

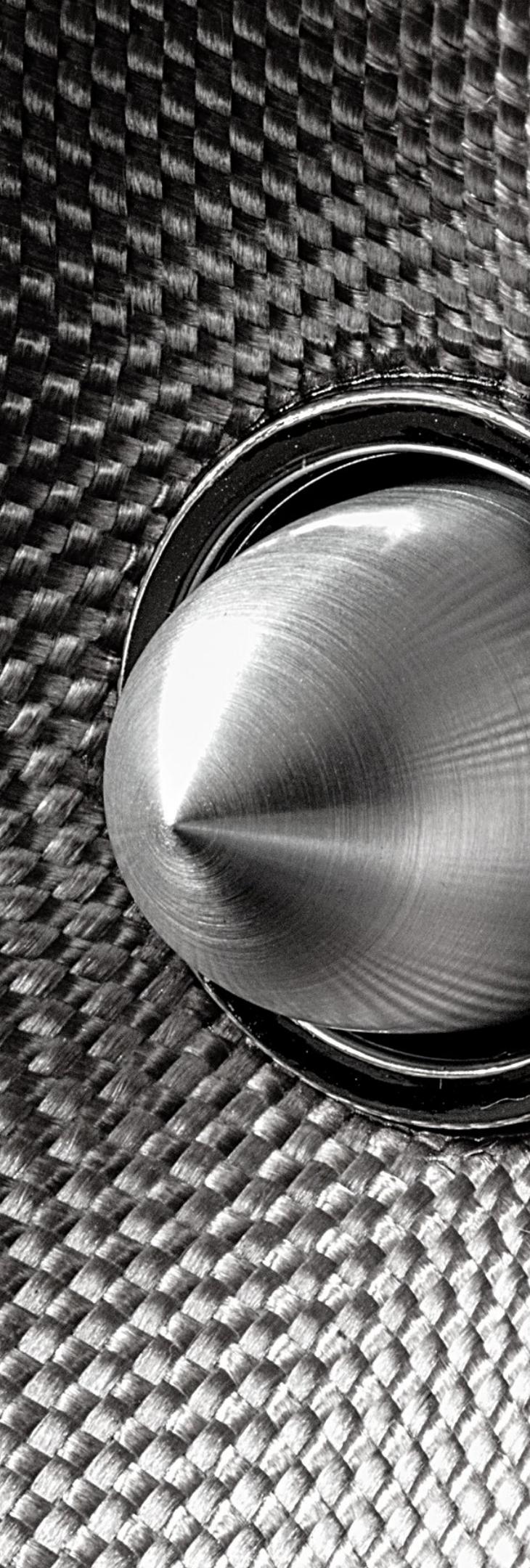
KELOMPOK 6

APA ITU KONTEKS DI DAX

"Konteks adalah bagaimana DAX menerapkan lapisan pemfilteran ke tabel yang digunakan dalam penghitungan Anda sehingga menghasilkan hasil yang relevan untuk setiap nilai."

Sesuai dokumentasi Microsoft, konteks adalah konsep penting untuk membangun analisis dinamis berkinerja tinggi dan untuk memecahkan masalah dalam rumus.

Artinya, konteks adalah lapisan pemfilteran dan diterapkan pada penghitungan untuk menghasilkan hasil yang terkait dengan setiap nilai tabel visual atau pivot termasuk total baris dan kolom.



JENIS KONTEKS

- 1 Row Context
- 2 Query Context
- 3 Filter Context



DAPATKAN DATA

The screenshot shows the Microsoft Power BI Data Import dialog box. The title bar reads "US Superstore data.csv". The dialog has three main sections: "File Origin" (1252: Western European (Windows)), "Delimiter" (Comma), and "Data Type Detection" (Based on first 200 rows). Below these settings is a preview grid displaying 20 rows of data from the CSV file. The columns in the preview are: Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, and City. The data shows various orders from different customers across the United States, with cities like Henderson, Los Angeles, and Fort Lauderdale.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country	City
1	CA-2016-152156	08/11/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson
2	CA-2016-152156	08/11/2016	11/11/2016	Second Class	CG-12520	Claire Gute	Consumer	United States	Henderson
3	CA-2016-138688	12/06/2016	16/06/2016	Second Class	DV-13045	Darrin Van Huff	Corporate	United States	Los Angeles
4	US-2015-108966	11/10/2015	18/10/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale
5	US-2015-108966	11/10/2015	18/10/2015	Standard Class	SO-20335	Sean O'Donnell	Consumer	United States	Fort Lauderdale
6	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
7	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
8	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
9	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
10	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
11	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
12	CA-2014-115812	09/06/2014	14/06/2014	Standard Class	BH-11710	Brosina Hoffman	Consumer	United States	Los Angeles
13	CA-2017-114412	15/04/2017	20/04/2017	Standard Class	AA-10480	Andrew Allen	Consumer	United States	Concord
14	CA-2016-161389	05/12/2016	10/12/2016	Standard Class	IM-15070	Irene Maddox	Consumer	United States	Seattle
15	US-2015-118983	22/11/2015	26/11/2015	Standard Class	HP-14815	Harold Pawlan	Home Office	United States	Fort Worth
16	US-2015-118983	22/11/2015	26/11/2015	Standard Class	HP-14815	Harold Pawlan	Home Office	United States	Fort Worth
17	CA-2014-105893	11/11/2014	18/11/2014	Standard Class	PK-19075	Pete Kriz	Consumer	United States	Madison
18	CA-2014-167164	13/05/2014	15/05/2014	Second Class	AG-10270	Alejandro Grove	Consumer	United States	West Jordan
19	CA-2014-143336	27/08/2014	01/09/2014	Second Class	ZD-21925	Zuschuss Donatelli	Consumer	United States	San Francisco
20	CA-2014-143336	27/08/2014	01/09/2014	Second Class	ZD-21925	Zuschuss Donatelli	Consumer	United States	San Francisco

At the bottom of the dialog are three buttons: "Load" (yellow), "Transform Data" (gray), and "Cancel".

FILTER KONTEKS

Filter konteks berarti ketika Anda menerapkan filter pada set nilai-nilai dari kolom atau tabel menggunakan perhitungan DAX .

Ada beberapa item yang konteks filternya diterapkan. Sebagai contoh,

1. atribut dalam baris atau kolom
2. dengan alat pengiris
3. melalui panel filter
4. ke ukuran yang dihitung

Sebelum penghitungan inti apa pun, konteks filter pertama diselesaikan

Setelah diputuskan, aturan filter (di dalam konteks) diterapkan di seluruh data dan penghitungan dijalankan pada data yang tersisa.

Setelah selesai perhitungan, filter konteks yang hancur dan tidak digunakan oleh proses lain.

KONTEKS FILTER IMPLISIT

The screenshot illustrates the process of creating a calculated measure and a matrix visual in Power BI.

Left Panel: Shows the Power BI ribbon and the 'Home' tab selected. A calculated measure is being defined:

- Name: Total Sales
- Home table: US Superstore data
- Value: `=SUM('US Superstore data'[Sales])`
- Format: General

Middle Panel: Displays a matrix visual with columns for Year, Central, East, South, West, and Total. The data shows sales figures for each year across different regions:

	Year	Central	East	South	West	Total
2014	703,835.76	123,463.46	103,845.84	147,289.03	484,247.90	2,297,200.00
2015	702,874.22	158,832.06	71,859.98	139,566.25	478,552.51	
2016	147,423.56	180,885.82	93,810.22	167,488.18	666,293.00	
2017	147,398.13	213,082.90	123,805.86	258,138.37	733,216.26	
Total	591,239.89	876,781.24	391,721.91	725,457.82	2,297,200.00	

Right Panel: Shows the 'Filters' pane with the following settings:

- Row: Order Date (selected)
- Column: Region (selected)
- Value: Total Sales (selected)
- Drill through: Off
- Cross-report: Off
- Keep all filters: On

Sales of Phones

US Superstore data

\$ % , .00 Auto

Format General Data category Uncategorized

New measure Quick measure

Structure Formatting Properties Calculations

1 Sales of Phones = CALCULATE(SUM('US Superstore data'[Sales]), 'US Superstore data'[Sub-Category] = "Phones")

Create calculated measure
using filter condition.



Sub-Category	Total Sales	Sales of Phones
Phones	330,007.05	330,007.05
Chairs	328,449.10	330,007.05
Storage	223,843.61	330,007.05
Tables	206,965.53	330,007.05
Binders	203,412.73	330,007.05
Machines	189,238.63	330,007.05
Accessories	167,380.32	330,007.05
Copiers	149,528.03	330,007.05
Bookcases	114,880.00	330,007.05
Appliances	107,532.16	330,007.05
Furnishings	91,705.16	330,007.05
Paper	78,479.21	330,007.05
Supplies	46,673.54	330,007.05
Art	27,118.79	330,007.05
Envelopes	16,476.40	330,007.05
Labels	12,486.31	330,007.05
Fasteners	3,024.28	330,007.05
Total	2,297,200.86	330,007.05

Create report with
Sub-Category,
Total Sales,
Sales of Phones



1

DARI LAPORAN SLIDE SEBELUMNYA

Anda dapat mengamati fungsi CALCULATE memperoleh jumlah nilai penjualan untuk kondisi filter eksplisit (Sub Kategori = "Telepon").

2

INI MENGABAIKAN NILAI IMPLISIT SUB-KATEGORI DALAM VISUAL.

3

ITU BERARTI FILTER EKSPLISIT DALAM FUNGSI DAX AKAN MENIMPA FILTER IMPLISIT YANG ADA DI VISUAL

4

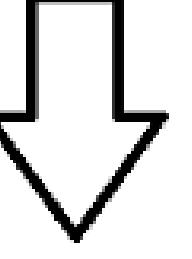
JIKA ANDA MENGUBAH KONDISI FILTER DAN MENGGUNAKAN FUNGSI SEMUA , MAKA ANDA DAPAT MENGABAIKAN KONTEKS FILTER SEBELUMNYA DAN MENGHASILKAN PENJUALAN UNTUK TOTAL SEMUA SUB-KATEGORI.

Sales of All Sub-Cat... Format General Data category Uncategorized New measure

table US Superstore data \$ % , .00 Auto Data category Uncategorized New measure

Structure Formatting Properties Calculations

1 Sales of All Sub-Category = CALCULATE(SUM('US Superstore data'[Sales]),ALL('US Superstore data'[Sub-Category]))



Sub-Category	Sales of All Sub-Category	Total Sales
Phones	2,297,200.86	330,007.05
Chairs	2,297,200.86	328,449.10
Storage	2,297,200.86	223,843.61
Tables	2,297,200.86	206,965.53
Binders	2,297,200.86	203,412.73
Machines	2,297,200.86	189,238.63
Accessories	2,297,200.86	167,380.32
Copiers	2,297,200.86	149,528.03
Bookcases	2,297,200.86	114,880.00
Appliances	2,297,200.86	107,532.16
Furnishings	2,297,200.86	91,705.16
Paper	2,297,200.86	78,479.21
Supplies	2,297,200.86	46,673.54
Art	2,297,200.86	27,118.79
Envelopes	2,297,200.86	16,476.40
Labels	2,297,200.86	12,486.31
Fasteners	2,297,200.86	3,024.28
Total	2,297,200.86	2,297,200.86

Values

Sub-Category Sales of All Sub-Category Total Sales

Drill through

Cross-report

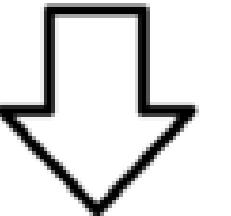
Off

Keep all filters

On

Add drill-through fields here

Total Sales for Sub-Category Phones = CALCULATE(SUM('US Superstore data'[Sales]),FILTER('US Superstore data','US Superstore data'[Sub-Category] = "Phones"))



Sub-Category	Total Sales for Sub-Category Phones	Total Sales
Phones	330,007.05	330,007.05
Accessories		167,380.32
Appliances		107,532.16
Art		27,118.79
Binders		203,412.73
Bookcases		114,880.00
Chairs		328,449.10
Copiers		149,528.03
Envelopes		16,476.40
Fasteners		3,024.28
Furnishings		91,705.16
Labels		12,486.31
Machines		189,238.63
Paper		78,479.21
Storage		223,843.61
Supplies		46,673.54
Tables		206,965.53
Total	330,007.05	2,297,200.86

Values

Sub-Category Total Sales for Sub-Cate Total Sales

Drill through

Cross-report

Off

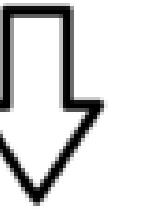
Keep all filters

On

Add drill-through fields here

Structure Formatting Properties Calculations

```
1 Total Sales for Phones_Arts = CALCULATE(SUM('US Superstore data'[Sales]), FILTER('US Superstore data', 'US Superstore data'[Sub-Category] = "Phones" || 'US Superstore data'[Sub-Category] = "Art"))
```



Sub-Category	Total Sales for Phones_Arts	Total Sales
Phones	330,007.05	330,007.05
Art	27,118.79	27,118.79
Accessories		167,380.32
Appliances		107,532.16
Binders		203,412.73
Bookcases		114,880.00
Chairs		328,449.10
Copiers		149,528.03
Envelopes		16,476.40
Fasteners		3,024.28
Furnishings		91,705.16
Labels		12,486.31
Machines		189,238.63
Paper		78,479.21
Storage		223,843.61
Supplies		46,673.54
Tables		206,965.53
Total	357,125.85	2,297,200.86

Values

Sub-Category

Total Sales for Phones_Arts

Total Sales

Drill through

Cross-report

Off

Keep all filters

On

Add drill-through fields here

KONTEKS BARIS

- . Konteks Baris terkait dengan baris saat ini. Jika Anda membuat penghitungan menggunakan kolom terhitung , konteks baris melibatkan nilai dari semua kolom dari baris saat ini . Jika tabel tersebut memiliki hubungan dengan tabel lain , maka itu termasuk semua nilai terkait dari tabel lain untuk baris itu.
Ada beberapa fungsi berulang di DAX di atas tabel. Fungsi tersebut melibatkan beberapa baris selama penghitungan dan masing-masing dengan konteks barisnya sendiri

TEMUKAN CONTOH DI BAWAH INI TENTANG KONTEKS BARIS.

- 1. BUAT SATU KOLOM TERHITUNG BIAYA YANG DIDASARKAN PADA KOLOM PENJUALAN DAN LABA.**
- 2. DI SINI SETIAP BARIS UNTUK KOLOM BIAYA MELIBATKAN NILAI KOLOM LAIN DARI BARIS SAATINI.**

The screenshot shows the Microsoft Power BI Data Editor interface. A calculated column named 'Cost' has been created, as indicated by the formula bar at the top:

```
1. Cost = 'US Superstore data'[Sales] - 'US Superstore data'[Profit]
```

The table displays various product details such as Product Name, Sales, Quantity, Discount, Profit, and Cost. The 'Cost' column is highlighted with a blue border. The Fields pane on the right lists various columns, with 'Cost' also highlighted with a blue border.

Segment	Country	City	State	Postal Code	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Cost
Consumer	United States	Los Angeles	California	90049	West	OFF-ST-10003479	Office Supplies	Storage	Eldon Base for stackable storage shelf, platinum	77.88	2	0	2.894	73.992
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10000833	Office Supplies	Art	Newell 327	6.63	2	0	1.7801	4.8599
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10001248	Office Supplies	Art	Newell 317	5.88	2	0	1.7552	4.1748
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10000833	Office Supplies	Art	Newell 307	5.48	2	0	1.5388	3.9312
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10004456	Office Supplies	Art	Panasonic KP-448K Battery-Operated Pencil Sharpener	73.2	2	0	21.228	51.972
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10002377	Office Supplies	Paper	Adams Telephone Message Book W/Dividers/Space For Pen	22.72	4	0	10.224	12.496
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10003205	Office Supplies	Paper	Xerox 229	45.39	7	0	21.7728	23.5972
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10003575	Office Supplies	Pasteners	Staples	11.54	8	0	3.2384	8.3136
Consumer	United States	Los Angeles	California	90049	West	OFF-ST-10003996	Office Supplies	Storage	Letter/Legal File Fote with Clear Snap On Lid, Black Granite	80.8	8	0	20.878	59.422
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10003477	Office Supplies	Paper	Xerox 1952	62.72	18	0	20.4278	42.8122
Consumer	United States	Los Angeles	California	90049	West	OFF-ST-10002968	Office Supplies	Storage	Tenneco Regal Shelving Units	405.64	4	0	12.1882	383.4798
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10001439	Office Supplies	Art	Newell 325	12.39	2	0	3.717	8.672
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10000992	Office Supplies	Appliances	Fellowes Mighty II Compact Surge Protector	60.82	2	0	17.0268	43.7932
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10001457	Office Supplies	Paper	White GlueTop Scratch Pads	90.24	6	0	41.5304	48.7296
Consumer	United States	Los Angeles	California	90049	West	OFF-ST-10003575	Office Supplies	Storage	File Shuttle II Hand-File, Black	305.02	2	0	78.2525	228.7575
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10002373	Office Supplies	Art	Newell 351	13.12	4	0	3.8048	9.3152
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10000837	Office Supplies	Art	Bixley & Smith InkTank Desk Highlighter, Chisel Tip, Yellow	10.73	2	0	3.3475	7.3525
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10000134	Office Supplies	Pasteners	Advanus Push Pins, Aluminum Head	11.62	2	0	3.8022	8.8178
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10000352	Office Supplies	Paper	Xerox 200	12.59	2	0	6.2308	6.7592
Consumer	United States	Los Angeles	California	90049	West	OFF-PA-10001135	Office Supplies	Pasteners	Brite-Rubber Bands, 1 1/2-in, Box	5.59	2	0	0.6752	5.8838
Consumer	United States	Los Angeles	California	90049	West	OFF-AB-10003662	Office Supplies	Art	Quartet Omega Colored Chalk, 12/Pack	11.68	2	0	3.4856	8.1964
Consumer	United States	Los Angeles	California	90049	West	OFF-SU-10004282	Office Supplies	Supplies	Elite 5" Scissors	16.9	2	0	5.07	11.89
Consumer	United States	Los Angeles	California	90049	West	OFF-SU-10002923	Office Supplies	Supplies	Serrated Blade or Curved Handle Hand Letter Openers	6.28	2	0	0.9628	6.3172
Consumer	United States	Los Angeles	California	90049	West	OFF-SU-10000646	Office Supplies	Supplies	Premier Automatic Letter Opener	480.74	2	0	144.0222	366.8178

Source

[https://ichi.pro/id/konsep-konteks-di-dax-dengan-
contoh-di-power-bi-bagian-3-23082944417330](https://ichi.pro/id/konsep-konteks-di-dax-dengan-contoh-di-power-bi-bagian-3-23082944417330)