

WORKSHOP VISUALISASI DATA

“POWER BI”



DOSEN PENGAMPU:

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DISUSUNN OLEH:

Teguh Januar Rifaldi

E31242015

Golongan D

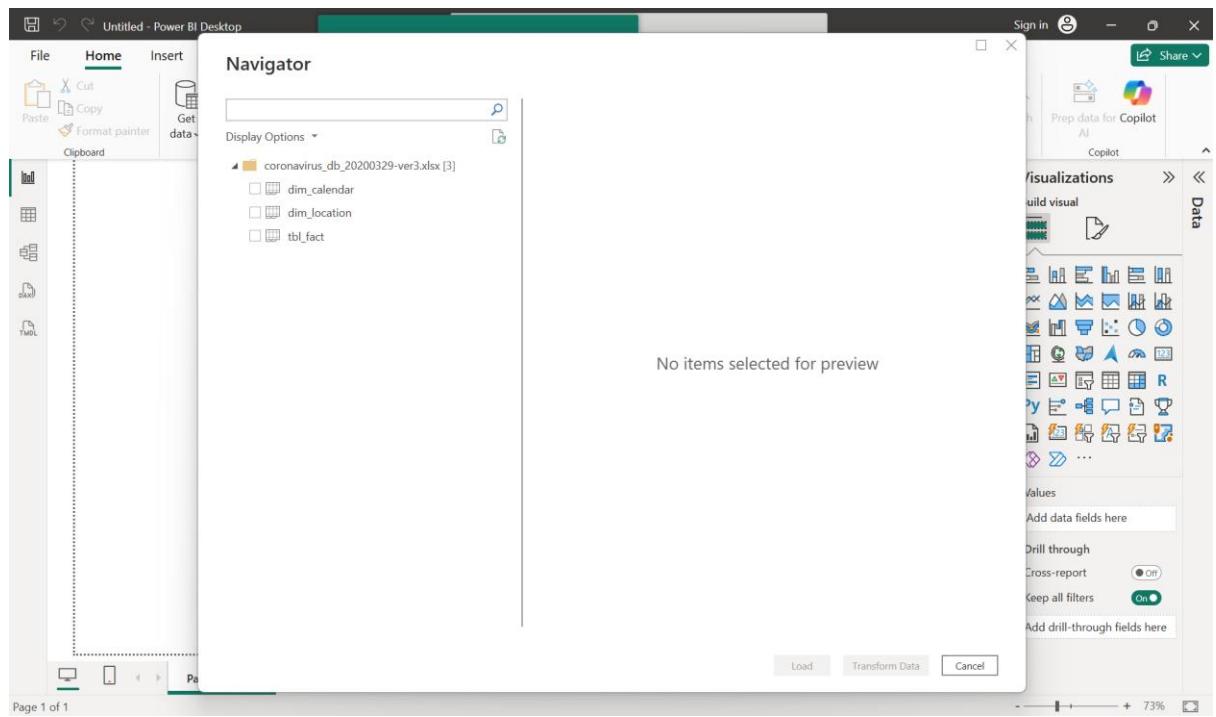
PROGRAM STUDI MANAJEMEN INFORMATIKA

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI JEMBER

2025

1. Data dari File Excel



Untitled - Power BI Desktop

File **Home** **Insert**

Cut Copy Format painter Get data Clipboard

Navigator

Display Options ▾

- coronavirus_db_20200329-ver3.xlsx [3]
- dim_calendar
- dim_location
- tbl_fact**

calendar_id	location_id	new_cases	new_deaths	total_cases	total_deaths
20191231	1	0	0	0	0
20200101	1	0	0	0	0
20200102	1	0	0	0	0
20200103	1	0	0	0	0
20200104	1	0	0	0	0
20200105	1	0	0	0	0
20200106	1	0	0	0	0
20200107	1	0	0	0	0
20200108	1	0	0	0	0
20200109	1	0	0	0	0
20200110	1	0	0	0	0
20200111	1	0	0	0	0
20200112	1	0	0	0	0
20200113	1	0	0	0	0
20200114	1	0	0	0	0
20200115	1	0	0	0	0
20200116	1	0	0	0	0
20200117	1	0	0	0	0
20200118	1	0	0	0	0
20200119	1	0	0	0	0
20200120	1	0	0	0	0
20200121	1	0	0	0	0
20200122	1	0	0	0	0

Load Transform Data Cancel

Page 1 of 1

Quick measure **Sensitivity** **Publish** **Prep data for Copilot AI** **Copilot**

Visualizations **Data**

Build visual

Search

- > dim_calendar
- > dim_location
- > **tbl_fact**

Values

Add data fields here

Drill through

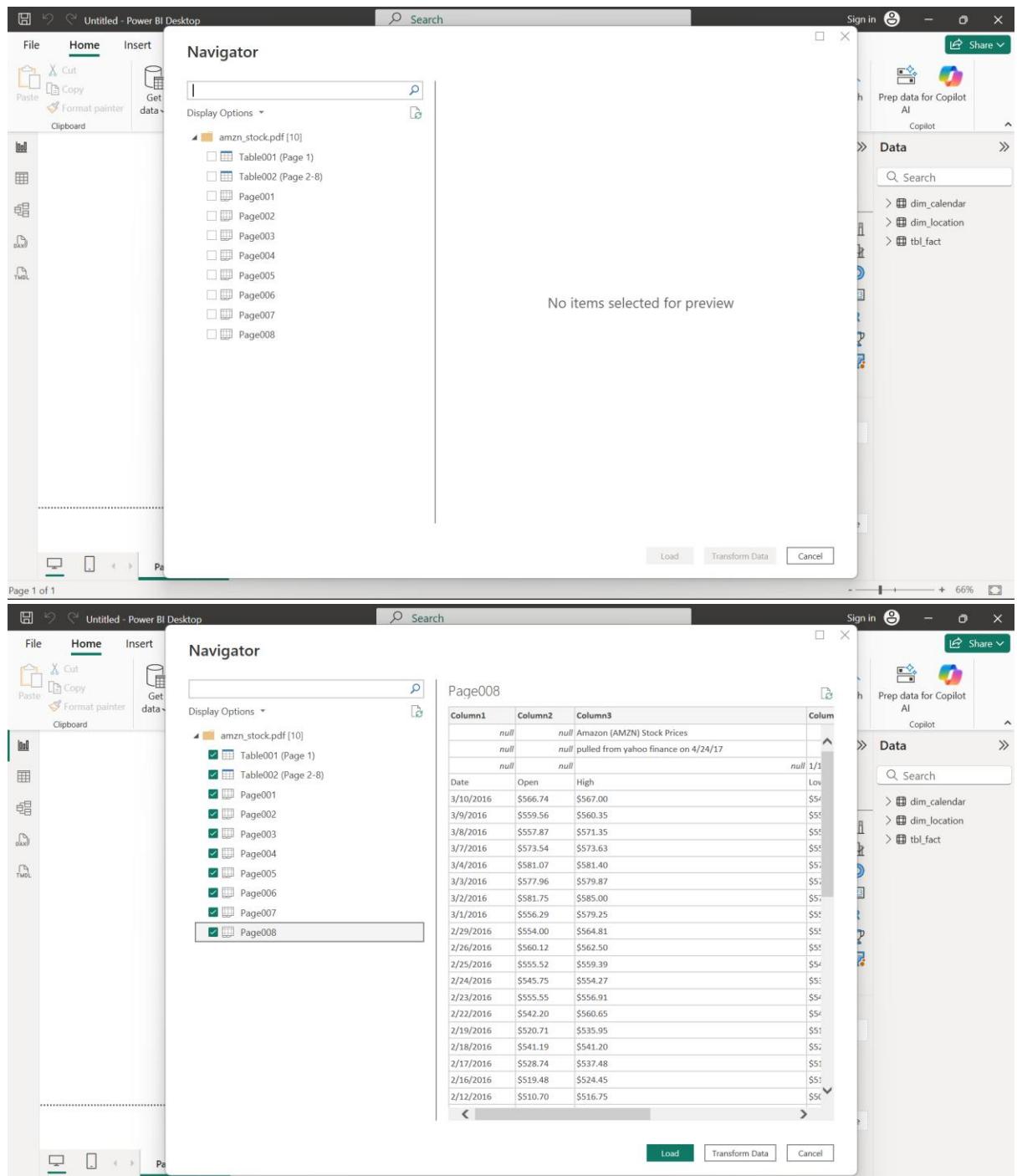
Cross-report Off

Keep all filters On

Add drill-through fields here

Proses dimulai dengan membuka jendela Navigator setelah memilih sumber data Excel. Pada tahap ini pengguna memilih tabel yang tersedia di dalam file, kemudian melakukan pengecekan melalui pratinjau untuk memastikan struktur data sudah sesuai. Setelah verifikasi selesai, pengguna menekan tombol Load sehingga tabel-tabel tersebut dimasukkan ke dalam model data dan tampil pada panel Data di Power BI.

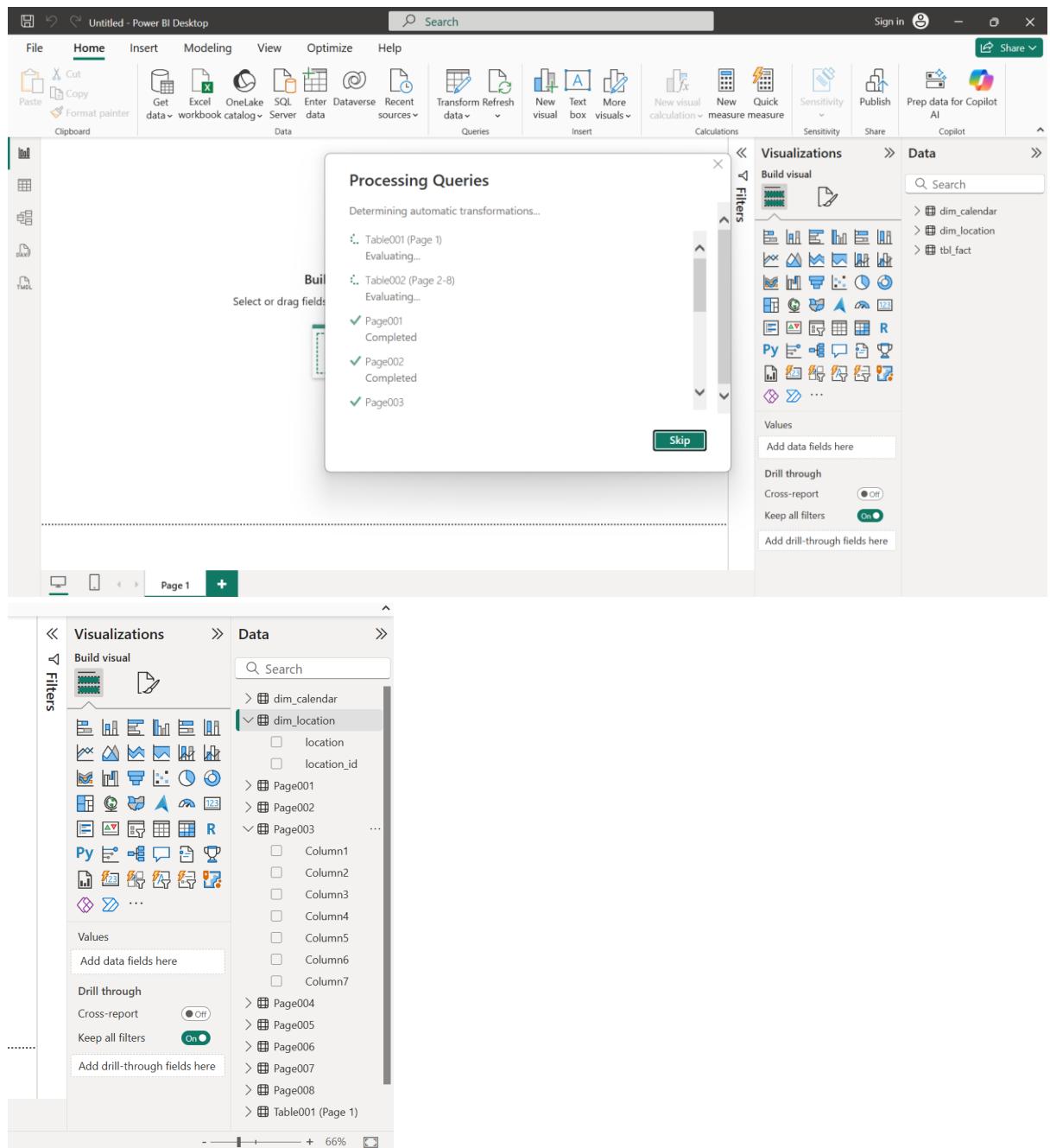
2. Data dari File PDF



The screenshot shows two instances of the Power BI Desktop application side-by-side, demonstrating the process of loading data from a PDF file.

Top Window (Untitled - Power BI Desktop):

- Navigator:** Shows a tree view of the PDF file "amzn_stock.pdf" containing 10 pages. Under "Table001 (Page 1)", there are entries for "Table002 (Page 2-8)" and several page numbers (001 to 008).
- Data:** pane shows three tables: "dim_calendar", "dim_location", and "tbl_fact".
- Bottom Window (Untitled - Power BI Desktop):**
- Navigator:** Shows the same tree view of the PDF file, but with checkboxes next to each item. All items under "Table001 (Page 1)" are checked, while others are not.
- Data:** pane displays a preview of "Page008" which contains a table of Amazon stock prices from April 2016. The table has columns: Date, Open, High, Low, and Close. The first few rows show data starting from March 10, 2016.



Pengguna memilih opsi Get Data dan memilih tipe sumber PDF, kemudian Power BI menampilkan Navigator yang berisi daftar tabel atau halaman yang terdeteksi dari file tersebut. Setelah memilih bagian data yang relevan dan meninjau pratinjaunya, proses dilanjutkan dengan menekan Load. Data kemudian diproses dan dimasukkan ke dalam model sehingga dapat digunakan untuk analisis lanjutan di Power BI.

3. Data dari File CSV

Screenshot of Power BI Desktop showing the "Get Data" dialog and the "Extract Table Using Examples" dialog.

Get Data Dialog:

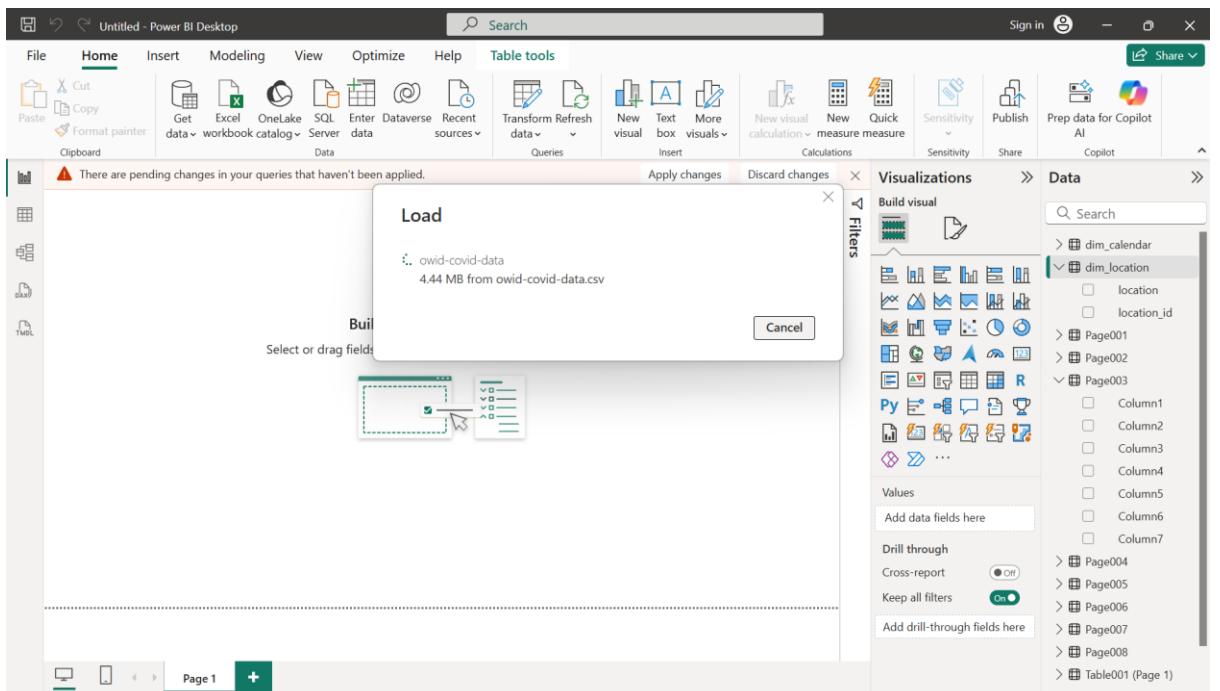
- File: Home, Insert, Modeling
- Clipboard: Paste, Cut, Copy, Format painter
- Get data: Excel Workbook, Text/CSV, XML, JSON, Folder, PDF, Parquet, SharePoint folder, SQL Server database, Access database, SQL Server Analysis Services database, Oracle database, IBM Db2 database, IBM Informix database (Beta), IBM Netezza, MySQL database
- Search: Search bar
- Sign in: Sign in button
- Share: Share button
- Prep data for Copilot AI: Prep data for Copilot AI button
- Data: Data pane (dim_calendar, dim_location, Page001, Page002, Page003, Page004, Page005, Page006, Page007, Page008, Table001 (Page 1))

Extract Table Using Examples Dialog:

- File Origin: 1252: Western European (Windows)
- Delimiter: Comma
- Data Type Detection: Based on first 200 rows
- Table Headers:

iso_code	continent	location	date	total_cases	new_cases	new_cases_smoothed	total_deaths	new_deaths	new_death
AFG	Asia	Afghanistan	2/24/2020	5	5	null	null	null	null
AFG	Asia	Afghanistan	2/25/2020	5	0	null	null	null	null
AFG	Asia	Afghanistan	2/26/2020	5	0	null	null	null	null
AFG	Asia	Afghanistan	2/27/2020	5	0	null	null	null	null
AFG	Asia	Afghanistan	2/28/2020	5	0	null	null	null	null
AFG	Asia	Afghanistan	2/29/2020	5	0	0.714	null	null	null
AFG	Asia	Afghanistan	3/1/2020	5	0	0.714	null	null	null
AFG	Asia	Afghanistan	3/2/2020	5	0	0	null	null	null
AFG	Asia	Afghanistan	3/3/2020	5	0	0	null	null	null
AFG	Asia	Afghanistan	3/4/2020	5	0	0	null	null	null
AFG	Asia	Afghanistan	3/5/2020	5	0	0	null	null	null
AFG	Asia	Afghanistan	3/6/2020	5	0	0	null	null	null
AFG	Asia	Afghanistan	3/7/2020	8	3	0.429	null	null	null
AFG	Asia	Afghanistan	3/8/2020	8	0	0.429	null	null	null
AFG	Asia	Afghanistan	3/9/2020	8	0	0.429	null	null	null
AFG	Asia	Afghanistan	3/10/2020	8	0	0.429	null	null	null
AFG	Asia	Afghanistan	3/11/2020	11	3	0.857	null	null	null
AFG	Asia	Afghanistan	3/12/2020	11	0	0.857	null	null	null
AFG	Asia	Afghanistan	3/13/2020	11	0	0.857	null	null	null
AFG	Asia	Afghanistan	3/14/2020	14	3	0.857	null	null	null

- Buttons: Extract Table Using Examples, Load, Transform Data, Cancel



The screenshot shows the Power Query Editor interface with the 'Home' ribbon selected. The 'Queries' list on the left shows 'owid-covid-data' (2) selected. The main area displays a table with columns: iso_code, continent, location, and date. The formula bar at the top shows the current step: `= Table.TransformColumnTypes(#"Promoted Headers", {"iso_code", type text},`. The 'APPLIED STEPS' pane on the right shows the 'Changed Type' step applied to the 'Source' query. The status bar at the bottom indicates '67 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'.

Untitled - Power BI Desktop

File Home Insert Modeling View Optimize Help Table tools

Power Query Editor

Queries [16]

= Table.RemoveColumns(#"Changed Type", {"icu_patients_per_million", "new_tests_per_thousand", "new_tests_smoothed", "new_tests_smoothed_per_thousand", "positivity_rate", "date"})

	Avg new_tests_per_thousand	Avg new_tests_smoothed	Avg new_tests_smoothed_per_thousand	Avg positivity_rate	Date
1	null	null	null	null	2/24/2020
2	null	null	null	null	2/25/2020
3	null	null	null	null	2/26/2020
4	null	null	null	null	2/27/2020
5	null	null	null	null	2/28/2020
6	null	null	null	null	2/29/2020
7	null	null	null	null	3/1/2020
8	null	null	null	null	3/2/2020
9	null	null	null	null	3/3/2020
10	null	null	null	null	3/4/2020
11	null	null	null	null	3/5/2020
12	null	null	null	null	3/6/2020
13	null	null	null	null	3/7/2020
14	null	null	null	null	3/8/2020
15	null	null	null	null	3/9/2020
16	null	null	null	null	3/10/2020
17	null	null	null	null	3/11/2020
18	null	null	null	null	3/12/2020
19	<				>

56 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 4:40 PM

Page 1

File Home Transform Add Column View Tools Help Table tools

Power Query Editor

Queries [16]

= Table.RemoveColumns(#"Changed Type", {"icu_patients_per_million", "new_tests_per_thousand", "new_tests_smoothed", "new_tests_smoothed_per_thousand", "positivity_rate", "date"})

	Avg iso_code	Avg continent	Avg location	Avg date
1	AFG	Asia	Afghanistan	2/24/2020
2	AFG	Asia	Afghanistan	2/25/2020
3	AFG	Asia	Afghanistan	2/26/2020
4	AFG	Asia	Afghanistan	2/27/2020
5	AFG	Asia	Afghanistan	2/28/2020
6	AFG	Asia	Afghanistan	2/29/2020
7	AFG	Asia	Afghanistan	3/1/2020
8	AFG	Asia	Afghanistan	3/2/2020
9	AFG	Asia	Afghanistan	3/3/2020
10	AFG	Asia	Afghanistan	3/4/2020
11	AFG	Asia	Afghanistan	3/5/2020
12	AFG	Asia	Afghanistan	3/6/2020
13	AFG	Asia	Afghanistan	3/7/2020
14	AFG	Asia	Afghanistan	3/8/2020
15	AFG	Asia	Afghanistan	3/9/2020
16	AFG	Asia	Afghanistan	3/10/2020
17	AFG	Asia	Afghanistan	3/11/2020
18	AFG	Asia	Afghanistan	3/12/2020
19	<			>

37 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

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Untitled - Power BI Desktop

File Home Insert Modeling View Optimize Help Table tools

Power Query Editor

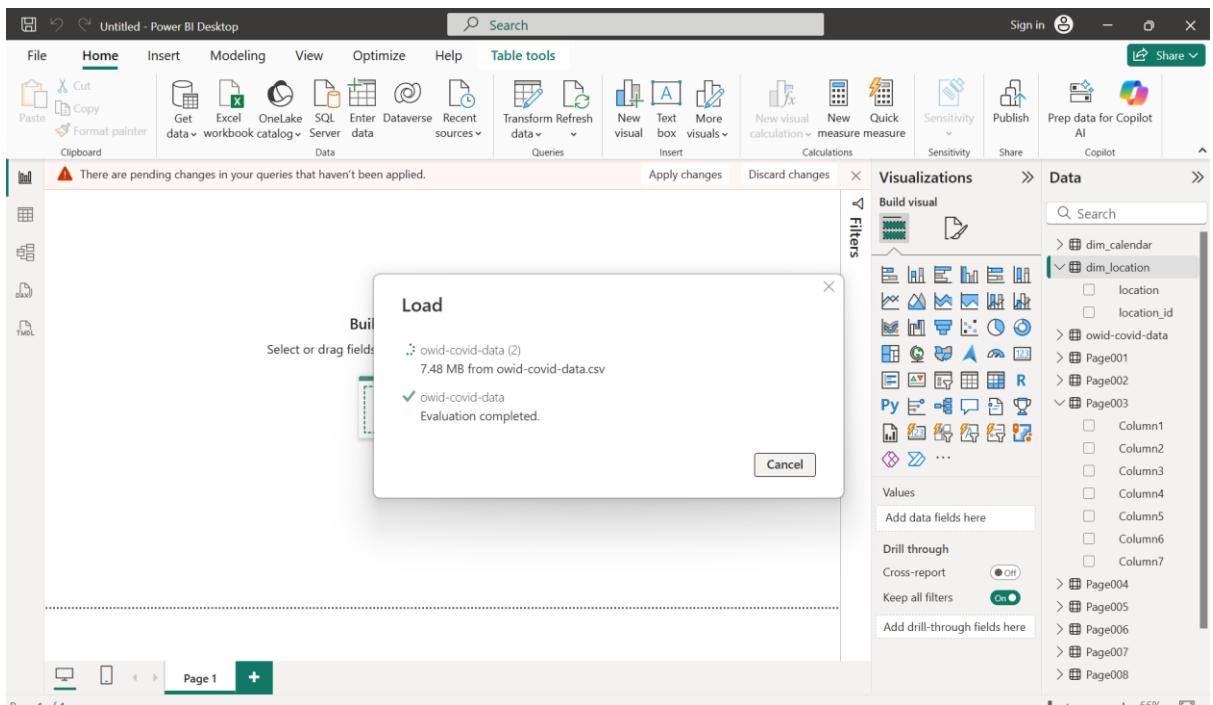
Queries [16]

= Table.RemoveColumns(#"Changed Type", {"icu_patients_per_million", "new_tests_per_thousand", "new_tests_smoothed", "new_tests_smoothed_per_thousand", "positivity_rate", "date"})

	Avg iso_code	Avg continent	Avg location	Avg date
1	AFG	Asia	Afghanistan	2/24/2020
2	AFG	Asia	Afghanistan	2/25/2020
3	AFG	Asia	Afghanistan	2/26/2020
4	AFG	Asia	Afghanistan	2/27/2020
5	AFG	Asia	Afghanistan	2/28/2020
6	AFG	Asia	Afghanistan	2/29/2020
7	AFG	Asia	Afghanistan	3/1/2020
8	AFG	Asia	Afghanistan	3/2/2020
9	AFG	Asia	Afghanistan	3/3/2020
10	AFG	Asia	Afghanistan	3/4/2020
11	AFG	Asia	Afghanistan	3/5/2020
12	AFG	Asia	Afghanistan	3/6/2020
13	AFG	Asia	Afghanistan	3/7/2020
14	AFG	Asia	Afghanistan	3/8/2020
15	AFG	Asia	Afghanistan	3/9/2020
16	AFG	Asia	Afghanistan	3/10/2020
17	AFG	Asia	Afghanistan	3/11/2020
18	AFG	Asia	Afghanistan	3/12/2020
19	<			>

37 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

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Pengguna memilih sumber data CSV melalui menu Get Data, lalu Power BI menampilkan jendela preview yang berisi seluruh isi tabel. Pada tahap berikutnya, pengguna memastikan delimiter, tipe data, serta struktur tabel sudah benar sebelum melanjutkan dengan tombol Load. Setelah itu, data CSV diproses dan muncul pada panel Data siap digunakan dalam pemodelan atau visualisasi.

4. Data dari file JSON

The screenshot shows the Power Query Editor interface. The 'File' tab is active. In the center, there's a preview of a table with one column labeled 'Topology' and type 'GeometryCollection'. The 'APPLIED STEPS' pane on the right details the transformation process, which included changing the type of the 'type' column from 'Text' to 'AnyType'.

The screenshot shows a JSON viewer interface. On the left, there's a tree view under the 'Viewer' tab, showing a structure with 'JSON' at the root, containing 'type : "Topology"', 'objects', 'arcs', 'bbox', and 'transform'. Below the tree is a search bar and navigation buttons ('GO!', 'Next', 'Previous'). On the right, there's a table view with columns 'Name' and 'Value'. The table contains five rows: 'arcs' (with three ellipsis buttons), 'bbox' (with three ellipsis buttons), 'objects' (with three ellipsis buttons), 'transform' (with three ellipsis buttons), and 'type' (with the value "'Topology'" and three ellipsis buttons). At the bottom, there's a message encouraging support: 'Support this one-nerd project, remove ads and increase loading speed all for \$19 (one-time): [Are you with me?](#)'.

Name	Value
arcs	...
bbox	...
objects	...
transform	...
type	"Topology"

Search: GO! Next Previous

Support this one-nerd project, remove ads and increase loading speed all for \$19 (one-time): [Are you with me?](#)

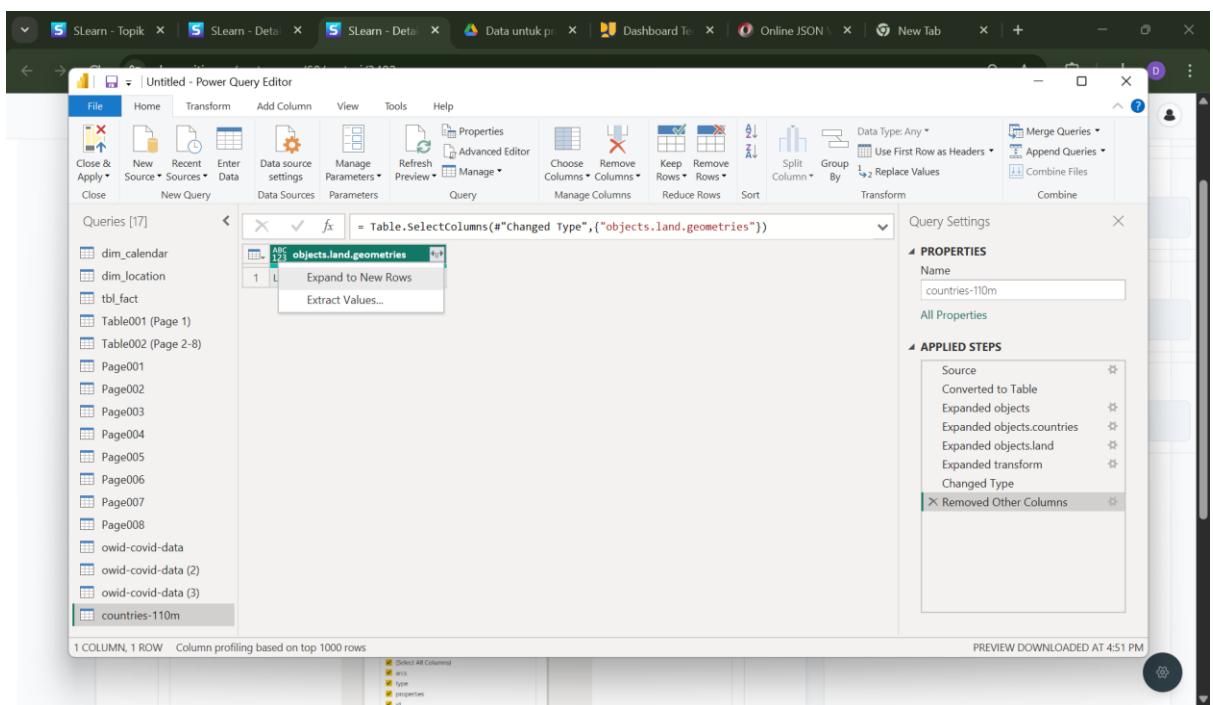
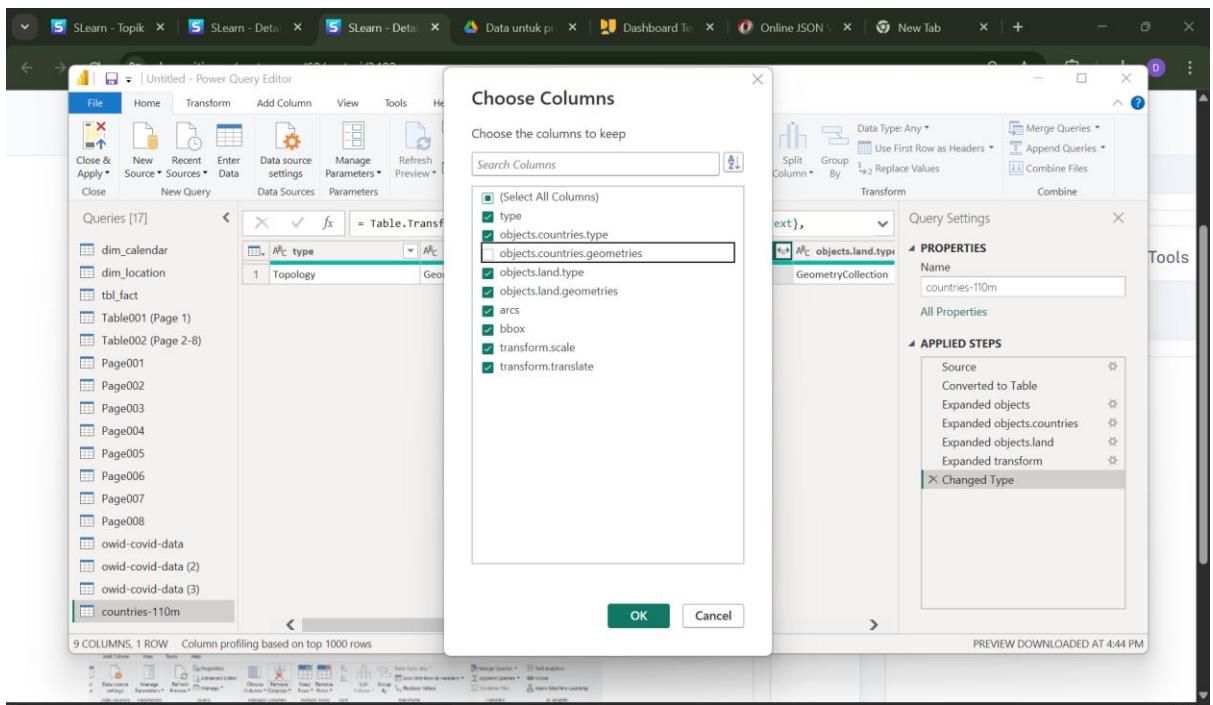
The screenshot shows a JSON viewer interface. On the left, there's a tree view of the JSON structure:

- JSON
 - type : "Topology"
 - objects
 - countries
 - land
 - arcs
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 0
 - 1
 - 2
 - 3
 - 4
 - 6
 - 7

At the bottom, there's a search bar and navigation buttons (GO!, Next, Previous). On the right, there's a table view with columns "Name" and "Value":

Name	Value
arcs	...
bbox	...
objects	...
transform	...
type	"Topology"

Below the table, a message encourages support: "Support this one-nerd project, remove ads and increase loading speed all for \$19 (one-time): [Are you with me?](#)".



The screenshot shows the Power Query Editor interface with the following details:

- Queries [17]:** A list of queries including `dim_calendar`, `dim_location`, `tbl_fact`, `Table001 (Page 1)`, `Table002 (Page 2-8)`, `Page001`, `Page002`, `Page003`, `Page004`, `Page005`, `Page006`, `Page007`, `Page008`, `owid-covid-data`, `owid-covid-data (2)`, `owid-covid-data (3)`, and `countries-110m`.
- Current Query Preview:** `= Table.ExpandListColumn(#"Removed Other Columns", 1, "ABC objects.countries.geometries")`
- Properties Panel:** Shows the query is named `countries-110m`.
- Applied Steps:** A list of steps including `Source`, `Converted to Table`, `Expanded objects`, `Expanded objects.countries`, `Expanded objects.land`, `Expanded transform`, `Changed Type`, `Removed Other Columns`, and `Expanded objects.countries.g...`.

The screenshot shows the Power Query Editor interface with the following details:

- Current Query Preview:** `= Table.ExpandListColumn(#"Removed Other Columns", 1, "ABC objects.countries.geometries")`
- Dialog Box (Search Columns to Expand):** A modal window titled "Search Columns to Expand" containing a list of columns:
 - (Select All Columns)
 - type
 - arcs
 - id
 - properties
- Properties Panel:** Shows the query is named `countries-110m`.
- Applied Steps:** A list of steps including `Source`, `Converted to Table`, `Expanded objects`, `Expanded objects.countries`, `Expanded objects.land`, `Expanded transform`, `Changed Type`, `Removed Other Columns`, and `Expanded objects.countries.g...`.

SLearn - Topik | SLearn - Data | SLearn - Data | Data untuk p... | Dashboard Te... | Online JSON | New Tab

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [17]

= Table.ExpandRecordColumn(#"Expanded objects.countries.geometries",

	type	arcs	id	properties
1	Multipolygon	List	242	Record
2	Polygon	List	834	Record
3	Polygon	List	732	Record
4	Multipolygon	List	124	Record
5	Multipolygon	List	840	Record
6	Polygon	List	398	Record
7	Polygon	List	860	Record
8	Multipolygon	List	598	Record
9	Multipolygon	List	360	Record
10	Multipolygon	List	032	Record
11	Multipolygon	List	152	Record
12	Polygon	List	180	Record
13	Polygon	List	706	Record
14	Polygon	List	404	Record
15	Polygon	List	729	Record
16	Polygon	List	148	Record
17	Polygon	List	332	Record
18	Polygon	List	214	Record
19	Multipolygon	List	643	Record

4 COLUMNS, 177 ROWS Column profiling based on top 1000 rows

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Query Settings

PROPERTIES

Name: countries-110m

All Properties

APPLIED STEPS

Source
Converted to Table
Expanded objects
Expanded objects.countries
Expanded objects.land
Expanded transform
Changed Type
Removed Other Columns
Expanded objects.countries.g...
Expanded objects.countries.g...

SLearn - Topik | SLearn - Data | SLearn - Data | Data untuk p... | Dashboard Te... | Online JSON | New Tab

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Queries [17]

= Table.ExpandRecordColumn(#"Expanded objects.countries.geometries1",

	type	arcs	id	name
1	Multipolygon	List	242	Fiji
2	Polygon	List	834	Tanzania
3	Polygon	List	732	W. Sahara
4	Multipolygon	List	124	Canada
5	Multipolygon	List	840	United States of America
6	Polygon	List	398	Kazakhstan
7	Polygon	List	860	Uzbekistan
8	Multipolygon	List	598	Papua New Guinea
9	Multipolygon	List	360	Indonesia
10	Multipolygon	List	032	Argentina
11	Multipolygon	List	152	Chile
12	Polygon	List	180	Dem. Rep. Congo
13	Polygon	List	706	Somalia
14	Polygon	List	214	Angola
15	Polygon	List	643	Malta
16	Polygon	List	332	Algeria
17	Polygon	List	729	Kenya
18	Polygon	List	148	Iran
19	Polygon	List	306	Yemen
20	Polygon	List	706	Uganda
21	Polygon	List	214	Lebanon
22	Polygon	List	643	Qatar
23	Polygon	List	332	Maldives
24	Polygon	List	729	Yemen
25	Polygon	List	148	Burkina Faso
26	Polygon	List	306	Uganda
27	Polygon	List	706	Qatar
28	Polygon	List	214	Lebanon
29	Polygon	List	643	Maldives
30	Polygon	List	332	Yemen
31	Polygon	List	729	Burkina Faso
32	Polygon	List	148	Uganda
33	Polygon	List	306	Qatar
34	Polygon	List	706	Lebanon
35	Polygon	List	214	Maldives
36	Polygon	List	643	Yemen
37	Polygon	List	332	Burkina Faso
38	Polygon	List	729	Uganda
39	Polygon	List	148	Qatar
40	Polygon	List	306	Lebanon
41	Polygon	List	706	Maldives
42	Polygon	List	214	Yemen
43	Polygon	List	643	Burkina Faso
44	Polygon	List	332	Uganda
45	Polygon	List	729	Qatar
46	Polygon	List	148	Lebanon
47	Polygon	List	306	Maldives
48	Polygon	List	706	Yemen
49	Polygon	List	214	Burkina Faso
50	Polygon	List	643	Uganda
51	Polygon	List	332	Qatar
52	Polygon	List	729	Lebanon
53	Polygon	List	148	Maldives
54	Polygon	List	306	Yemen
55	Polygon	List	706	Burkina Faso
56	Polygon	List	214	Uganda
57	Polygon	List	643	Qatar
58	Polygon	List	332	Lebanon
59	Polygon	List	729	Maldives
60	Polygon	List	148	Yemen
61	Polygon	List	306	Burkina Faso
62	Polygon	List	706	Qatar
63	Polygon	List	214	Lebanon
64	Polygon	List	643	Maldives
65	Polygon	List	332	Yemen
66	Polygon	List	729	Burkina Faso
67	Polygon	List	148	Uganda
68	Polygon	List	306	Qatar
69	Polygon	List	706	Lebanon
70	Polygon	List	214	Maldives
71	Polygon	List	643	Yemen
72	Polygon	List	332	Burkina Faso
73	Polygon	List	729	Uganda
74	Polygon	List	148	Qatar
75	Polygon	List	306	Lebanon
76	Polygon	List	706	Maldives
77	Polygon	List	214	Yemen
78	Polygon	List	643	Burkina Faso
79	Polygon	List	332	Uganda
80	Polygon	List	729	Qatar
81	Polygon	List	148	Lebanon
82	Polygon	List	306	Maldives
83	Polygon	List	706	Yemen
84	Polygon	List	214	Burkina Faso
85	Polygon	List	643	Uganda
86	Polygon	List	332	Qatar
87	Polygon	List	729	Lebanon
88	Polygon	List	148	Maldives
89	Polygon	List	306	Yemen
90	Polygon	List	706	Burkina Faso
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97	Polygon	List	706	Qatar
98	Polygon	List	214	Lebanon
99	Polygon	List	643	Maldives
100	Polygon	List	332	Yemen
101	Polygon	List	729	Burkina Faso
102	Polygon	List	148	Uganda
103	Polygon	List	306	Qatar
104	Polygon	List	706	Lebanon
105	Polygon	List	214	Maldives
106	Polygon	List	643	Yemen
107	Polygon	List	332	Burkina Faso
108	Polygon	List	729	Uganda
109	Polygon	List	148	Qatar
110	Polygon	List	306	Lebanon
111	Polygon	List	706	Maldives
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118	Polygon	List	706	Yemen
119	Polygon	List	214	Burkina Faso
120	Polygon	List	643	Uganda
121	Polygon	List	332	Qatar
122	Polygon	List	729	Lebanon
123	Polygon	List	148	Maldives
124	Polygon	List	306	Yemen
125	Polygon	List	706	Burkina Faso
126	Polygon	List	214	Uganda
127	Polygon	List	643	Qatar
128	Polygon	List	332	Lebanon
129	Polygon	List	729	Maldives
130	Polygon	List	148	Yemen
131	Polygon	List	306	Burkina Faso
132	Polygon	List	706	Uganda
133	Polygon	List	214	Qatar
134	Polygon	List	643	Lebanon
135	Polygon	List	332	Maldives
136	Polygon	List	729	Yemen
137	Polygon	List	148	Burkina Faso
138	Polygon	List	306	Uganda
139	Polygon	List	706	Qatar
140	Polygon	List	214	Lebanon
141	Polygon	List	643	Maldives
142	Polygon	List	332	Yemen
143	Polygon	List	729	Burkina Faso
144	Polygon	List	148	Uganda
145	Polygon	List	306	Qatar
146	Polygon	List	706	Lebanon
147	Polygon	List	214	Maldives
148	Polygon	List	643	Yemen
149	Polygon	List	332	Burkina Faso
150	Polygon	List	729	Uganda
151	Polygon	List	148	Qatar
152	Polygon	List	306	Lebanon
153	Polygon	List	706	Maldives
154	Polygon	List	214	Yemen
155	Polygon	List	643	Burkina Faso
156	Polygon	List	332	Uganda
157	Polygon	List	729	Qatar
158	Polygon	List	148	Lebanon
159	Polygon	List	306	Maldives
160	Polygon	List	706	Yemen
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258	Polygon	List	706	Uganda
259	Polygon	List	214	Qatar
260	Polygon	List	643	Lebanon
261	Polygon	List	332	Maldives
262	Polygon</td			

SLearn - Topik | SLearn - Data | SLearn - Data | Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Sources Data Data source settings Parameters Refresh Advanced Editor Properties Manage Query Choose Columns Remove Columns Keep Rows Remove Rows Split Column Group By Reduce Rows Sort Data Type: Any Use First Row as Headers Merge Queries Append Queries Combine Files Transform

Queries [17]

dim_calendar
dim_location
tbl_fact
Table001 (Page 1)
Table002 (Page 2-8)
Page001
Page002
Page003
Page004
Page005
Page006
Page007
Page008
owid-covid-data
owid-covid-data (2)
owid-covid-data (3)
countries-110m

Table = Table.RemoveColumns#"Expanded properties",["arcs"]

	type	id	name
1	MultiPolygon	242	Fiji
2	Polygon	834	Tanzania
3	Polygon	732	W. Sahara
4	MultiPolygon	124	Canada
5	MultiPolygon	840	United States of America
6	Polygon	398	Kazakhstan
7	Polygon	860	Uzbekistan
8	MultiPolygon	598	Papua New Guinea
9	MultiPolygon	360	Indonesia
10	MultiPolygon	032	Argentina
11	MultiPolygon	152	Chile
12	Polygon	180	Dem. Rep. Congo
13	Polygon	706	Somalia
14	Polygon	404	Kenya
15	Polygon	729	Sudan
16	Polygon	148	Chad
17	Polygon	332	Haiti
18	Polygon	214	Dominican Rep.
19	MultiPolygon	643	Russia

3 COLUMNS, 177 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 4:54 PM

Transform | Combine

Query Settings

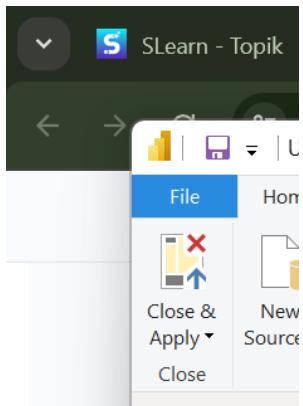
Properties

Name: world-countries

All Properties

Applied Steps

- Source
- Converted to Table
- Expanded objects
- Expanded objects.countries
- Expanded objects.land
- Expanded transform
- Changed Type
- Removed Other Columns
- Expanded objects.countries.g...
- Expanded objects.countries.g...
- Expanded properties
- Removed Columns



The screenshot shows the Power BI Desktop interface. In the center, there is a table visualization displaying data from a JSON file named "world-countries". The table has three columns: "id", "name", and "type". The data includes entries for countries like Kosovo, Niue, San Marino, and Antarctica, along with their respective types (e.g., Polygon or MultiPolygon). To the right of the table, the "Filters" pane shows filters for "id", "name", and "type", all currently set to "(All)". Below the filters, there are sections for "Filters on this page" and "Filters on all pages", each with an "Add data fields here" button. The "Visualizations" pane contains icons for various chart types. On the far right, the "Data" pane lists other datasets and pages, such as "dim_calendar", "dim_location", "owid-covid-data (2)", "Page001", and "Page002". The "Table tools" tab is selected at the top.

File JSON dipilih sebagai sumber data melalui menu Get Data, dan Power BI menampilkan struktur JSON dalam bentuk hierarchical. Pengguna mengekspansi elemen yang diperlukan untuk memverifikasi isi data, kemudian melanjutkan dengan perintah Load. Setelah selesai dimuat, data JSON muncul sebagai tabel yang telah diratakan (flattened) di panel Data sehingga dapat digunakan dalam analisis di Power BI.

NIM Genap

Analisa Dashboard

1. Tujuan atau Goals dari Dashboard

Tujuan utama dashboard ini adalah untuk:

- **Memantau dan menganalisis kondisi tenaga kerja konstruksi di Indonesia secara nasional dan per provinsi.**
- **Menyediakan informasi real-time** mengenai jumlah tenaga kerja bersertifikat, kualifikasi, jabker (jabatan kerja), serta asosiasi dan klasifikasi bidang.
- **Mendukung pengambilan keputusan** oleh Kementerian PUPR dan pihak terkait dalam perencanaan, peningkatan kompetensi, dan kebijakan ketenagakerjaan sektor konstruksi.

2. KPI (Key Performance Indicators) yang Ditampilkan

KPI utama yang terlihat dalam dashboard ini antara lain:

KPI	Penjelasan
Jumlah Tenaga Kerja Konstruksi (TKK)	Total tenaga kerja aktif di bidang konstruksi (535.666 orang).
Jumlah Sertifikat Kompetensi Kerja (SKK)	Total sertifikat kompetensi yang diterbitkan (709.458 SKK).
Jumlah SKA (Sertifikat Keahlian)	Jumlah tenaga ahli yang memiliki sertifikat keahlian (3.202).
Jumlah SKT (Sertifikat Keterampilan)	Jumlah tenaga terampil yang memiliki sertifikat keterampilan (5.572).
Sebaran Geografis Tenaga Kerja	Distribusi TKK per provinsi ditampilkan dalam peta Indonesia.
Kualifikasi dan Sub Bidang SKK/SKA/SKT	Rincian jumlah berdasarkan tingkat kualifikasi (Utama, Madya, Muda) dan bidang pekerjaan.
Asosiasi dan Jabatan Kerja (Jabker)	Jumlah tenaga kerja berdasarkan asosiasi profesi dan jabatan.

3. Fungsi dan Jenis Chart dalam Dashboard

Berikut jenis chart dan fungsinya:

Jenis Chart	Fungsi / Tujuan	Alasan Pemilihan Jenis Chart
Peta (Map Chart)	Menampilkan distribusi geografis tenaga kerja konstruksi di Indonesia.	Mudah untuk melihat konsentrasi wilayah tenaga kerja secara visual dan cepat.
Bar Chart (Grafik Batang)	Menunjukkan jumlah per kategori seperti asosiasi, jabatan kerja, kualifikasi, dan sub bidang SKK/SKT.	Efektif membandingkan nilai antar kategori dan memperjelas perbandingan antar provinsi atau bidang.
Pie Chart (Diagram Lingkaran)	Menampilkan proporsi kualifikasi SKA/SKT (Utama, Madya, Muda).	Memudahkan melihat komposisi atau persentase masing-masing kualifikasi.
KPI Card / Number Indicator	Menampilkan angka utama (seperti total TKK, total SKK, total SKA, total SKT).	Memberikan informasi ringkas dan langsung untuk evaluasi cepat.

4. Atribut Data yang Dibutuhkan

Untuk membuat dashboard seperti ini, data yang dibutuhkan mencakup:

Kategori Data	Atribut yang Diperlukan
Data Tenaga Kerja	Nama, NIK (opsional untuk anonim), provinsi, jenis kelamin, usia, pendidikan terakhir.
Data Sertifikasi	Nomor sertifikat, jenis sertifikasi (SKA/SKT), kualifikasi (Utama/Madya/Muda), tanggal terbit, masa berlaku.
Data Profesi/Jabatan	Jabatan kerja, asosiasi profesi, sub bidang pekerjaan.
Data Geografis	Provinsi, kabupaten/kota, koordinat wilayah (untuk visualisasi peta).

Kategori Data	Atribut yang Diperlukan
Data Lembaga Sertifikasi	Nama lembaga sertifikasi, jumlah peserta, jenis pelatihan/ujian.
Data Pendukung (opsional)	Jumlah proyek konstruksi per wilayah, data BPS tenaga kerja sektor konstruksi, data pendidikan vokasi.