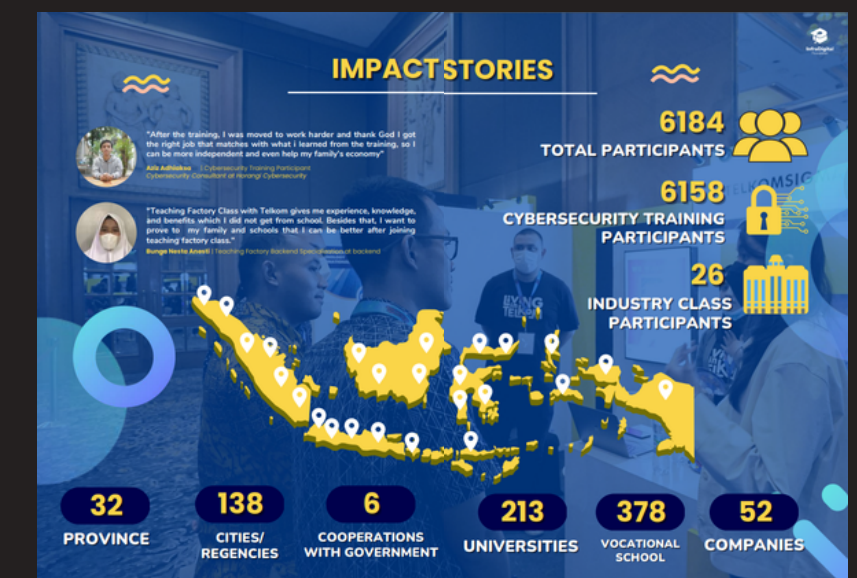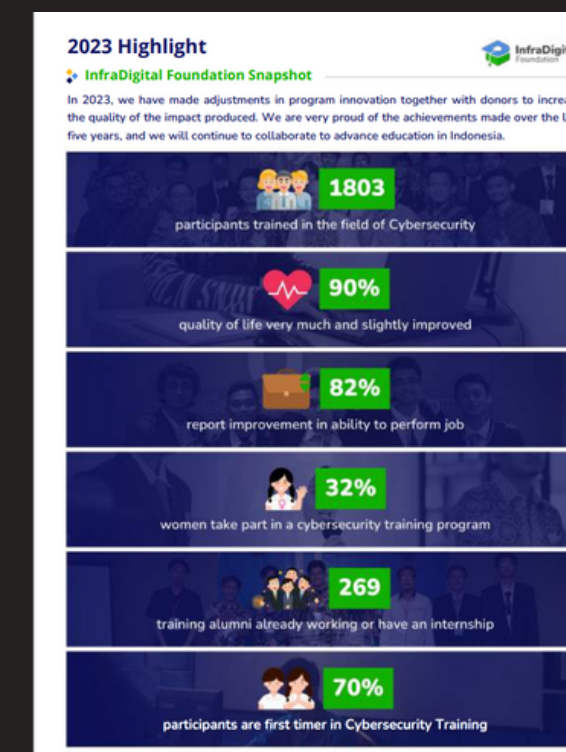
PERSONAL PROJECT

SPREADSHEET PROJECT

E-Commerce Analysis Study Case

Given 52942 transaction database record with list of column: Customer Code, Customer Name, Tax, Area, Store ID, Product Name, Box Qty, Total Weight

	A	B	C	D	E	F	G	H	I
	No	CUSTOMER CODE	CUSTOMER NAME	Tax	AREA	STORE ID	PRODUCT NAME	BOX QTY	TOTAL WEIGHT
	1	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	DRY IRON - HD1173/40	3	12
	2	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	DRY IRON - HD1173/80	1	2
	3	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	DRY IRON - HD1173/50	1	6
	4	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	DRY IRON - HD1172/99	5	14
	5	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	STEAM IRON - GC3920/24	1	1
	52936	CTR0500215	Hartono Sidoarjo	PTKP	Surabaya	RE0630	RICE COOKER 2L - PREMIUM PLUS RED - HD3132/32	2	11
	52937	CTR0500215	Hartono Sidoarjo	PTKP	Surabaya	RE0630	ACCESSORIES FOR BLENDER - HR2939/55	3	5
	52938	CTR0500215	Hartono Sidoarjo	PTKP	Surabaya	RE0630	BLENDER - 1.5 L PLASTIC - HR2102/06	1	14
	52939	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	HAIR DRYER - HP8108/02	2	4
	52940	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	STRAIGHTENER KERASHINE - HP8316/00	1	14
	52941	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	STRAIGHTENER - HP8302/00	2	11
	52942	CTR0500215	Hartono Sidoarjo	PKP	Surabaya	RE0630	GOSTYLER - MG1100/16	2	3

	H	I
18	Price Table	
19	Price per Qty Box	Rp 100.000
20	Price per Weight	Rp 1.000.000

Find Customer Name, Tax, Qty Box, Total Weight, the Price Total Qty Box, Price Total Weight, Tax Amount, and Total Amount. Price per Qty Box is 100.000 and Price per weight is Rp. 1.000.000.

No	Customer Code	Customer Name	Tax	Qty Box	Total Weight	Price Total Qty Box	Price Total Weight	Tax Amount	Total Amount
1	CTR0500215								
2	CTR0200412								
3	CTR0200320								
4	CTR0300148								
5	CTR0300007								
6	CTR0300048								
7	CTR0500905								
8	CTR0300435								
9	CTR0300242								
10	CTR0103779								
11	CTR0300011								
12	CTR0300275								
13	CTR0200400								
14	CTR0100455								
15	CTR0500343								

Fill the Customer Name

Based on database sheet, we can use VLOOKUP formula to find and fill the customer name column (C2) based on customer code (B2)

=VLOOKUP(Test!B2;Database!B:D;2;0)

Fill the Tax Column

=VLOOKUP(Test!B2;Database!B:D;3;0)

B	C	D
CUSTOMER CODE	CUSTOMER NAME	Tax
CTR0500215	Hartono Sidoarjo	PKP
CTR0500215	Hartono Sidoarjo	PKP
CTR0500215	Hartono Sidoarjo	PKP
CTR0500215	Hartono Sidoarjo	PKP
CTR0500215	Hartono Sidoarjo	PKP
CTR0500215	Hartono Sidoarjo	PKP

Data in database sheet

B	C
Customer Code	Customer Name
CTR0500215	Hartono Sidoarjo
CTR0200412	Login Megastore Bandung
CTR0200320	Mutiara Super Kichen
CTR0300148	Fortuna Yogyakarta
CTR0300007	Ada Setiabudi

Data to fill based on database sheet

B	D
Customer Code	Tax
CTR0500215	PKP
CTR0200412	PTKP
CTR0200320	PTKP
CTR0300148	PTKP
CTR0300007	PTKP
CTR0300048	PTKP
CTR0500905	PTKP

Data to fill based on database sheet

Fill the Qty Box & Total Weight

By using SUMIF, we can get total quantity box(E) and total weight(F) for each customer

Qty Box formula

=SUMIF(Database!B:B;Test!$B2;Database!H:H)

Total Weight formula

=SUMIF(Database!$B:$B;Test!$B2;Database!I:I)

Customer Name	Qty Box	Total Weight
Hartono Sidoarjo	5401	30696
Login Megastore Bandung	745	4889
Mutiara Super Kichen	1313	4920
Fortuna Yogyakarta	416	2396
Ada Setiabudi	456	1892
Atlanta Ngaliyan	806	4773

Find Tax Amount

If the Tax column is PKP then it is 10% & if PTKP it is 0%

We can using IF function to determine tax amount of customer based on Tax Column

=IF(D2="PKP";10%;0%)

Customer Code	Customer Name	Tax	Tax Amount
CTR0500215	Hartono Sidoarjo	PKP	10%
CTR0200412	Login Megastore Bandung	PTKP	0%
CTR0200320	Mutiara Super Kichen	PTKP	0%
CTR0300148	Fortuna Yogyakarta	PTKP	0%

Find Total Amount

We can using basic function to determine total amount

=(G2+H2)+((G2+H2)*I2)

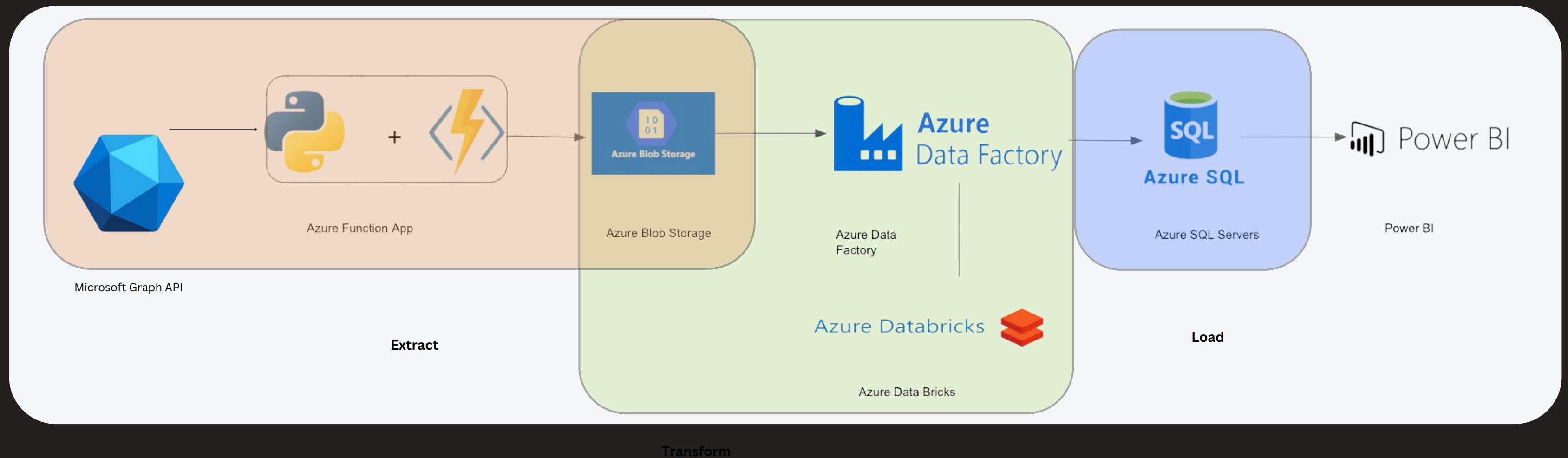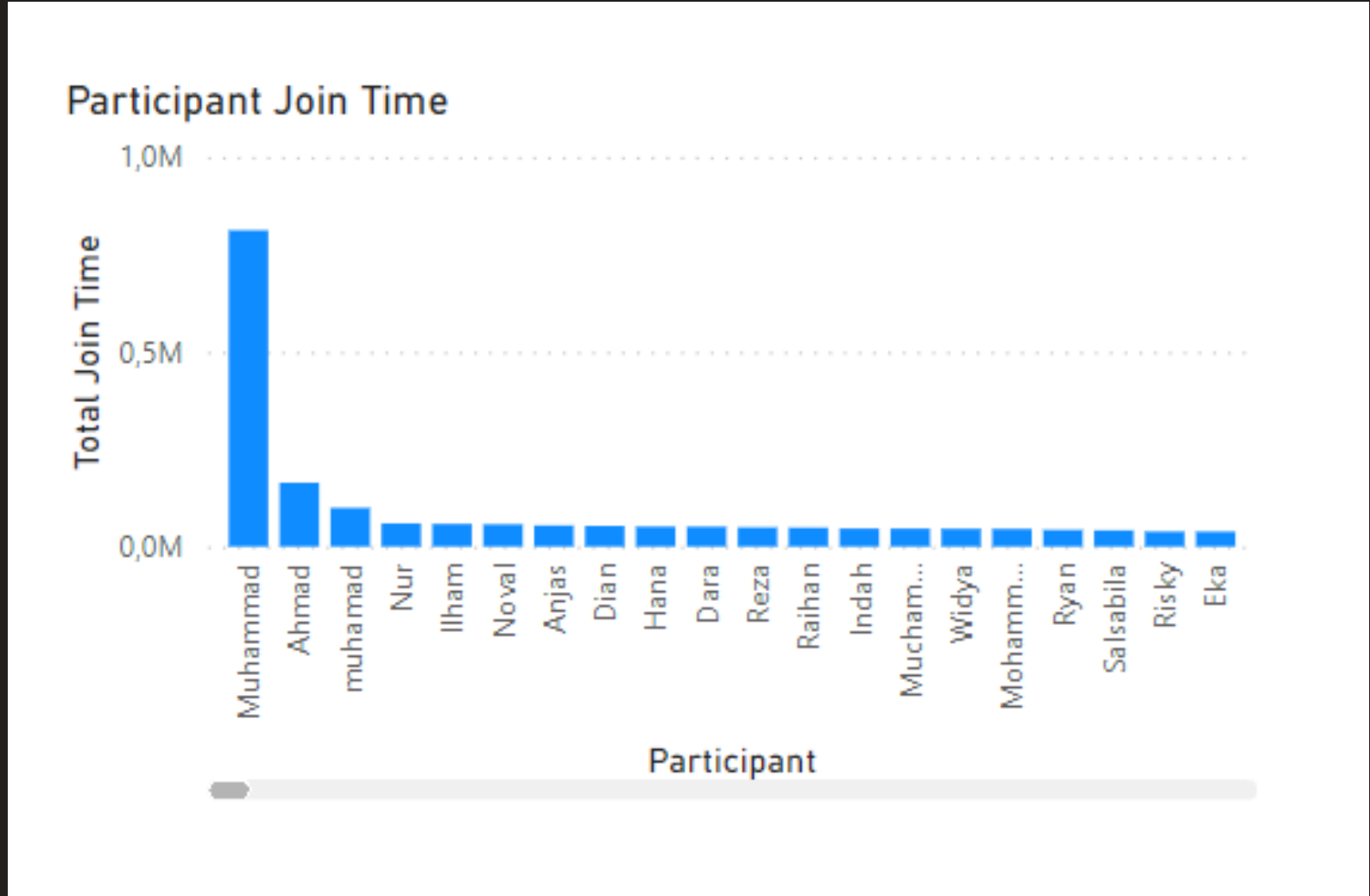| Total Amount |
|---|
| Rp 34.359.710.000 |
| Rp 4.963.500.000 |
| Rp 5.051.300.000 |
| Rp 2.437.600.000 |

MICROSOFT TEAMS MEETING REPORT

Using Azure Function, Azure Blob Storage, Azure Data Factory, and PowerBI

PROJECT OVERVIEW

This project suitable for event organizer or organization which handling webinar or online meeting using Microsoft Teams. The project mostly using Microsoft product such as Microsoft Teams, Azure Function, Azure Blob Storage, Azure Data Factory, and PowerBI.

PIPELINE

Azure Function App

Azure Blob Storage

Azure Data Factory

Azure SQL Servers

Power BI

Microsoft Graph API

Azure Data Bricks

Extract

Transform

Load

Sample of Chart

ANALYTICS OF THE DATA

Finally, once the data is stored in a relational database, we can then generate reports on it to analyze data trends.

We can query the database directly or create analytical models and connect to BI services.

THE LOOK ECOMMERCE

Analysis Case Study

Visualize of Working Dataset

The visualization show insight of The Look ecommerce from google bigquery public data.

Table interest to run queries and analyze data are:
- bigquery-public-data.thelook_ecommerce.products
- bigquery-public-data.thelook_ecommerce.order_items
- bigquery-public-data.thelook_ecommerce.orders

Tools:
- Google BigQuery to exploring data
- Tableau Public to visualizing data

Main Points:
- Sold Product Item Category by Gender
- Top 5 Sold Product Item Categories (2021)
- Bottom 5 Sold Product Item Categories (2021)

Google BigQuery

Retrieve data from data warehouse using BigQuery

SOLD PRODUCT ITEM CATEGORY BY GENDER (2021)

Gender	Category	Value
F	Intimates	801
	Dresses	344
	Jeans	334
	Tops & Tees	331
	Swim	315
	Fashion Hoodies & ..	311
	Maternity	310
	Shorts	295
	Accessories	290
	Sleep & Lounge	275
	Plus	273
	Sweaters	270
	Socks & Hosiery	270
	Active	253
	Outerwear & Coats	223
	Leggings	208
	Blazers & Jackets	208
	Pants & Capris	203
	Skirts	142
	Suits	72
	Jumpsuits & Romp..	66
	Clothing Sets	8
M	Pants	497
	Underwear	480
	Jeans	477
	Tops & Tees	462
	Swim	440
	Sweaters	436
	Sleep & Lounge	431
	Fashion Hoodies & ..	419
	Socks	412
	Shorts	407
	Active	379
	Outerwear & Coats	375
	Accessories	372
	Suits & Sport Coats	340

Female   Male

Top 5 Sold Product Item Categories (2021)

Category ⩸

Category	Male	Female	Total
Intimates		843	843
Jeans	486	345	831
Tops & Tees	477	338	815
Swim	457	323	780
Fashion Hoodies & Sweatshirts	424	318	742

Total Item Sold ⩸

Female ■ Male

Intimates are the most sold product item category at The Look E-Commerce which 100 of buyers are Female

Bottom 5 Sold Product Item Categories (2021)

Category �

Category	Total Item Sold
Leggings	210
Skirts	145
Suits	72
Jumpsuits & Rompers	67
Clothing Sets	8

Total Item Sold �
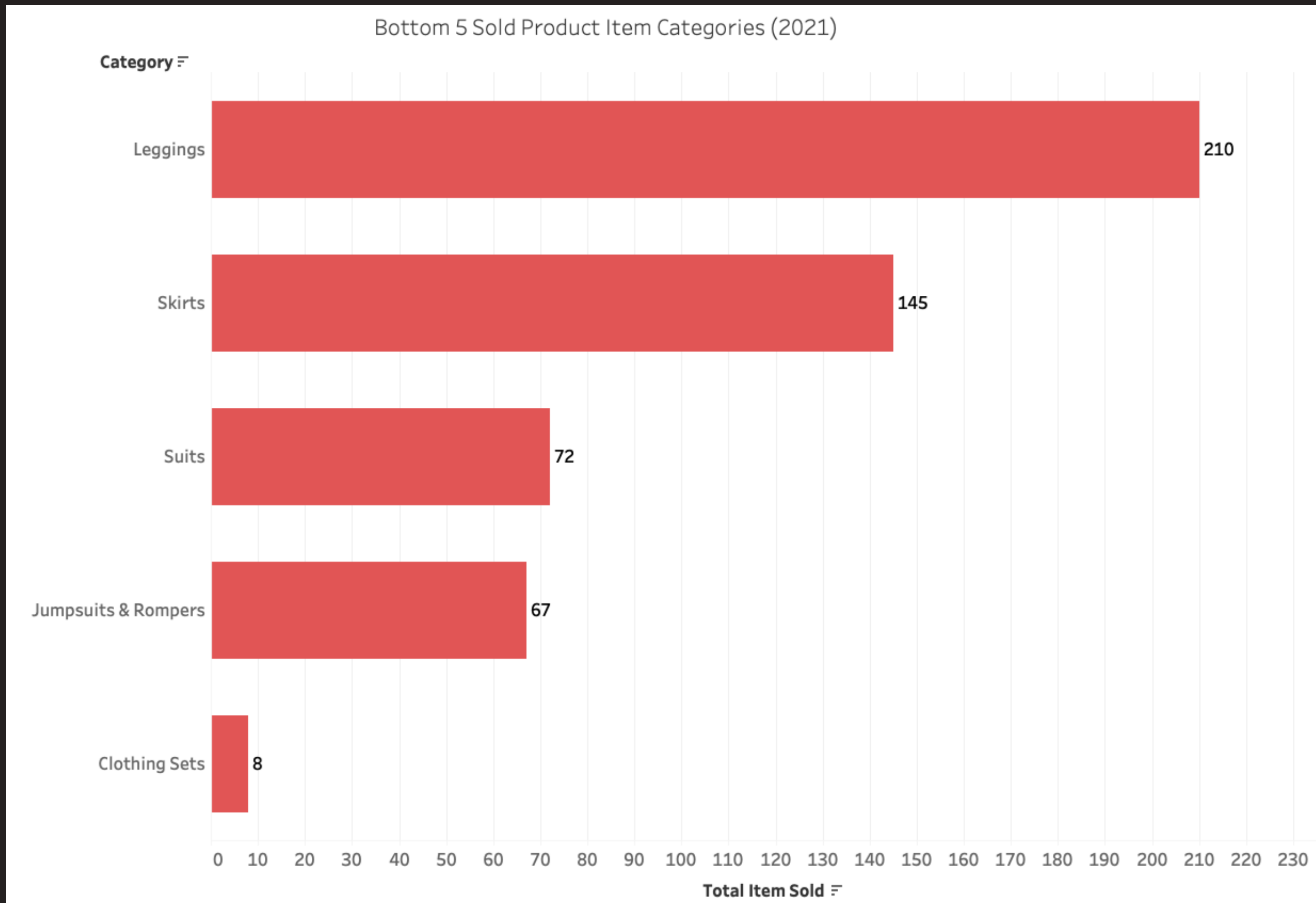
Even female item category are in first place of top 5 sold item at The Look ecommerce, 5 Least salable of sold product item categories come from female product categories. The most unpopular category is clothing sets

REFERENCES

Infradigital Foundation
- Rofai Ahmad (+62 856-9732-0212)
- Syarifah Dessy (+62 877-8619-4242)
- Triana Nur Baity (+62 813-9394-9707)

THANK YOU