



Power BI



# GROUP BY AND AGGREGATIONS



< SWIPE A white rounded rectangle containing a left-pointing arrow and three horizontal bars of decreasing height.

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# WHAT IS GROUP BY IN POWER BI?

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Group By is used in Power Query Editor to:

- ◆ Group rows based on a field (e.g., Customer, Region, Date)
  - ◆ Apply aggregation functions like Sum, Count, Average, etc.
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- 📌 It's like SQL's GROUP BY or Excel's Pivot Table!

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## WHY USE GROUP BY?

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- ✓ Summarize large datasets
- ✓ Get KPIs (e.g., Total Sales per Region)
- ✓ Perform pre-aggregations for faster reporting
- ✓ Simplify data structure before loading to the model

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## WHERE TO FIND IT

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- Power Query Editor
- Go to: Home → Group By
- Choose column(s) to group
- Define aggregations (Sum, Min, Max, Count, etc.)

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## EXAMPLE USE CASE

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Dataset:

| Region | Sales | Customer |

Group By: Region

Aggregate: Sum of Sales



Output:

| Region | Total Sales |

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# TYPES OF AGGREGATIONS

Function	Use Case Example
Sum	Total Revenue
Count	Number of Orders
Average	Avg. Order Value
Min / Max	First/Last Purchase Date
All Rows	Keep full records per group

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## ADVANCED GROUP BY (ALL ROWS)

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📌 “All Rows” lets you group data but retain full detail in a nested table

You can later expand or apply conditional logic.

Useful for:

- Nested calculations
- Filtering within groups

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# GROUP BY VS DAX MEASURES

Feature	Power Query Group By	DAX Measures
Pre-load Aggregation	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
On-the-fly Flexibility	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
Ideal For	Data Cleaning	Reporting Layer

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# BEST PRACTICES

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- ✓ Always unpivot before loading into the model if structure is wide
- ✓ Rename “Attribute” and “Value” columns for clarity
- ✓ Avoid pivoting large categorical data unnecessarily

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## COMMON PITFALLS

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- ⚠️ Grouping with wrong column types
- ⚠️ Forgetting to rename output columns
- ⚠️ Too many group levels creates  
Complicates model
- ⚠️ Not applying correct aggregation  
logic (e.g., average vs sum)

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# BEST PRACTICES

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- ✓ Rename aggregated columns clearly (e.g., "Total\_Profit")
- ✓ Group only where needed to reduce data size
- ✓ Combine with Sort, Filter, or Custom Columns
- ✓ Keep intermediate tables for reuse

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# REAL-WORLD USE CASES

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- 📌 Total Sales per Store
- 📌 Average Transaction Value per Customer
- 📌 Count of Products Sold per Brand
- 📌 Max Discount per Category
- 🔄 Can be reused in dashboards and models for KPIs





Power BI



**Thank You for Swiping  
Through!**



— By Anish Chakravorty