



A photograph of four professionals in a modern office environment. In the foreground, a woman with glasses and a man are seated at a desk, looking at a laptop screen. Behind them, two other individuals are standing and engaged in conversation. The background features a large world map on the wall.

**Data Analysis:
Metadata, Data Joining,
and Data Blending**

Virtual Internship Experience



Outline

- 1 Konsep Dasar Metadata**
- 2 Penerapan Editing Metadata**
- 3 Joining**
- 4 Blending**

Disclaimer

“Dokumen ini memiliki hak cipta. Barang siapa yang menyebarluaskan atau menduplikasi tanpa izin dari instansi terkait dapat diproses sesuai dengan ketentuan hukum yang berlaku.”

Editing Metadata

- **Checking Metadata**

Setelah memuat sumber data, Ms Acces menyajikan semua data kolom pada tabel yang ada di sumber.

- **Changing Data Type**

Pengubahan tipe data dapat dilakukan jika pengaturan data sebelumnya kurang tepat.

- **Renaming Column**

Nama kolom dapat diubah dengan menggunakan opsi penggantian nama.

- **Column Alias**

Setiap kolom sumber data dapat diberi alias yang membantu lebih memahami sifat kolom.

Checking Metadata



Screenshot of Microsoft Access showing the 'Superstore_customer' table in Datasheet View.

The ribbon tabs shown are: File, Home, Create, External Data, Database Tools, Fields, Table, and a search bar.

The 'Home' tab is selected, showing various tools like Cut, Copy, Paste, Filter, Sort & Filter, Refresh, Find, and Text Formatting.

The table has the following columns:

Customer ID	Customer Name	Segment	Country	City	State	Postal Code	Region	Click to Add
AA-10315	Alex Avila	Consumer	United States	Minneapolis	Minnesota	55407	Central	
AA-10375	Allen Arnold	Consumer	United States	Mesa	Arizona	85204	West	
AA-10480	Andrew Allen	Consumer	United States	Concord	North Carolina	28027	South	
AA-10645	Anna Andreadi	Consumer	United States	Chester	Pennsylvania	19013	East	
AB-10015	Aaron Bergmar	Consumer	United States	Seattle	Washington	98103	West	
AB-10060	Adam Bellavan	Home Office	United States	New York City	New York	10009	East	
AB-10105	Adrian Barton	Consumer	United States	Phoenix	Arizona	85023	West	
AB-10150	Aimee Bixby	Consumer	United States	Long Beach	New York	11561	East	
AB-10165	Alan Barnes	Consumer	United States	Los Angeles	California	90036	West	
AB-10255	Alejandro Balle	Home Office	United States	Lorain	Ohio	44052	East	
AB-10600	Ann Blume	Corporate	United States	Tucson	Arizona	85705	West	
AC-10420	Alyssa Crouse	Corporate	United States	San Francisco	California	94122	West	
AC-10450	Amy Cox	Consumer	United States	Minneapolis	Minnesota	55407	Central	
AC-10615	Ann Chong	Corporate	United States	New York City	New York	10009	East	
AC-10660	Anna Chung	Consumer	United States	Huntsville	Texas	77340	Central	
AD-10180	Alan Domingue	Home Office	United States	Houston	Texas	77041	Central	
AF-10870	Art Ferguson	Consumer	United States	College Station	Texas	77840	Central	
AF-10885	Art Foster	Consumer	United States	Louisville	Kentucky	40214	South	
AG-10270	Alejandro Grov	Consumer	United States	West Jordan	Utah	84084	West	
AG-10300	Aleksandra Gai	Corporate	United States	Los Angeles	California	90049	West	
AG-10330	Alex Grayson	Consumer	United States	Stockton	California	95207	West	
AG-10390	Allen Goldenen	Consumer	United States	Cincinnati	Ohio	45231	East	
AG-10495	Andrew Gjertse	Corporate	United States	Philadelphia	Pennsylvania	19140	East	

Record: 1 of 798 | No Filter | Search

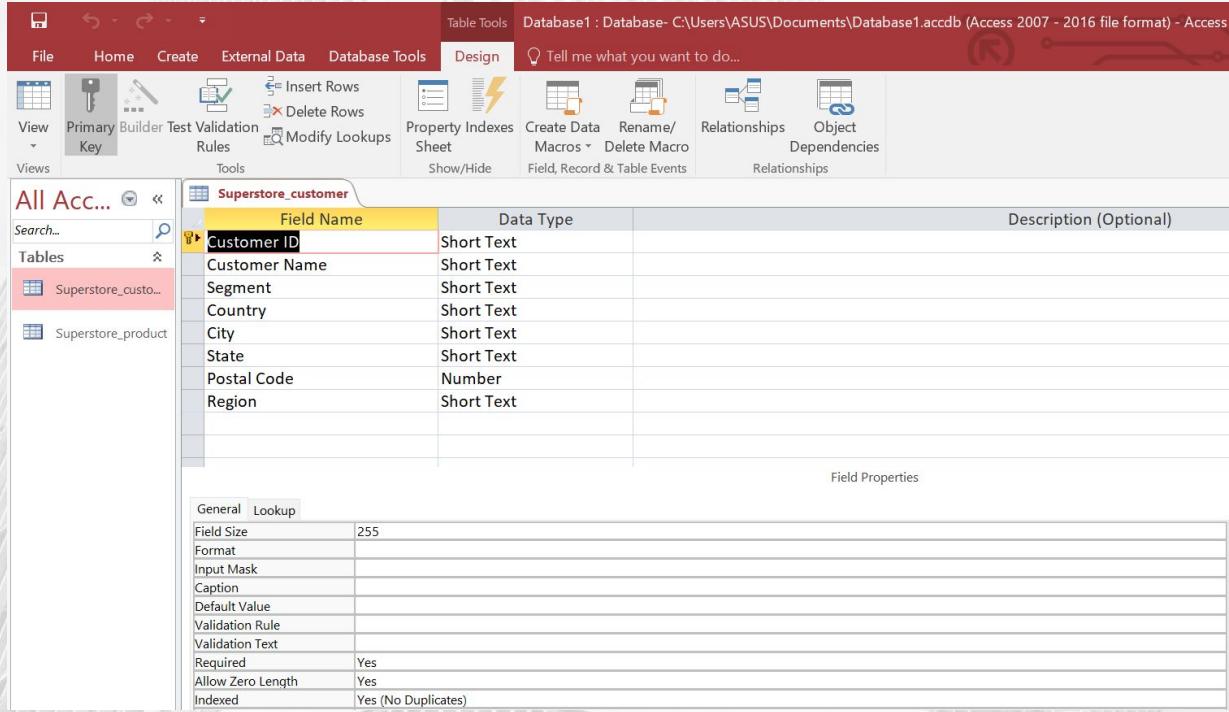
Changing Data Type

View ⇒ Design View ⇒ Select Table ⇒ Data type

The screenshot shows the Microsoft Access application in Design View. The main window displays the 'Superstore.customer' table. The 'Customer ID' field is selected, and its properties are visible in the 'Field Properties' pane. The 'Data Type' dropdown menu is open, showing various options like Short Text, Long Text, Number, Date/Time, Currency, etc. The 'Number' option is highlighted. A tooltip at the bottom right of the 'Data Type' dropdown provides the information: 'The data type determines the kind of values that users can store in the field. Press F1 for help on data types.' The status bar at the bottom left indicates 'Design view. F6 = Switch panes. F1 = Help.'

Renaming Column

View ⇒ Design View ⇒ Select Table ⇒ Field Name



The screenshot shows the Microsoft Access application interface in Design View. The ribbon at the top has 'Design' selected. The left pane shows tables: 'All Acc...', 'Tables', 'Superstore_customer', and 'Superstore_product'. The main area displays the 'Superstore_customer' table with the following fields:

Field Name	Data Type	Description (Optional)
Customer ID	Short Text	
Customer Name	Short Text	
Segment	Short Text	
Country	Short Text	
City	Short Text	
State	Short Text	
Postal Code	Number	
Region	Short Text	

Below the table, the 'Field Properties' dialog is open for the 'Customer ID' field, showing the following settings:

General	Lookup
Field Size	255
Format	
Input Mask	
Caption	
Default Value	
Validation Rule	
Validation Text	
Required	Yes
Allow Zero Length	Yes
Indexed	Yes (No Duplicates)

Joining dan Blending

Suatu data akan lebih powerfull jika dapat didukung oleh data lainnya.

Metode penggabungan (*joining*) dapat dilakukan dengan cara menggabungkan data yang **memiliki kesamaan**. Ada empat tipe penggabungan, yaitu inner join, left join, right join, dan full outer join.

Blending data adalah metode untuk menggabungkan data dari berbagai sumber. Memadukan data membawa **informasi tambahan dari sumber data sekunder** dan menampilkannya dengan data dari sumber data primer langsung dalam tampilan.



Perbedaan *Joining* dan *Blending*

Perbedaan *joining* dan *blending* terletak pada sumber datanya.

Joining digunakan apabila kumpulan data berasal dari **sumber yang sama**, sedangkan **blending** digunakan apabila datanya berasal dari **sumber yang berbeda**.



Implementation in Bank Muamalat



Source

<https://www.qubisa.com/microlearning/memahami-cara-menggabungkan-tabel-dalam-tableau#showSummary>

<https://sis.binus.ac.id/2020/07/31/about-data-blending-and-steps-for-blending-data-in-tableau/>

<https://edu.gcfglobal.org/en/access2016/modifying-tables/1/>



Assets



Logo Putih



Logo Berwarna



Thank You!

