

2025

Code the Map
Decode the Future

MAPID Academy

WebGIS Development Bootcamp

4 Agustus - 30 Oktober



Outline

Location Value

Materials:

1. Konsep Perspektif Lokasi
2. Problem Definition & Spatial Thinking
3. Location Analytics (Business Cases)
4. Recall: Cloud GIS Platform vs Desktop GIS Platform
5. Introduction to GEO MAPID (Map Viewer & Map Editor)

Hands-On:

1. Understanding Basic Features GEO MAPID
2. Quickstart Mapping on GEO MAPID

MAPID Academy

WebGIS Development Bootcamp



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03

Location Value

Lokasi menjadi salah satu aspek yang punya value dalam mengidentifikasi kebutuhan bisnis.

Masayoshi Son
Founder, Chairman & CEO

SoftBank was founded for what purpose? For what purpose was Masa Son born? It may sound strange, but I think I was born to realize ASI. I am super serious about it. Are you serious, you may ask, can you do it? Actually, that was a question I asked myself. But this morning, I solved the most complex problem. That's why I am super confident today. Don't ask me why. Looking back, evolution of humanity, 200,000 years back, human used to drive evolution. Humans created tools, humans drove evolution. Pretty soon, AGI will come, maybe in five years, even in three years, sometime in three years to five years, AGI will come. Beyond that, AGI will drive evolution. In the past, geniuses have driven evolution of humanity, different geniuses stimulated each other and delivered evolution. Going forward, AGI stimulates AGI and drives evolution. Because AGI is much smarter than humans. Smarter AGIs stimulate smarter AGIs accelerate evolution. It's non-stoppable. Then, ASI will come. I think ASI will come sometime in 10 years. 10,000x smarter than humans. Looking back 200,000 years of the human history, compared to that, just less than 10 years, ASI will come.

SoftBank Group • AGM 2024 21 Jun, 2024

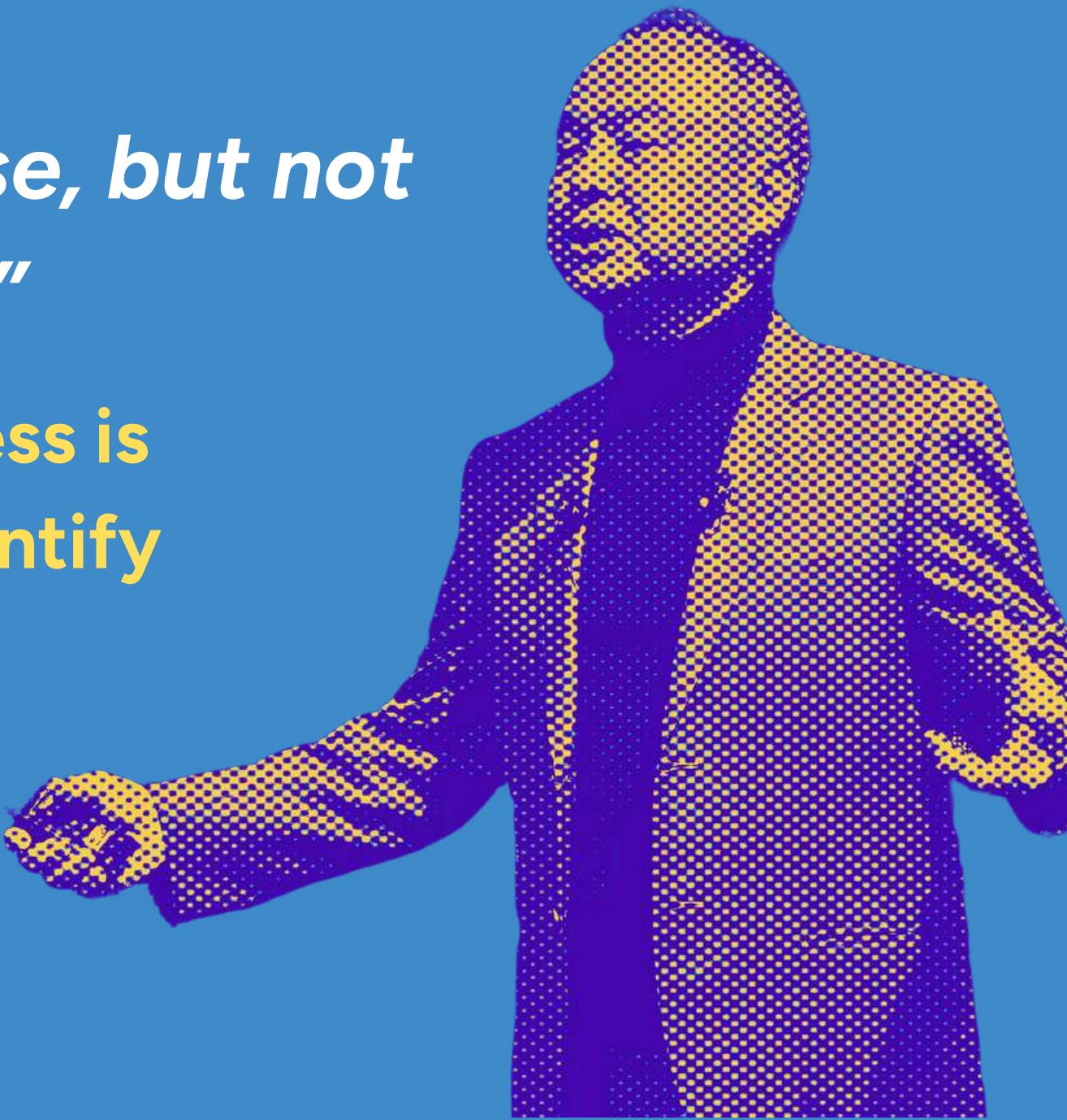
This highlight was created using Quatr Pro

Quatr

"Every company has a purpose, but not all have meaningful purposes"

CTA: If the core purpose of a business is to create value, then how do we identify that specific value?

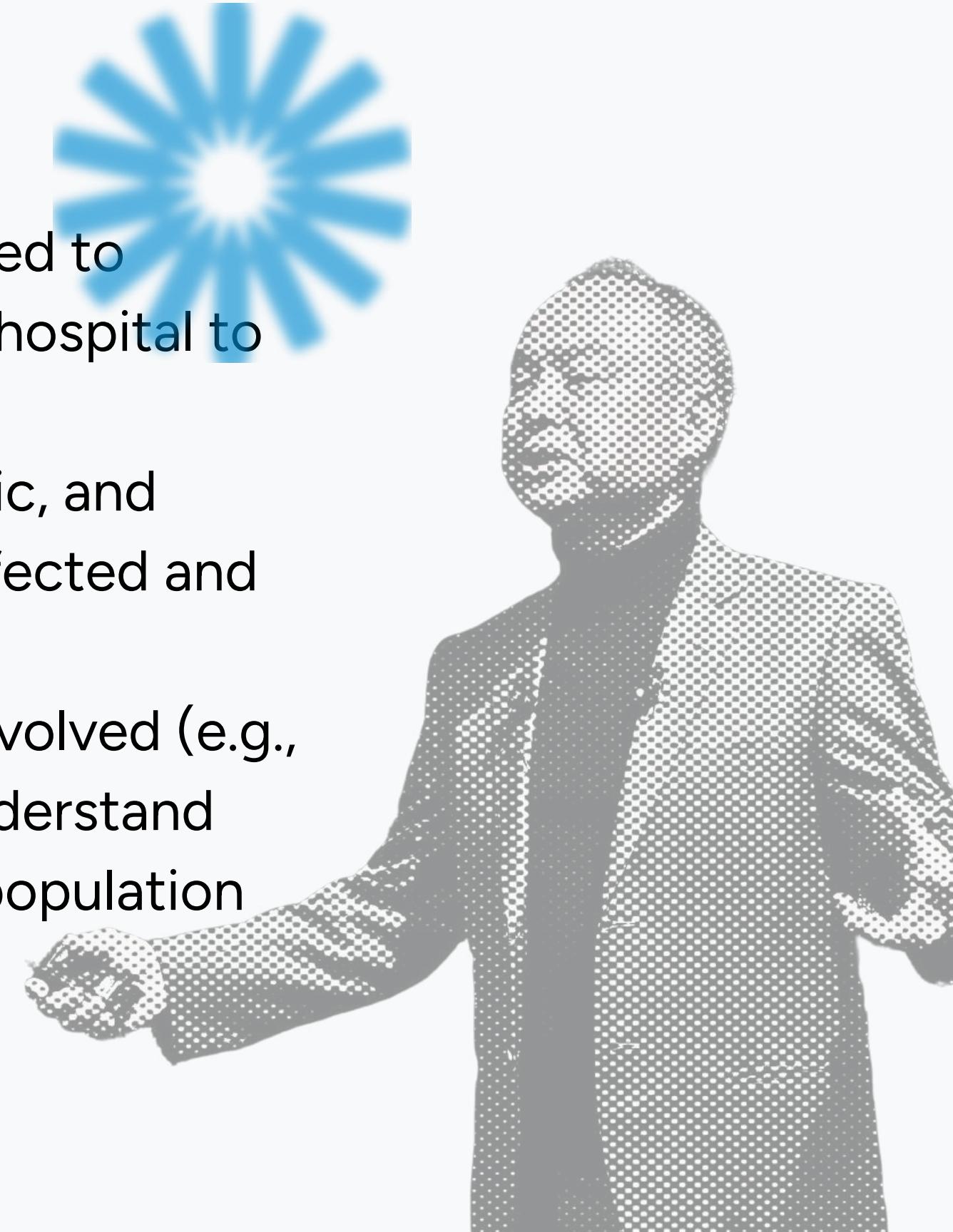
Let's think spatially!



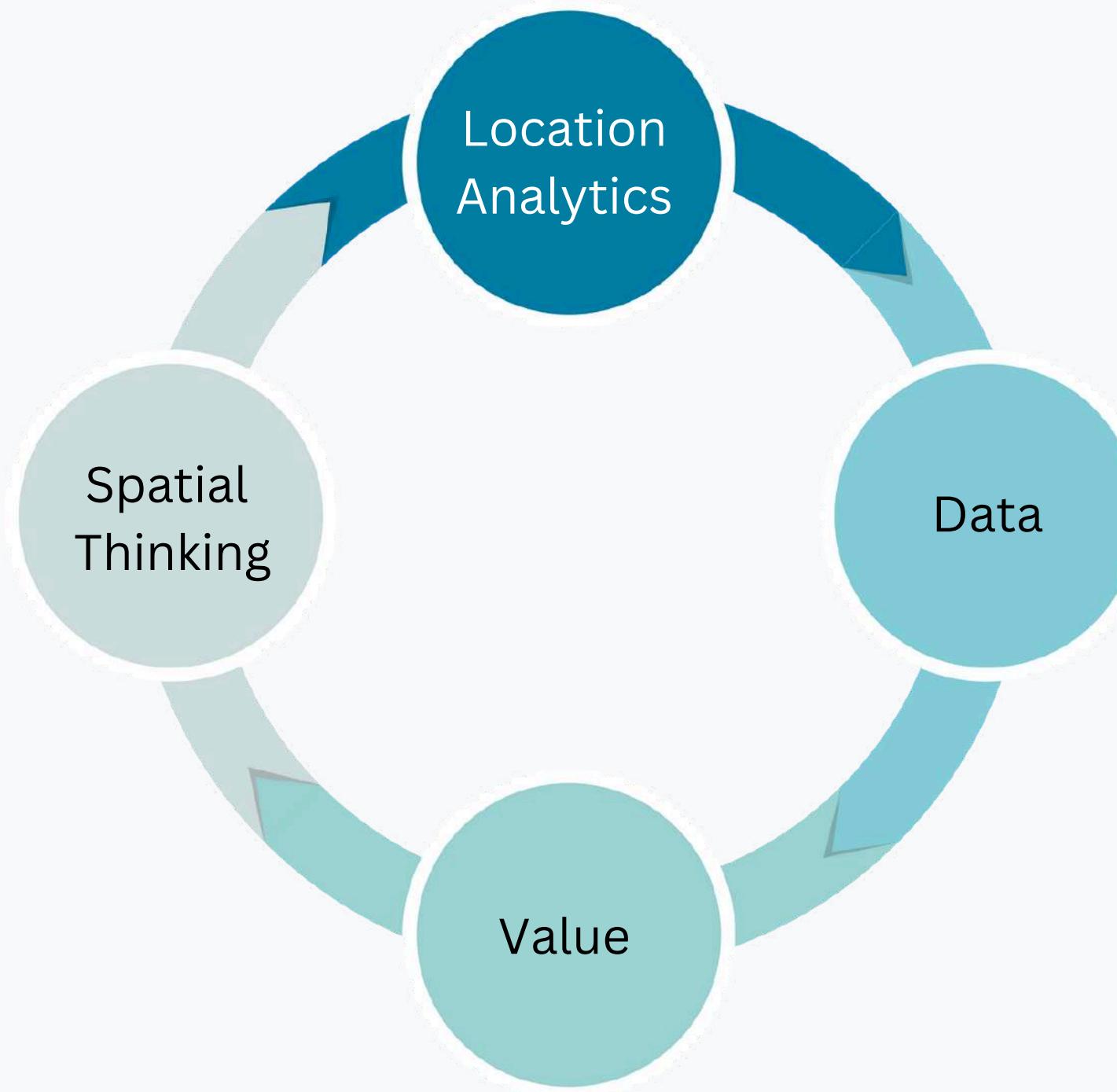
Understanding the Problems

Let's think spatially!

- **Define the Problem or Objective:** Clearly state what you need to address or achieve. Example: "Where should we build a new hospital to best serve the community?"
- **Understand the Context:** Consider physical, social, economic, and cultural aspects relevant to your problem. Identify who is affected and involved in the issue.
- **Identify Key Components:** List out the main components involved (e.g., population, transportation, existing healthcare facilities). Understand how these components interact with each other (e.g., how population density affects healthcare demand).



See This Cycle!



Value

Apa yang hendak dicapai oleh bisnis?

Spatial Thinking

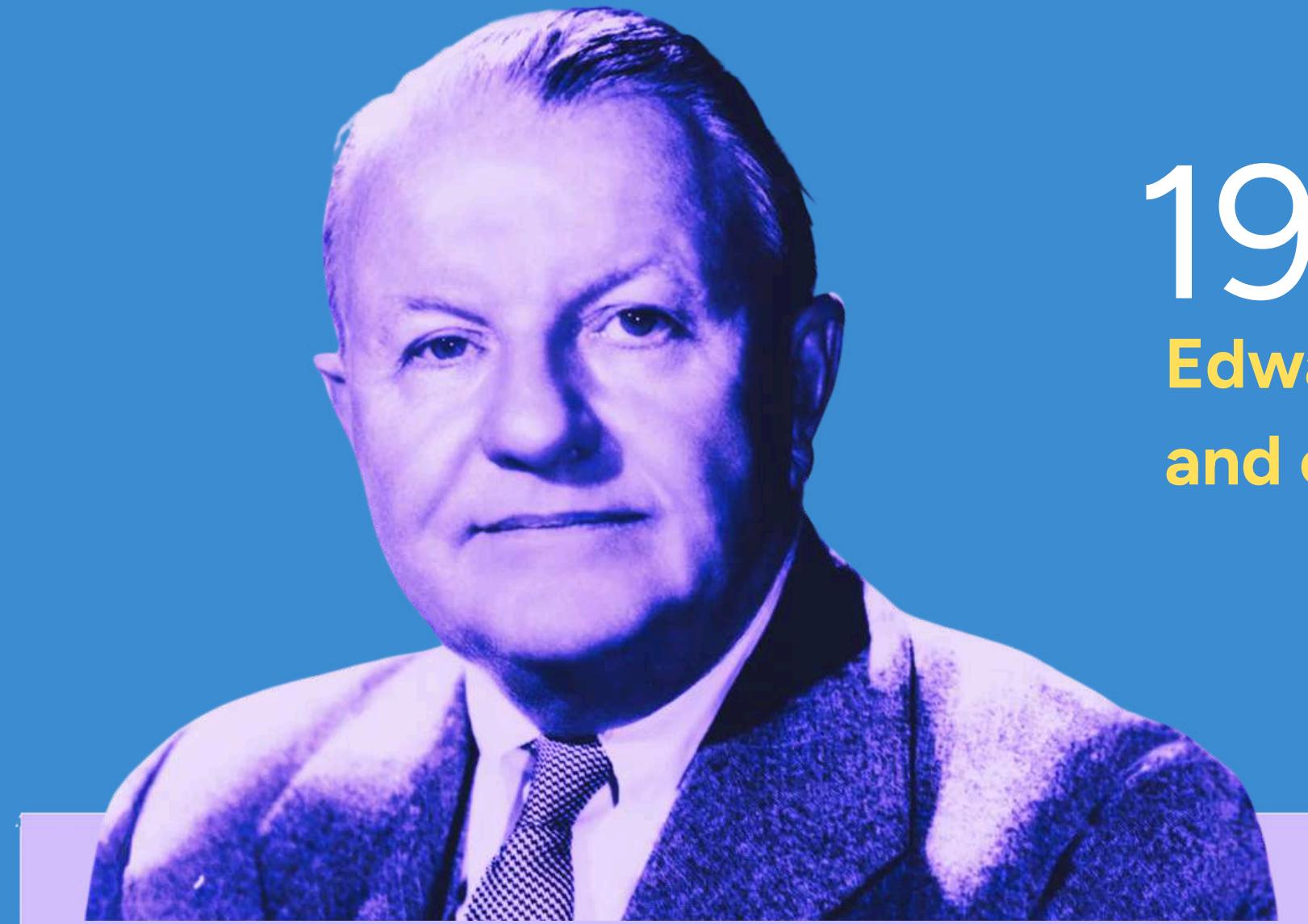
Terjemahkan tujuan bisnis jadi pertanyaan tentang **LOKASI**

Location Analytics

Lakukan 4 teknik analisis, seperti **Deskriptif, Eksplanatori, Prediktif, dan Preskriptif**

Data

Perhatikan data lokasi yang akurat dan relevan



Edward Jones®
MAKING SENSE OF INVESTING

1980

Edward Jones conducted a series of analyses and consultations

discovered that its resonating value proposition was that it offered a highly personalized investment service to those individual customers who wanted to delegate investment decisions

This spatial reasoning resulted in the rapid growth of Edward Jones from 400 to 1,000 locations in a seven-year period



Spatial Thinking/Reasoning

Catch the idea!

Value?

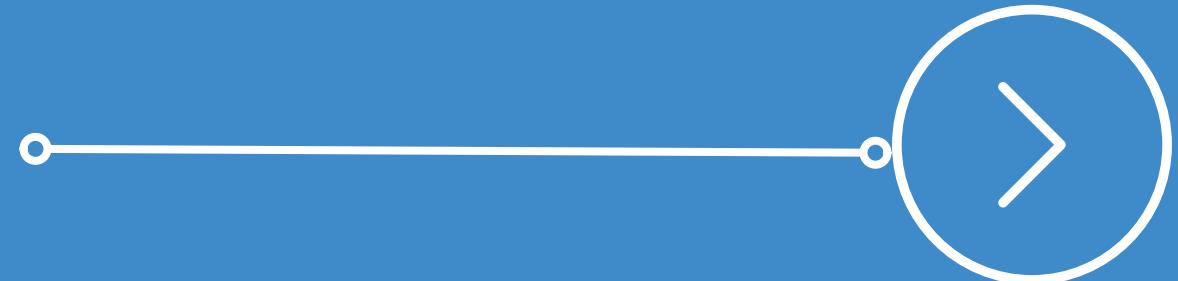
- Efficiently and quickly match passengers with drivers.
- Provide accurate and competitive estimates for time and pricing

Which driver is closest and has the fastest estimated time of arrival (ETA) to the passenger's location?

Spatial Thinking?

Location Analytics?

Data?



Location Analytics?

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Descriptive Analysis

What is happening?

Example: Displaying a real-time map in your app that shows the locations of nearby drivers

Explanatory Analysis

Why is this happening?

Example: Analyzing why wait times in Area X are consistently long every Friday night

Predictive Analysis

What is likely to happen?

Example: Based on historical data and upcoming events (e.g., a concert at GBK), we predict a spike in goride at 10 PM.

Prescriptive Analysis

What should be done?

Example: Based on historical data and upcoming events (e.g., a concert at GBK), we have to send notifications and offer incentives or bonuses to drivers near GBK before ends.

Data?



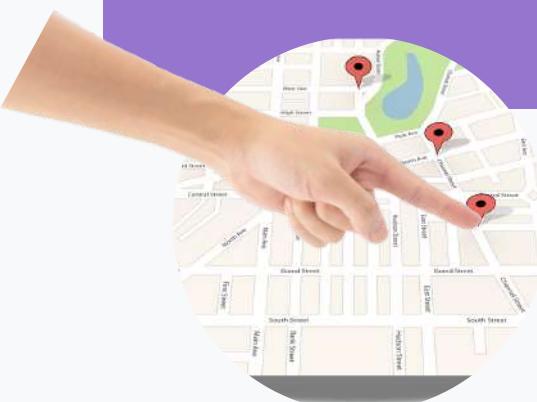
Real-time GPS data
Historical trip data
Third-party location data
Area polygons



Try to Respond!



Sebuah perusahaan manufaktur telah memproduksi barang konsumsi di kota Nairobi sejak 1995. Mereka sudah memiliki beberapa fasilitas produksi dan gudang di berbagai wilayah. Perusahaan ini ingin mengoptimalkan jaringan distribusi mereka agar lebih efisien, mengurangi biaya, dan memastikan produk sampai ke pelanggan dengan cepat.



Try to Respond!

Value

Apa yang hendak dicapai oleh bisnis?

Spatial Thinking

Terjemahkan tujuan bisnis jadi pertanyaan tentang **LOKASI**

Location Analytics

Lakukan 4 teknik analisis, seperti **Deskriptif, Eksplanatori, Prediktif, dan Preskriptif**

Data

Perhatikan data lokasi yang akurat dan relevan

Code the Map
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Business Use Cases



Logistics Optimization



Supply Chain Distribution



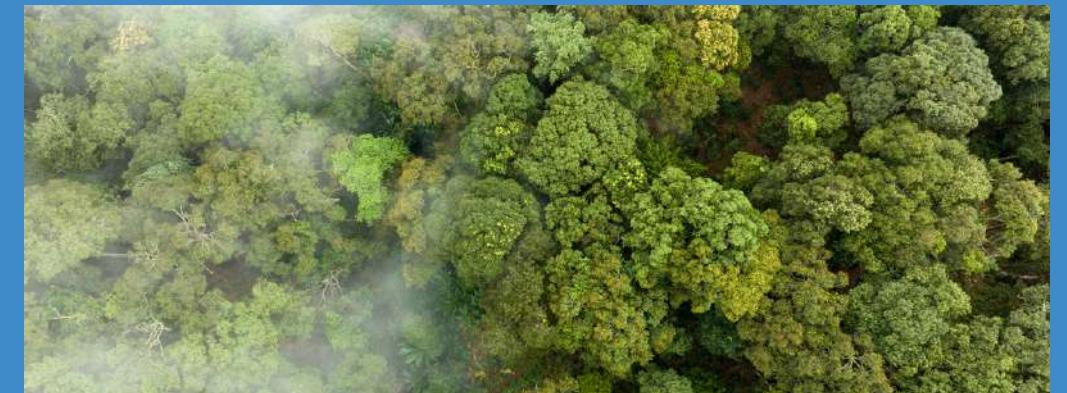
Land Development



Aset Appraisal



Transit Oriented Development



Environmental Protection

Business Use Cases

Logistics Optimization

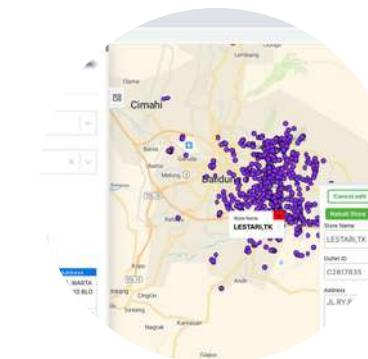


- Fleet Management
- Route Optimization
- Geofencing & Alerts
- Demand Forecasting
- Site Selection

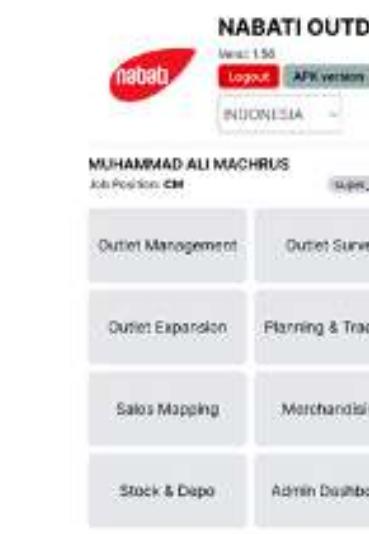
The image displays a composite of three screens from a logistics management system. The top right screen is a map of the Indonesian island of Java, specifically the western coast, showing numerous green icons representing truck locations along the routes. The bottom left and right screens show detailed route planning for a specific trip from Majalengka to Bekasi. Each of these screens includes a map, a search interface for 'Advance Search' (with fields for Order ID, Status, Customer, Province, and Cargo), and a 'Navigasi' (Navigation) panel. The navigation panels show 'Order Info' (No Order), 'Shipper' (PT Wijaya Karya Beton, Tbk.), 'Transporter' (SISU SPl.), 'Armada' (Hendri - L-8972-UV), 'Route' (KABUPATEN MAJALENGKA - KABUPATEN BEKASI), and 'Lokasi' (PPB Majalengka, GPN Cikarang). The bottom right panel also includes a 'Pilih Driver' (Select Driver) dropdown and route summary information.

Business Use Cases

Supply Chain Distribution



Outlet Management



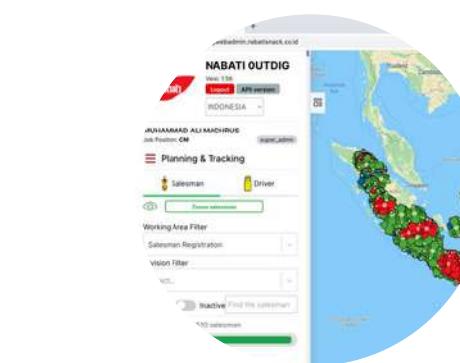
One-stop solution for
Planning & Tracking



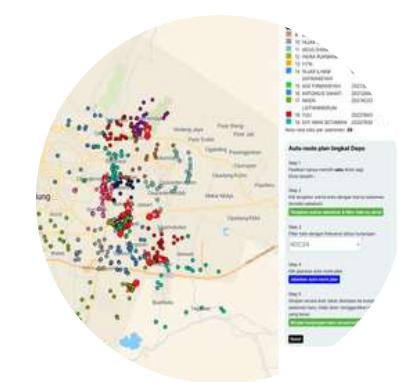
Mobile Application



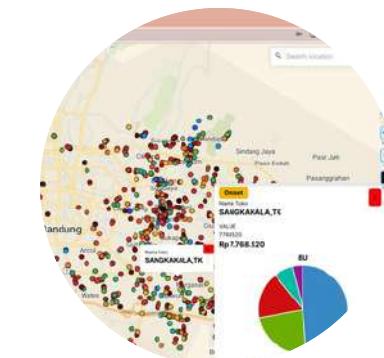
Outlet Survey



Tracking Salesman Activity



Auto Routing



Omzet Outlet

- Outlet Management
- Outlet Survey
- Salesman Activity
- Auto Planing
- Business Insight

Business Use Cases

Land Development



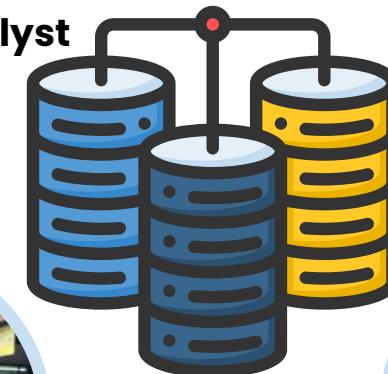
- Site Selection
- Infrastructure Planing
- Environmental Assessment
- Risk Assessment
- Market Analysis
- Land Use Planning



Business Analyst



Survey



Cloud Big Data



Tech & Dev



Smart Sensing



Business Use Cases

Asset Appraisal



- Accurate Valuation
- Comparable Analysis
- Market Trends
- Risk Assessment
- Zoning and Regulation
- Investment Analysis
- Data Validation
- Transparent Reporting

The collage consists of five screenshots:

- Top Left:** A mobile app interface titled "danamas Danamas End to End Testing". It shows a sidebar with options like "Buat Layer Baru", "Unggah File", and "Join Table". Below is a table titled "Appraisal Test" with three rows, each showing a surveyor's name, status (e.g., "On Process", "Assign"), and borrower information.
- Top Middle:** A desktop application interface showing a map of Southeast Asia with a search bar labeled "Caril". Below the map is a table with columns "No.", "Surveyor", "Status", "Nama Borrower", and "Kode L".
- Top Right:** A mobile phone displaying a map of Bandung, Indonesia, with a search bar "Search location". Below the map is a table titled "Pilih atau survei data pembanding (3 titik)".
- Bottom Left:** A desktop application interface showing a detailed report titled "LAPORAN HASIL PENILAIAN AGUNAN". The report includes sections for "PELEJASANAN PENILAIAN" and "RINGKASAN HASIL PENILAIAN".
- Bottom Right:** A mobile phone displaying a summary table titled "Total Indikasi nilai tanah agunan" with a total value of "Rp.5.474.159".

What's the difference?

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CLOUD
CLOUD
CLOUD
CLOUD

GIS ?



DESKTOP
DESKTOP
DESKTOP
DESKTOP

Basic Differences

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CLOUD GIS

Location Analytics

Simple to Medium Data Processing

Business Focused (Expand, etc)

Real Time Processed

Cloud Based

DESKTOP GIS

GIS Warehouse Analysis

Simple to Advance Data Processing

Majority on Academic Purposes

Statically Proccesed

Desktop Based



Introduction to GEO MAPID

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GEO MAPID: What can I do?

- Creating a custom map by self-digitizing,
- Visualizing existing data,
- Accessing data provided by MAPID,
- Identifying potential locations to expand business,
- Creating a MAPID FORM,
- Making a publication,
- etc.

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MAPID

Login

Data

BOOTCAMP LOCATION ANALYTICS

MAPID Academy

Batch 12 is open

Discount up to 68% sebelum KUOTA PENUH

GEO MAPID i

PT. Multi Areal Planing Indonesia

Version 2.54.13 . About Us ↗

GEO MAPID V 2.54.13

What's New

EN ID

Sign in

Sign in to your account and enjoy the exclusive features.

E-mail / Username

Enter your E-mail / Username

Password

Enter Your Password

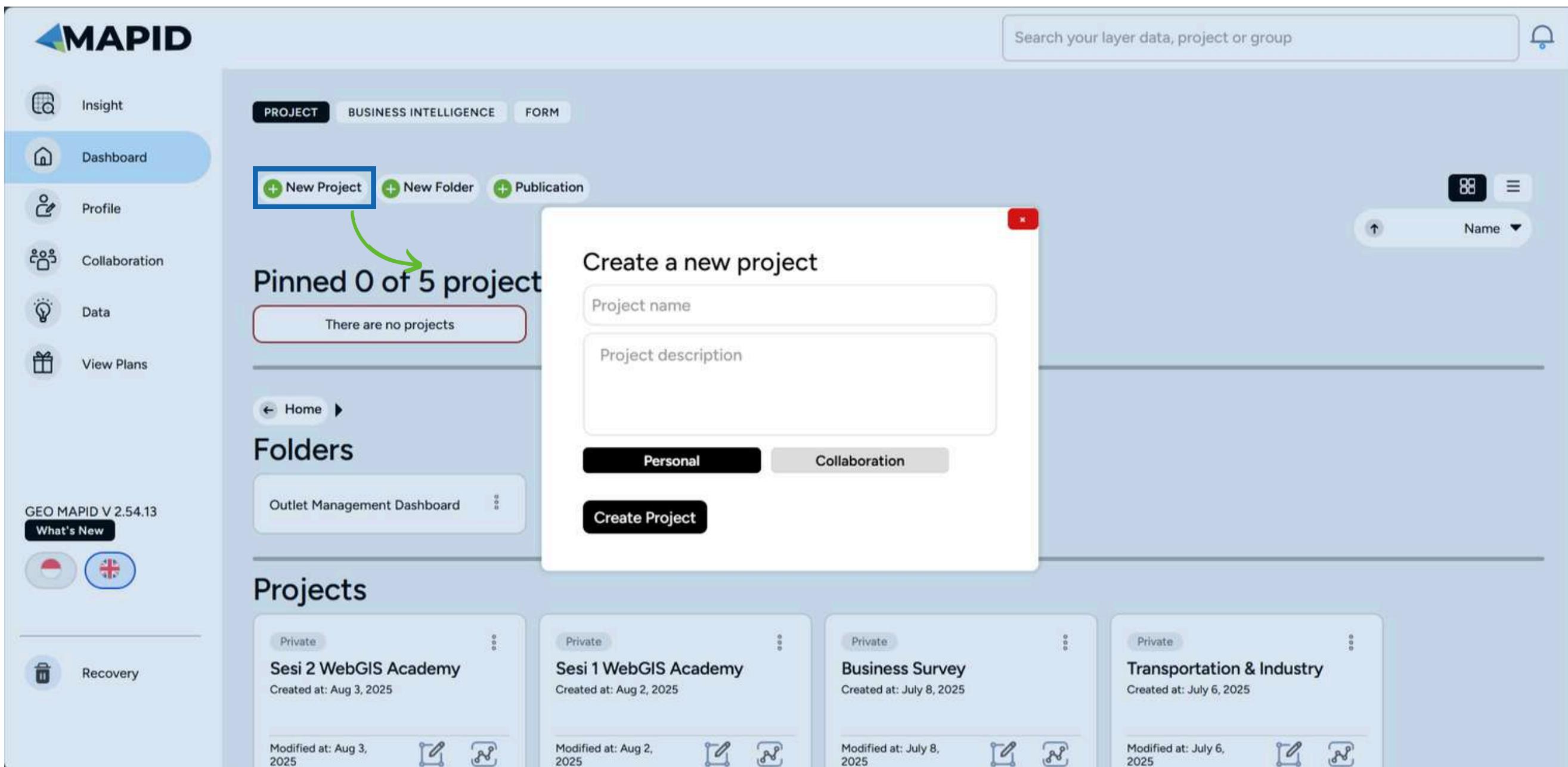
Forgot Password?

Sign in

Don't have an account? [Sign Up](#)

Sign in and generate your idea!

Pembuatan Project



The journey will begin with one click of this....

GEO MAPID as A Database Map Editor

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The image shows the GEO MAPID map editor interface. On the left is a vertical sidebar with various options: New Layer, Upload File, Connect to API, Join Table, Import data, New Folder Layer, and View Activities. Below this are buttons for Open all folder and Close all folder, and a search/filter bar. A large central map of Southeast Asia is displayed, showing landmasses and bodies of water. On the right is another vertical sidebar with buttons for DATA, SINI, and TOOL. The SINI section includes a plus sign button to start it. A legend at the bottom right shows symbols for Land, Water, and Buildings.

Left Side Bar:

- Create your Own Map
- Upload your Own File
- Explore Data MAPID
- Merge Data
- Folder Management

→ **Layer mode**

→ **Layer “explore your data here”**

Right Side Bar:

- Max/min the map
- “Your Location”
- GEO MAPID Tool
- Legend
- Basemap style
- Language

Click the plus button to get started SINI

1

2

3

4

GEO MAPID Tools

DATA

Layer: lereng
lereng
Project: Final Project

Pilih kolom untuk disaring
Pilih Kolom....

Parameter yang difilter:
[X Reset filter & tampilkan semua data](#)

Grafik Luas Zona utama Agroekologi

Zona	Luas (Ha)
Badan Air	800
Zona I	0
Zona II	0
Zona III	0
Zona IV	0
Zona V	0
Zona VI	0
Zona VII	0

Sum

Average

1

SINI

Klik di peta
Riwayat AI
Pintasan riwayat

- Tampilkan SINI

+ Tampilkan SINI

+

2

TOOL

TOOL BOX

Distance

+ Measure distance

Distance
Measure the straight line distance between point A and point B or length of a line

Distance
Elevation
Area
Radius
Isochrone
Grid count point

3

Simple to Medium Processing

Digitasi Pada Layer

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The image illustrates the process of digitizing layers in the MAPID platform, divided into six numbered steps:

- Step 1:** A screenshot of the "Buat Layer Baru" (Create New Layer) dialog box. It shows fields for "Nama layer" (Layer Name), "Deskripsi layer" (Layer Description), "Point" (Point type selected), and "Di luar folder" (Outside folder). A blue "Buat Layer" (Create Layer) button is at the bottom. A green arrow points from the "POINT" label below to the "Point" dropdown.
- Step 2:** A screenshot of the "Lainnya" (Others) section of the MAPID interface. It lists two entries: "SMA" (Type: Polygon) and "MA" (Type: Polygon). Each entry has a "digitasi" (Digitized) status indicator and a "V2" version number. A red circle with the number 3 is over the edit icon for the first entry.
- Step 3:** A close-up of the edit icon (pencil) from Step 2.
- Step 4:** A screenshot of the MAPID map interface. It shows a street map of Padang, Indonesia, with various landmarks labeled. A blue rectangle highlights a specific area on the map, which corresponds to the "SMA Negeri 1 Padang" entry in the list.
- Step 5:** A red circle with the number 5 is placed over the highlighted blue rectangle on the map.
- Step 6:** A screenshot of a detailed table view. The table has one row with one column. The header cell contains "No. ↑" and "New Column". The data cell contains the number "1.". Below the table is a search bar with "Search..." and a "TAMBAH BARIS" (Add Row) button. At the bottom right are buttons for "UNDUH xls" (Download xls), "COLUMNS", and "ROWS per page: 100". A red circle with the number 6 is placed over the "TAMBAH BARIS" button.

Simple to Medium Processing Import Data

The screenshot shows the MAPID platform interface. On the left, a sidebar contains buttons for 'New Layer', 'Upload File', 'Connect to API', 'Join Table', 'Import data', 'New Folder Layer', 'View Activities', and 'Open all folder'. Below this is a search bar labeled 'Name' and a dropdown menu. A modal window titled 'Import Data' is open, showing a table with data categories and their counts:

Category	Count
Climate & Disaster	3823
Consumer Goods	510
Energy	764
Environment	4193
Food & Beverages	763
Government	152
Real Estate	1903
Research	4133
Retail	16663
Social	18434
Tourism	510
Transportation	2224

A large blue callout bubble on the right says 'Data Anda: Data Anda: Data Dalam Project Yang Pernah Anda Buat' (Your Data: Your Data: Data in Projects You've Created). Another blue callout bubble below it says 'Data Premium: Data MAPID Khusus Untuk Pengguna Yang Berlangganan' (Data Premium: Special MAPID Data for Subscribers). At the bottom right, there's a map with the text 'GEO V 2.54.1'.

Simple to Medium Processing Upload Data

MAPID
Mapid academy batch 8 [Edit](#)

Buat Layer Baru

Unggah File

Unqah file

Pilih folder

Di luar folder

Unggah file

Catatan:

- Tipe koordinat yang diterima adalah latitude longitude bertipe WGS84 / CGS dalam derajat desimal.
- Untuk berkas shapefile, harus berisi 4 berkas didalamnya (prj, shp, shx, dbf) yang disatukan menjadi .zip.
- Maksimum besar file 14 MB namun bisa lebih kecil jika ukuran geometri dalam satu feature terlalu besar.
- Mendukung ekstensi .csv, .xlsx, .geojson, .GeoJSON, .json, .JSON, .shp, .zip, dan .kml
- Untuk berkas xlsx pastikan data berada pada Sheet1
- Desimal harus dipisahkan dengan titik. Contoh: 106.8858778

Filter layer berdasarkan nama

Nama

Lainnya

SMA
Tipe : Polygon

digitasi V2

Batch Upload

Drop geojson files here

Aktifkan semua layer ini setelah file terunggah

Back

Geojson Batch Upload

Next

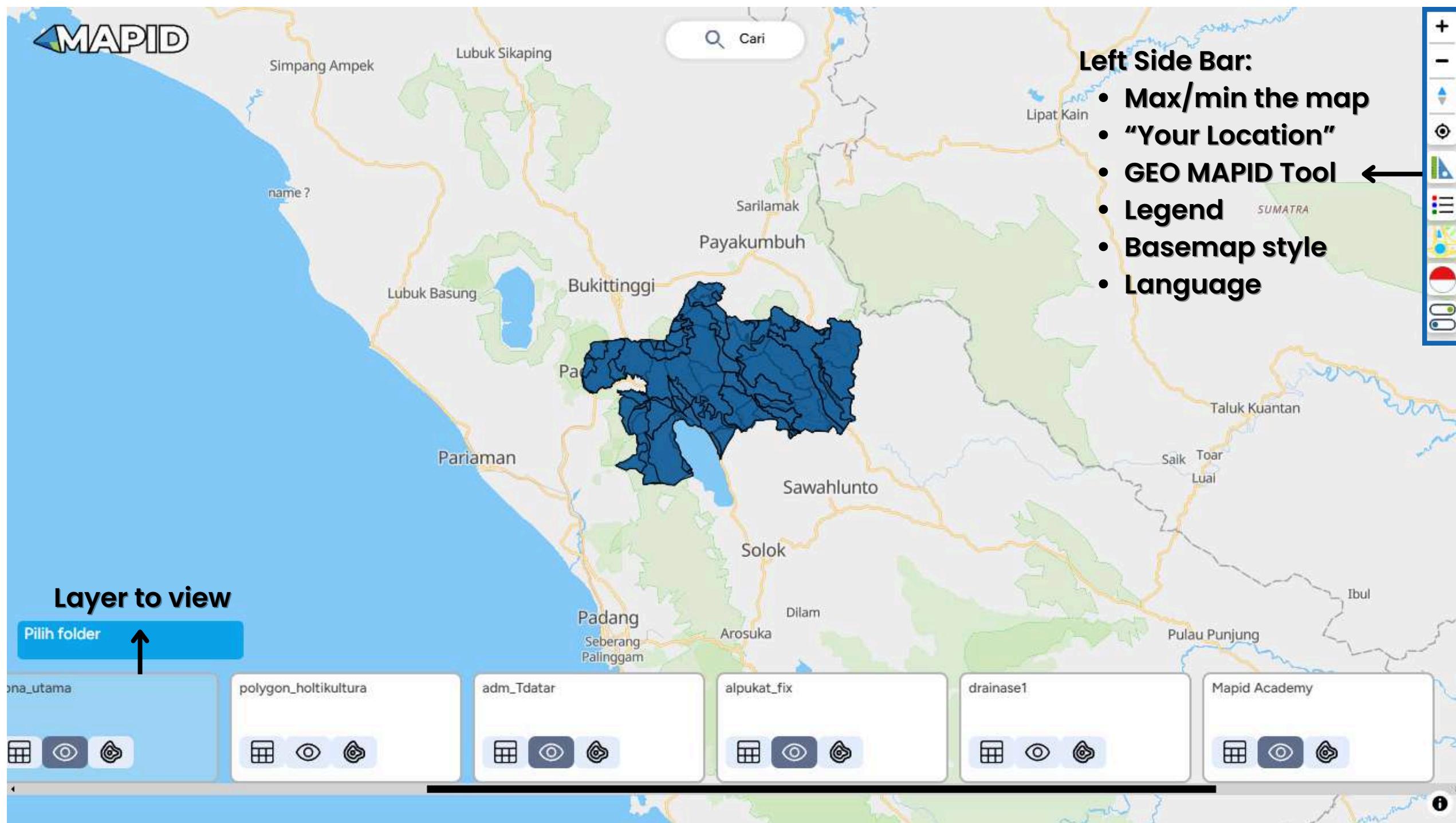
Bersihkan Semua

No. ↑ New Column

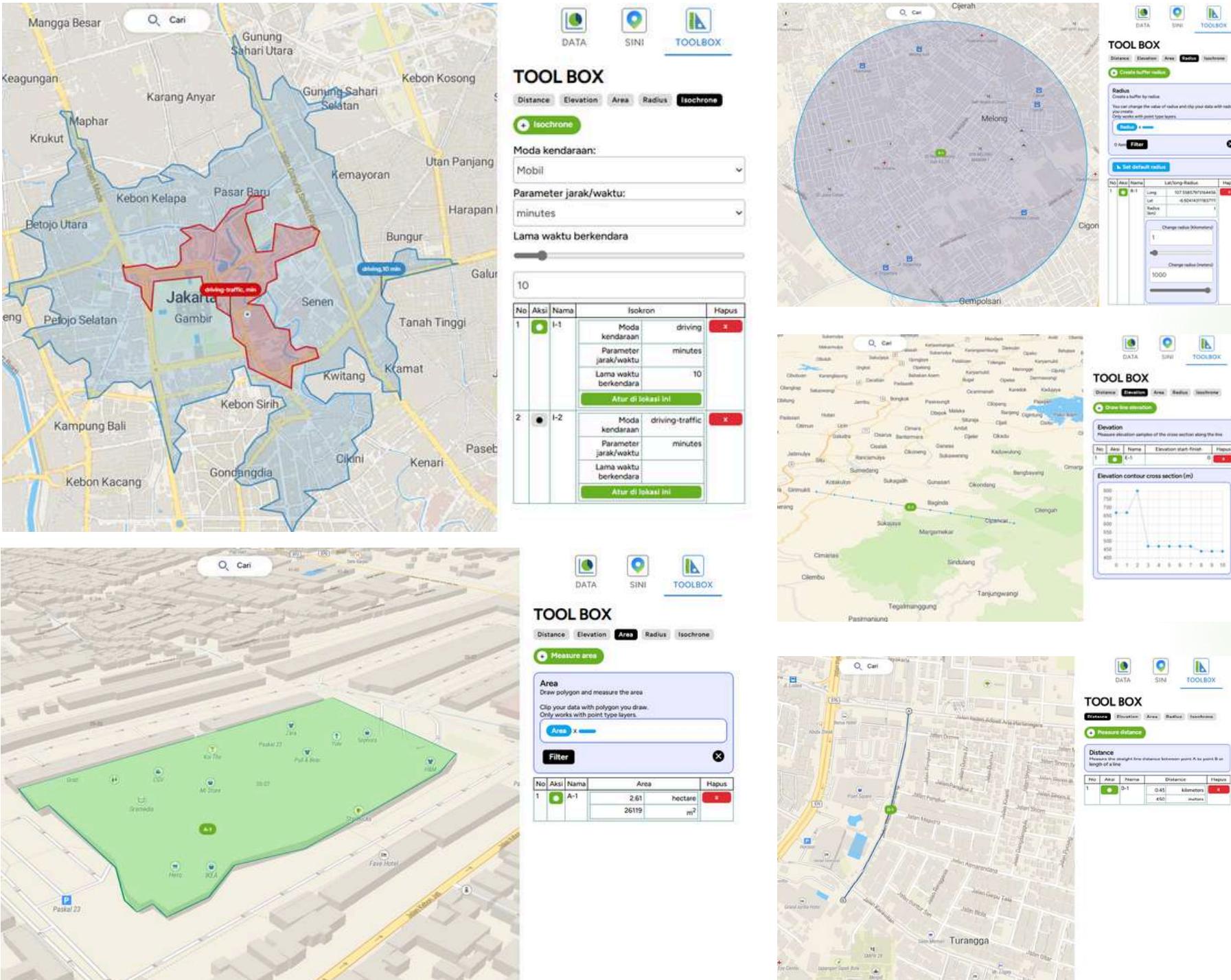
1.

Search... + TAMBAH BARIS COLUMNS Unduh xls Rows per page: 100 1–1 of 1

Map Viewer



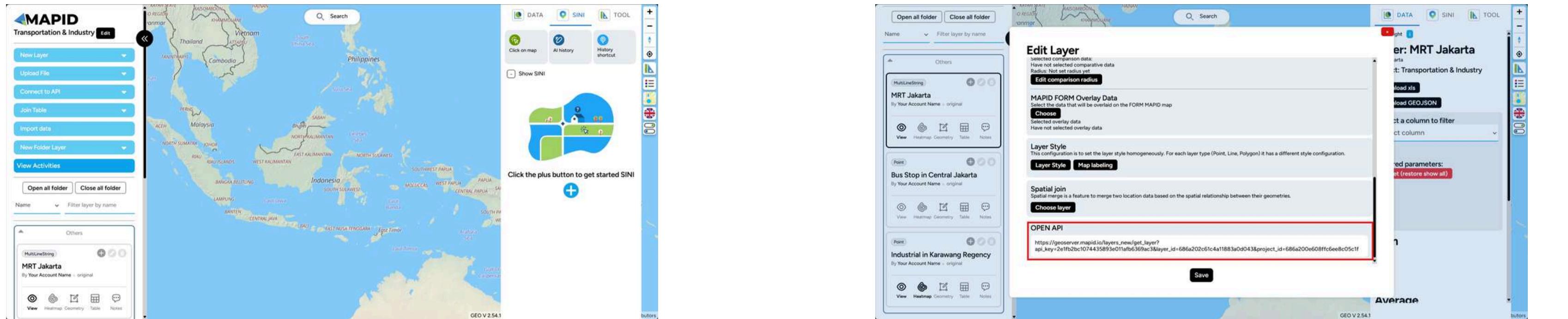
TOOLBOX



What can I do with TOOLBOX?

- Measure the distance or length of line features (linestrings)
- Calculate the area covered during travel
- Filter data based on a specified radius or area
- Create cross-sectional profiles along a defined line

How to Access Open API Layer



Pilih **Project** Tempat Anda
Menyimpan Data

Pilih **Layer** untuk Diakses
untuk data WebGISmu

OPEN API

```
https://geoserver.mapid.io/layers_new/get_layer?  
api_key=2e1fb2bc1074435893e011afb6369ac3&layer_id=686a202c61c4a11883a0d043&project_id=686a200e608ffc6ee8c05c1f
```

Access via your code!

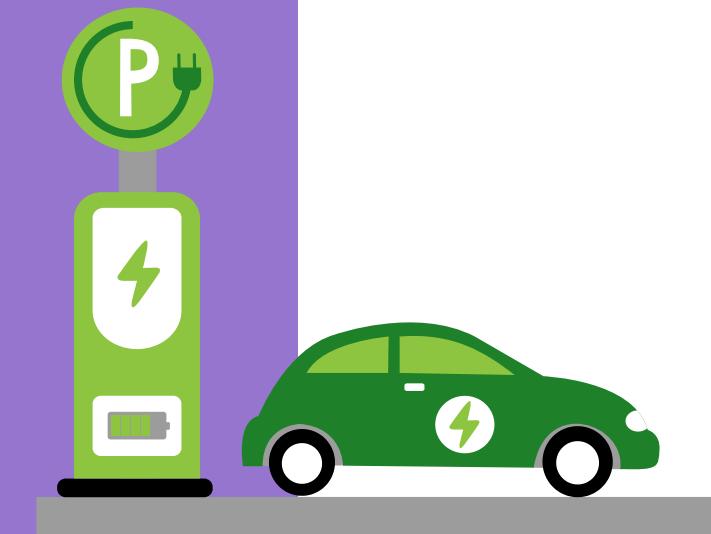
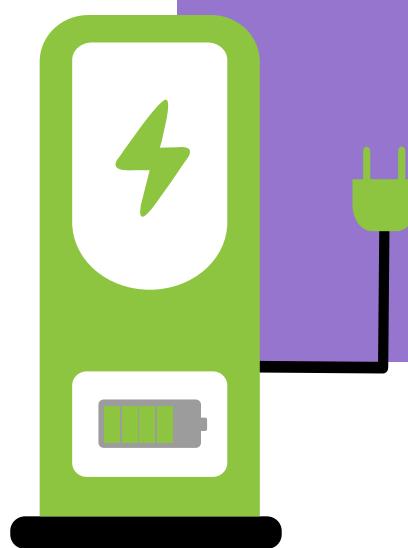
Hands-On

Location Analytics & GEO 1

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Apa yang akan kita lakukan?

- Tujuan: Mencari Lokasi Strategis untuk Jaringan "Charge & Chill" EV Charging Station di Surabaya!
- Langkah-langkah:
 - *Understanding business*
 - *Data collection*
 - *Visualization*
 - *Analyze*
 - *Pick your recommendation*



mapid.co.id/handsongeo1

Home Task

Location Analytics & GEO 1

Code the Map
Decode the Future



Home Task: Menentukan Lokasi "Blockbuster" untuk Jaringan Bioskop CineMAX di Surabaya

Misi: melakukan analisis nilai lokasi (Location Value Analysis) secara lengkap dari deskriptif hingga preskriptif untuk memberikan satu rekomendasi lokasi baru yang didukung oleh data.



Check the details on: mapid.co.id/taskgeo1